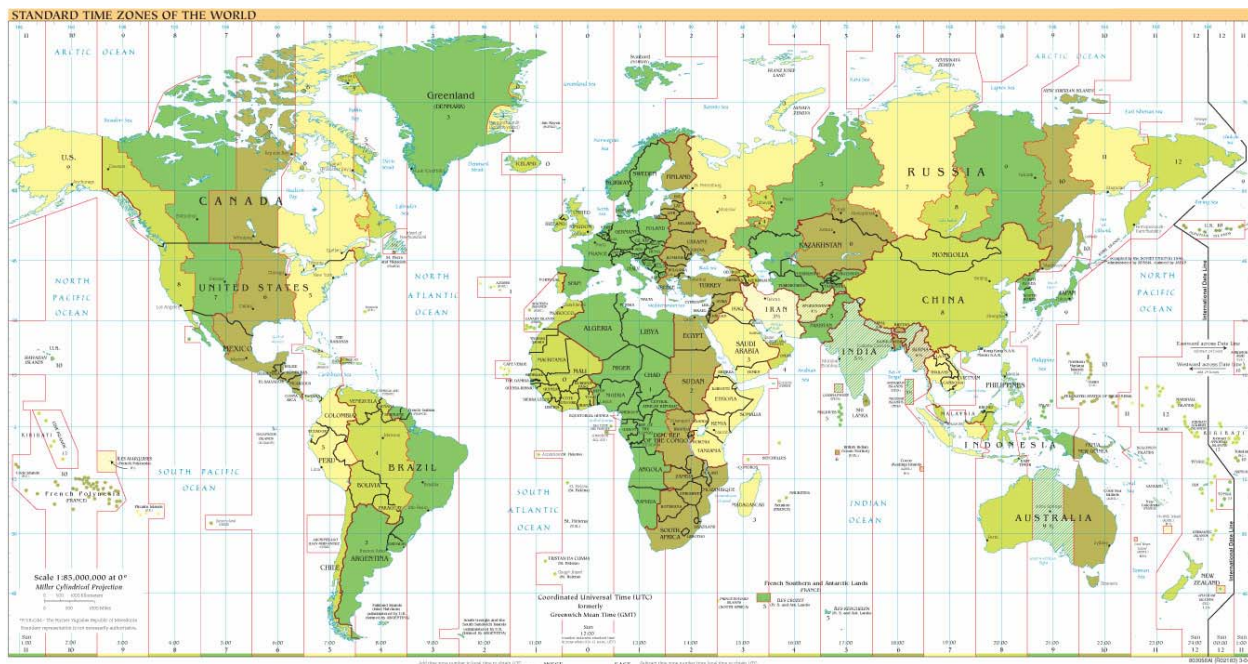


# PROCEEDINGS

of the

## IABE-2007 Annual Conference

Las Vegas, Nevada, USA  
October 14-17, 2007



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We hope you will join us again next year at the **IABE-2008 in Stockholm and IABE-2008 Las Vegas**.

Warmest regards,

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October 15, 2007  
Las Vegas, Nevada, USA

## TABLE OF CONTENTS

<b>ENTRY DETERRENCE IN RECYCLING MARKETS AND GOVERNMENT POLICIES: THE CASE OF OLD NEWSPAPERS IN THE USA</b>	<b>Page 1</b>
Aref A. Hervani, Chicago State University, Chicago, IL, USA Joanne LaBonte, Chicago State University, Chicago, IL, USA	
<b>SELLING THE DESERT: ENTERING THE KOREAN MARKET TO PROMOTE DUBAI AS A TOURIST AND COMMERCIAL DESTINATION: A DTCM APPROACH</b>	<b>21</b>
Syd Gilani, University of Dubai, United Arab Emirates Berina Esra O. Gilani, International Marketing Consultant (Independent), United Arab Emirates	
<b>DURATIONAL LIMITS ON A COMMERCIAL RIGHT TO PUBLICITY: WHERE'S JOHNNY?</b>	<b>38</b>
Phillip D. Howard, Ball State University, Muncie, IN, USA	
<b>THE SINGLE GLOBAL CURRENCY - COMMON CENTS FOR BUSINESS</b>	<b>46</b>
Morrison Bonpasse, Single Global Currency Association, Newcastle, Maine, USA	
<b>AWARDING GRADES WHILE AVOIDING GRADE INFLATION</b>	<b>55</b>
Sekhar Anantharaman, Indiana University of Pennsylvania, Indiana, USA Jungki Lee, Korea University, Seoul, KOREA	
<b>THE ROLE OF THE FINANCIAL RATIOS IN THE ENTITY ANALYSIS</b>	<b>61</b>
Ioan Batrancea, Babes-Bolyai, University, Cluj-Napoca, Romania Sorin Borlea, Babes-Bolyai University, Cluj-Napoca, Romania	
<b>THE ANALYSIS OF ACTIVITY IN ROMANIAN ENTITIES</b>	<b>65</b>
Ioan Batrancea, Babes-Bolyai University, Cluj-Napoca, ROMANIA Victor Ardelean, Babes-Bolyai University, Cluj-Napoca, ROMANIA	
<b>THE INFORMATIONAL SYSTEM IN COAL-BEARING INDUSTRY</b>	<b>70</b>
Maria Batrancea, Bogdan Voda University, Cluj-Napoca, ROMANIA	
<b>BLUE OCEAN STRATEGY AND THE THEORY OF CHAOS</b>	<b>75</b>
Hilary Becker, Carleton University, Ottawa, Ontario, CANADA	
<b>THE SURETY INSURANCE</b>	<b>81</b>
Corneliu Benă, University of Oradea, Oradea, România	
<b>HOUSE COST TRACKING SYSTEM</b>	<b>86</b>
Chuleeporn Changchit, Texas A&M University – Corpus Christi, Corpus Christi, TX, USA James Rhyne, Texas A&M University – Corpus Christi, Corpus Christi, TX, USA	
<b>YOUTH AND THE DIGITAL DIVIDE: EMPOWERING PUBLIC ADMINISTRATION STUDENTS THROUGH INFORMATION COMPETENCY EXERCISES</b>	<b>92</b>
Chandrasekhar Commuri, California State University-Bakersfield, USA Yong Choi, California State University-Bakersfield, USA	

<b>OPPORTUNITIES FOR ECONOMIES OF SCOPE: FOCUS ON AFRICAN AMERICAN AND HISPANIC MARKETS</b>	<b>98</b>
Francisco Coronel, Hampton University, Hampton Virginia, USA	
Ruby L. Beale, Hampton University, Hampton Virginia, USA	
Telemanie Borsay, Hampton University, Hampton Virginia, USA	
<b>INDIVIDUAL ADOPTION OF INSTANT MESSAGING IN THE WORKPLACE: A CONCEPTUAL VIEW</b>	<b>104</b>
Dessa David, Morgan State University, Baltimore, Maryland, USA	
Dennis Agboh, Morgan State University, Baltimore, Maryland, USA	
<b>SOCIOLOGY OF KNOWLEDGE AND LEADERSHIP DEVELOPMENT: THE CASE OF SOUTHWEST NIGERIA</b>	<b>109</b>
Solomon Fakinlede, Baltimore City Community College, Baltimore, USA	
<b>MULTI-FIBRE AGREEMENT AND KENYA'S MAJOR APPAREL EXPORTS TO THE US</b>	<b>116</b>
Michelle W. L. Fong, Victoria University, AUSTRALIA	
Jane W. Ndurumo, Ministry of Trade and Industry, KENYA	
<b>RISK TRANSFER SOLUTIONS FOR NATURAL CATASTROPHES IN ROMANIA</b>	<b>121</b>
Marius D. Gavriltea, Babes Bolyai University, Business Faculty, Cluj – Napoca, ROMANIA	
Partenie Dumbrava, Babes Bolyai University, Business Faculty, Cluj – Napoca, ROMANIA	
Cornelia Pop, Babes Bolyai University, Business Faculty, Cluj – Napoca, ROMANIA	
<b>CAPITAL BUDGETING IN PUBLIC AGENCIES</b>	<b>129</b>
Nashwa George, New Jersey, USA	
<b>THE CHALLENGES TO HUMAN RESOURCE PROFESSIONALS</b>	<b>132</b>
Tami S. Moser, Capella University, Weatherford, Oklahoma, USA	
Jean Gordon, Capella University, Florida, USA	
Michael Williams, Capella University, West Orange, New Jersey, USA	
<b>ANALYSIS OF INTER-PROCESSOR OVERHEAD AND ITS IMPORTANCE IN USING DISTRIBUTED PROCESSING TO SOLVE COMPUTATIONALLY INTENSIVE APPLICATIONS</b>	<b>137</b>
Dennis Guster, St. Cloud State University, St Cloud, Minnesota USA	
Udeesh Millathe, St. Cloud State University, St Cloud, Minnesota USA	
Mark Nordby, St. Cloud State University, St Cloud, Minnesota USA	
Brittany Jansen, St. Cloud State University, St Cloud, Minnesota USA	
<b>MANAGING A COMPUTER CLUSTER: TRADEOFFS AND SCALABILITY</b>	<b>142</b>
Dennis Guster, St. Cloud State University-St. Cloud, Minnesota, USA	
Renat Sultanov, St. Cloud State University-St. Cloud, Minnesota, USA	
Mark Nordby, St. Cloud State University-St. Cloud, Minnesota, USA	
Tim Slattery, St. Cloud State University-St. Cloud, Minnesota, USA	
<b>BOTTOM-LINE VALUE FOR LEADERSHIP MASTERING COOPERATION: TRANSFORMATIVELY CHANGING GLOBAL ENTERPRISES</b>	<b>147</b>
Marilyn E Harris, Capella University and Human Systems Change Consulting, Petoskey, USA	
Toni Buchsbaum Greif, Capella University and Sound Beach, LLC, Sarasota, Florida, USA	
<b>CURRICULAR CHANGES IN RESPONSE TO ASSURANCE OF LEARNING RESULTS IN INFORMATION TECHNOLOGY</b>	<b>152</b>
Kimberly Killmer Hollister, Montclair State University, NJ, USA	
Nicole B. Koppel, Montclair State University, NJ, USA	

<b>APPLYING TARGET COSTING TO PRODUCT DEVELOPMENT</b>	<b>159</b>
Man-Li Lin, Tunghai University, Taichung, Taiwan, R.O.C. Philip Y. Huang, Virginia Tech, Blacksburg, Virginia, USA	
<b>INTERMITTENT EXPLOSIVE DISORDER: MT. VESUVIUS AT WORK</b>	<b>164</b>
Pamela R. Johnson, California State University, Chico, California, USA Julie Indvik, California State University, Chico, California, USA Claudia Rawlins, California State University, Chico, California, USA	
<b>COOL-HUNTING: A BASIS FOR CATALYZING ENTREPRENEURIAL THINKING</b>	<b>170</b>
Gary Wishniewsky, California State University, East Bay, Hayward, California, USA	
<b>A STRATEGY TO ENHANCE DSS CAPABILITIES FOR THE IMPROVEMENT OF DECISION PERFORMANCE</b>	<b>178</b>
Wonjin Jung, Dankook University, Seoul, KOREA	
<b>ORGANIZATIONAL COMMITMENT RECALL IN TIMES OF CRISIS</b>	<b>183</b>
Leila Messarra, Lebanese American University, Beirut, LEBANON Silva Karkoulia, Lebanese American University, Beirut, LEBANON	
<b>DEPLOYING THE MEASUREMENT OF KNOWLEDGE MANAGEMENT BY A BALANCED SCORECARD</b>	<b>190</b>
Eric K. W. Lau, Faculty of Business, City University of Hong Kong, Hong Kong	
<b>THE ECO TAXES: THE FIRST GLOBAL TAXES</b>	<b>194</b>
Mario Lima, Universidade Federal da Bahia, Salvador, Bahia, BRAZIL	
<b>CROSS-CULTURAL DIFFERENCES AFFECTING THE PROPENSITY TO ADOPT SELF-SERVICE TECHNOLOGY</b>	<b>199</b>
Kevin M. Elliott, Minnesota State University, Mankato, Minnesota, USA Juan (Gloria) Meng, Minnesota State University, Mankato, Minnesota, USA	
<b>COMPARATIVE ANALYSIS OF FACTORS INFLUENCING JOB SATISFACTION OF ACCOUNTING PROFESSIONALS</b>	<b>204</b>
Glen D. Moyes, University of Texas Pan American, Edinburg, TX, USA Lawrence P. Shao and Michael Newsome, Marshall University, Huntington, WV, USA	
<b>CORPORATE SOCIAL RESPONSIBILITY AND PERFORMANCE: ROLES OF INTERNAL COMPETENCY AND EXTERNAL FORCE</b>	<b>207</b>
Ingorn Nachailit, Mahasarakham University, THAILAND	
<b>WHAT LEADERSHIP STYLE IS MORE APPROPRIATE FOR THE ETHICAL NEEDS OF THE ORGANIZATION AND THE WORKERS IN THE 21<sup>ST</sup> CENTURY?</b>	<b>217</b>
Ernest Alonza Norris, University of Phoenix, Nashville, Tennessee, USA Verneshia Brown-Boone, University of Phoenix, Beachwood, Ohio, USA	
<b>WHY EVERY ECONOMICS PROGRAM SHOULD HAVE AT LEAST ONE PLURALIST ECONOMICS COURSE</b>	<b>231</b>
Rod O'Donnell, University of New South Wales, Sydney, AUSTRALIA	
<b>REFLECTIONS ON CONTENT ANALYSIS OF INDIAN MAGAZINE ADVERTISEMENTS</b>	<b>236</b>
Bhagaban Panigrahi, Norfolk State University, Norfolk, Virginia, USA Ranjita Misra, Texas A & M University, College Station, Texas, USA	

<b>THE EMPIRICAL INSIGHTS ON THE PROBABILITY OF WINNING: AN EVIDENCE FROM THE NATIONAL BASKETBALL ASSOCIATION (NBA)</b>	<b>241</b>
Jonathon Euerle, Minnesota State University, Mankato, Minnesota, USA Kwang Woo (Ken) Park, Minnesota State University, Mankato, Minnesota, USA Soonhwan Lee, Minnesota State University, Mankato, Minnesota, USA	
<b>EFFECT OF ALCOHOL ON COLLEGE GRADES</b>	<b>248</b>
Manimoy Paul, Siena College, Loudonville, New York, USA	
<b>U.S. OFFSHORE OUTSOURCING WITH REFERENCE TO INDIA: A CRITICAL EXAMINATION</b>	<b>253</b>
Kamrouz Pirouz, Montclair State University, Upper Montclair, NJ, USA Farahmand Rezvani, Montclair State University, Upper Montclair, NJ, USA	
<b>ARCHAEOLOGICAL EXCAVATING IN VIRTUAL VILLAGES: A PRIMER ON DISCOVERY OF ARTIFACTS FROM A DIGITAL CULTURE</b>	<b>260</b>
Richard L. Ponschock, Capella University & Desert Depot LLC, Yuma, Arizona, USA Toni Buchsbaum Greif, Capella University & Sound Beach LLC, Sarasota, Florida, USA	
<b>GRAPHIC PRESENTATION PATTERNS OF THE SHARES IN THE UNCLASSIFIED ROMANIAN GROUPS</b>	<b>266</b>
Iustin Atanasiu Pop, Babes-Bolyai University, Cluj-Napoca, Romania	
<b>THE EFFECTS OF TEAMWORK OF AUDITORS ON ORGANIZATIONAL COMMITMENT AND PERFORMANCE: EVIDENCE IN THAILAND</b>	<b>274</b>
Pairat Pornpundejwittaya, Mahasarakham University, THAILAND	
<b>ANALYZING IMPACT OF STRATEGIC PLANNING ON THE QUALITY OF HEALTH CARE BENEFIT PLAN OFFERINGS IN SMALL AND MEDIUM ENTERPRISES</b>	<b>283</b>
Dharam S. Rana, Jackson State University, Jackson, Mississippi, USA Stacey Reynolds McNeil, Jackson State University, Jackson, Mississippi, USA	
<b>GLOBAL CAREERS: WHERE IN THE WORLD DO CSU MBA STUDENTS WANT TO GO AND WHY?</b>	<b>290</b>
Asha Rao, California State University East Bay, USA Ekaime Ekanem, California State University East Bay, USA Nma Eleazu, California State University East Bay, USA Kim Mai, California State University East Bay, USA Vijay Pamula, California State University East Bay, USA Romeo Peleneagra, California State University East Bay, USA	
<b>SYSTEMATIC DISTORTION: A PHENOMENON THAT MAY BE INFLUENCING CONSUMER PERCEPTION AND ADOPTION OF ORGANIC PRODUCTS</b>	<b>297</b>
Kevin M. Elliott, Minnesota State University, Mankato, Minnesota, USA Juan (Gloria) Meng, Minnesota State University, Mankato, Minnesota, USA	
<b>TECHNICAL ANALYSIS: DONCHIAN CHANNELS AND THE BRITISH POUND</b>	<b>302</b>
David L. Rayome, Northern Michigan University, USA Abhijit Jain, Northern Michigan University, USA Daniel Konku, Northern Michigan University, USA	
<b>STUDENTS AS MARKETING CONSULTANTS</b>	<b>306</b>
Peter A. Reday, Youngstown State University, Youngstown, Ohio, USA	



<b>GENERATIVE LEARNING AS A CATALYST FOR SERVANT LEADERSHIP AND CO-CREATED UNIQUE VALUE AT THE ORGANIZATIONAL AND COMMUNITY LEVEL</b>	<b>312</b>
Anne Saber Hallcom, Capella University, Miami, FL, USA Toni Buchsbaum Greif, Capella University and Sound Beach, LLC, Sarasota, Florida, USA Marilyn E Harris, Capella University and Human Systems Change Consulting, Petoskey, Michigan, USA Philip Cass, Columbus Medical Association and Foundation, Columbus, OH, USA	
<b>WILLIAM GATES AND MICROSOFT: SYNTHESIZING 21<sup>ST</sup> CENTURY GLOBAL LEADERSHIP APPROACH</b>	<b>324</b>
Marilyn E Harris, Capella University and Human Systems Change Consulting Petoskey, Michigan, USA Matias Santana, Capella University, USA, USFQ, Quito, ECUADOR	
<b>THE EFFECTS OF A PROCESS CONTROL IMPROVEMENT INTERVENTION ON FISCAL PERFORMANCE IN A CORRECTIONS FACILITY</b>	<b>344</b>
Anthony Stahelski, Central Washington University, Ellensburg, USA Stephen Schepman, Central Washington University, Ellensburg, USA Karen Kelley, Yakima County Department of Corrections, WA, USA	
<b>MUTUALLY ADVANTAGEOUS FINANCIAL LEASES</b>	<b>348</b>
Jacques A. Schnabel, Wilfrid Laurier University, Waterloo, Ontario, CANADA	
<b>MOTIVES OF INTERNATIONAL JOINT VENTURES FORMATION IN INDIA: IDENTIFICATION OF LATENT RESOURCE BASED MOTIVES</b>	<b>353</b>
Rajeev D Sharma, Charles Darwin University, Northern Territory, AUSTRALIA	
<b>SKILL BASED PAY AND EDUCATIONAL OUTCOMES</b>	<b>361</b>
Miles M. Smayling, Minnesota State University-Mankato, Mankato, Minnesota, USA	
<b>THE WHO, WHAT, WHERE, AND HOW OF NON-FINANCIAL METRIC DISCLOSURE: AN EXPLORATORY QUALITATIVE EXAMINATION OF EUROPEAN MULTINATIONAL AND INDIAN COMPANIES' DISCLOSURE OF NON-FINANCIAL METRICS</b>	<b>366</b>
Anthony J. Culpepper, Pepperdine University, Malibu, California USA J. Goosby Smith, California State University Channel Islands, Camarillo, CA, USA	
<b>THE EMPIRICAL INSIGHTS ON THE PROBABILITY OF WINNING: EVIDENCE FROM THE NATIONAL BASKETBALL ASSOCIATION (NBA)</b>	<b>373</b>
Jonathon Euerle, Minnesota State University, Mankato, Minnesota, USA Kwang Woo (Ken) Park, Minnesota State University, Mankato, Minnesota, USA Soonhwan Lee, Misericordia University, Dallas, Pennsylvania, USA	
<b>PERSONALITY AND ATTITUDE TOWARDS KNOWLEDGE SHARING BEHAVIORS OF BANK OFFICERS IN THAILAND</b>	<b>380</b>
Phichai Tangpinyoputtikhun, Mahasarakham University, THAILAND	
<b>GLOBAL PROJECT IMPLEMENTATION IS AN EDUCATIONAL PROCESS</b>	<b>388</b>
M. Jeffery Tyler, Kaplan University, Ft. Lauderdale, Florida, USA	
<b>IN SEARCH OF PROFITABLE GROWTH: STRATEGIC PRIORITIES PUT TO A META-ANALYTIC PERFORMANCE TEST</b>	<b>394</b>
Andreas Bausch, Friedrich Schiller University, Jena, Germany Frithjof Pils, Jacobs University, Bremen, Germany Duc Linh Van Tri, Jacobs University, Bremen, Germany	

<b>CELL PHONE ATTACHMENT: A MEASURE AND ITS BENEFITS</b>	<b>407</b>
Elizabeth Alexander, Marshall University	
Cheryl B. Ward, Middle Tennessee State University	
Charles K. Braun, Marshall University	
<b>CONTINGENT APPROACHES TO THE EFFICIENT FORMATION OF VIRTUAL TEAMS</b>	<b>413</b>
Velvet Weems-Landingham, Kent State University- Geauga, Burton, OH, USA	
<b>STRESS MANAGEMENT DESIGNED FOR HIGH ACHIEVERS</b>	<b>419</b>
Gayle Webb White, Southern Arkansas University, Magnolia, Arkansas, USA	
<b>COOL-HUNTING: A BASIS FOR CATALYZING ENTREPRENEURIAL THINKING</b>	<b>425</b>
Gary Wishniewsky, California State University, East Bay, Hayward, California, USA	
<b>TRADE WITH AUTOCRATIC CHINA: DOES IT JUSTIFY OR RUIN "DEMOCRATIC TRADE"?</b>	<b>433</b>
Tianxiao Yang, University of Texas- Dallas, Richardson, Texas, USA	
<b>EFFECTS OF UNDERWRITERS, VENTURE CAPITAL AND INDUSTRY ON LONG-TERM IPO PERFORMANCE<sup>1</sup></b>	<b>438</b>
Juin Boon Ang, San Francisco State University, San Francisco, California, USA	
Yuli Su, San Francisco State University, San Francisco, California, USA	
Yewmun Yip, University of South Dakota, Vermillion, South Dakota, USA	
<b>THE EFFECTS OF EMOTIONAL STRESS ON INFORMATION PROCESSING</b>	<b>441</b>
Veysel Yucetepe, Kean University, Union, New Jersey, USA	
Danielle M. Mayer, Kean University, Union, New Jersey, USA	
<b>PUBLIC ADMINISTRATION AND DEVELOPMENT IN INDIA: PREMISE, FORM AND PERFORMANCE</b>	<b>445</b>
T. Yadagiri Rao, Kakatiya University, Warangal, Andhra Pradesh, INDIA	
R. Meghana Rao, New Science Degree College, Warangal, Andhra Pradesh, INDIA	
<b>LONG-TERM UNEMPLOYMENT IN CENTRAL EUROPE: HOW BAD IS IT?</b>	<b>452</b>
Thomas Mondschean, Department of Economics, DePaul University, Chicago, IL, USA	
Margaret Oppenheimer, Department of Economics, DePaul University, Chicago, IL, USA	
<b>BUSINESS PROCESS MANAGEMENT IN ACADEMIA: HOW TO LEVERAGE RESOURCES</b>	<b>453</b>
Scott Metlen, University of Idaho, Moscow, Idaho, USA	
<b>AIRPLANES, LLC: A CASE IN COMPLEX TAX PLANNING AIMED AT AVOIDING U.S. TAX BY SHIFTING INCOME TO A FOREIGN PARTNER</b>	<b>455</b>
David J. Roberts, DePaul University, Chicago, Illinois, USA	
Mark Sullivan, DePaul University, Chicago, Illinois, USA	
<b>DEFINED BENEFIT PENSION PLANS: APPLICATION OF FAS 158 TO FINANCIAL ACCOUNTING AND REPORTING BY EMPLOYERS</b>	<b>457</b>
G. Eddy Birrer, Gonzaga University, Gonzaga University	
<b>FROM MADE IN CHINA TO GLOBAL CHINESE BRAND</b>	<b>458</b>
Joseph Ben-Ur, University of Houston – Victoria, Victoria, Texas, USA	
Jifu Wang, University of Houston – Victoria, Houston, Texas, USA	



## AUTHOR INDEX:

Agboh, Dennis	104	Fong, Michelle W. L.	116
Alexander, Elizabeth	407	Gavriletea, Marius D.	121
Anantharaman, Sekhar	55	George, Nashwa	129
Ang, Juin Boon	438	Gilani, Berina Esra O.	21
Ardelean, Victor	65	Gilani, Syd	21
Batrancea, Ioan	61; 65	Gordon, Jean	132
Batrancea, Maria	70	Greif, Toni Buchsbaum	147; 260; 312
Bausch, Andreas	394	Guster, Dennis	137; 142
Beale, Ruby L.	98	Hallcom, Anne Saber	312
Becker, Hilary	75	Harris, Marilyn E	147; 312; 324
Ben-Ur, Joseph	458	Hervani, Aref A.	1
Ben□e, Corneliu	81	Hollister, Kimberly Killmer	152
Birrer, G. Eddy	457	Howard, Phillip D.	38
Bonpasse, Morrison	46	Huang, Philip Y.	159
Borlea, Sorin	61	Indvik, Julie	164
Borsay, Telemantie	98	Jain, Abhijit	302
Braun, Charles K.	407	Jansen, Brittany	137
Brown-Boone, Verneshia	217	Johnson, Pamela R.	164
Cass, Philip	312	Jung, Wonjin	178
Changchit, Chuleeporn	86	Karkouliau, Silva	183
Choi, Yong	92	Kelley, Karen	344
Commuri, Chandrasekhar	92	Konku, Daniel	302
Coronel, Francisco	98	Koppel, Nicole B.	152
Culpepper, Anthony J.	366	LaBonte, Joanne	1
David, Dessa	104	Lau, Eric K. W.	190
Dumbrava, Partenie	121	Lee, Jungki	55
Ekanem, Ekaime	290	Lee, Soonhwan	241; 373
Eleazu, Nma	290	Lima, Mario	194
Elliott, Kevin M.	199; 297	Lin, Man-Li	159
Euerle, Jonathon	241; 373	Mai, Kim	290
Fakinlede, Solomon	109	Mayer, Danielle M.	441

McNeil, Stacey Reynolds	283	Rawlins, Claudia	164
Meng, Juan (Gloria)	199; 297	Rayome, David L.	302
Messarra, Leila	183	Reday, Peter A.	306
Metlen, Scott	453	Rezvani, Farahmand	253
Millathe, Udeesh	137	Rhyne, James	86
Misra, Ranjita	236	Roberts, David J.	455
Mondschean, Thomas	452	Santana, Matias	324
Moser, Tami S.	132	Schepman, Stephen	344
Moyes, Glen D.	204	Schnabel, Jacques A.	348
Nachailit, Ingorn	207	Shao, Lawrence P.	204
Ndurumo, Jane W.	116	Sharma, Rajeev D	353
Newsome, Michael	204	Slattery, Tim	142
Nordby, Mark	137; 142	Smayling, Miles M.	361
Norris, Ernest Alonza	217	Smith, J. Goosby	366
O'Donnell, Rod	231	Stahelski, Anthony	344
Oppenheimer, Margaret	452	Su, Yuli	438
Pamula, Vijay	290	Sullivan, Mark	455
Panigrahi, Bhagaban	236	Sultanov, Renat	142
Park, Kwang Woo (Ken)	241; 373	Tangpinyoputtikhun, Phichai	380
Paul, Manimoy	248	Tyler, M. Jeffery	388
Peleneagra, Romeo	290	Van Tri, Duc Linh	394
Pils, Frithjof	394	Wang, Jifu	458
Pirouz, Kamrouz	253	Ward, Cheryl B.	407
Ponschock, Richard L.	260	Weems-Landingham, Velvet	413
Pop, Cornelia	121	White, Gayle Webb	419
Pop, Iustin Atanasiu	266	Williams, Michael	132
Pornpundejwittaya, Pairat	274	Wishniewsky, Gary	425
Rana, Dharam S.	283	Wishniewsky, Gary	170
Rao, Asha	290	Yang, Tianxiao	433
Rao, R. Meghana	445	Yip, Yewmun	438
Rao, T. Yadagiri	445	Yucetepe, Veysel	441

## ENTRY DETERANCE IN RECYCLING MARKETS AND GOVERNMENT POLICIES: THE CASE OF OLD NEWSPAPERS IN THE USA

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### ABSTRACT

*The wastepaper recycling market, in particular, old newspapers (ONP) has not been successful in utilizing the ONP generated. There exist high sunk costs for entry to the market and also there are small numbers of buyers with relatively large market shares in the ONP market. To alleviate recycling, two state government policies were implemented. The problem being investigated is: what are the impacts created on ONP markets by state government recycling policies when these markets are influenced by market power of ONP buyers. The impacts of buyers market power on amounts of ONP utilized and on new entrants into de-inking market were examined. Further, the impacts of two government policies which were designed to help to increase the ONP supply levels (through higher recovery rates) and stimulate demand for ONP (minimum content standards) on amounts of ONP supplied and utilized were investigated. The findings from this study confirmed that buyers' market power had negative impacts on future capacity levels. The government policies had positive impacts on future capacity levels.*

**Keywords:** Oligopsony, Minimum Content Standards, Mandated Recycling Programs, Buyers and sellers market Shares

### I. INTRODUCTION

The increasing volume of municipal solid waste (MSW) generated and limited landfill availability for disposal purposes has raised concerns about the future of landfill space as the number of landfills in operation in U.S. declined by almost 75% between 1963 and 1993 (Yang, 1993; Ready and Ready, 1995; Ince, 1998). As a result of higher costs associated with landfill disposal fees, land filling has become less economical. A lack of landfill availability has created a need to reduce the volume of waste stream by source reduction or recycling. To address the problem of landfill availability, states have undertaken a variety of voluntarily and mandated recycling programs to reduce the volume of MSW. A greater percentage of recycling programs implemented on a voluntary basis or mandated by state legislation have included wastepaper recycling in their programs (i.e., 24 states have mandated recycling programs and 12 states have mandated recycled fiber standards). Two main government policies which are considered to help to increase the wastepaper recycling rates are: the mandated recycling programs on the demand-side and the minimum content standards on the supply-side (i.e., in newsprint manufacture). The landfill crisis can be most easily dealt with if the volume of wastepaper entering the MSW is reduced. Table 1 shows the supply and demand sides policy enactment dates.

The share of waste paper in municipal solid waste has been increasing to approximately 40% of the total volume in the last decades. About 80% of paper going into waste is estimated to be recoverable (EPA, 1992). The existence of oligopolistic market power in newsprint output may allow exploitation of ONP by input buyers. The interdependence between oligopolistic and (possible) oligopsonistic market structure and market imperfections may impact the effectiveness of government policies dealing with ONP market. Imperfect market structure of ONP reduces recovery of ONP through lower prices paid for ONP input which may not cover collection and recovery rates of ONP, therefore weakens the effectiveness of government policies aimed at enhancing recycling. This study postulates that Oligopsony elements were present among newsprint mills in ONP input market prior to the mandated recycling programs and this trend is undergoing some changes that may weaken the Oligopsony impacts on ONP prices.

The market demand for ONP has been very limited, hampering the success of collection efforts and recycling programs. The limited demand for ONP may be due to the structure of ONP market. There are three market observations which indicate that there may exist oligopsonistic elements in the ONP market: (1) the existence of barriers to entry; (2) relatively few large buyers and many sellers; and (3) historically volatile price variations and instability. The lack of capacity utilization for recovered ONP

**TABLE 1 - CURRENT U.S. MANDATED RECYCLING PROGRAMS**

Sates	<u>Supply-side Policy</u> Enactment Date	<u>Demand-side Policy</u> Enactment Date
<b><u>NORTHEAST</u></b>		
Vermont	1987	-----
New Jersey	1988	-----
Connecticut	1991	1990
New York	1992	-----
Pennsylvania	1991	-----
Rode Island	1991	1991
Maine	1994	
Maryland	-----	1990
<b><u>MIDWEST</u></b>		
Illinois	1991	1990
Indiana	1991	-----
Ohio	1994	-----
Missouri	-----	1990
Wisconsin	-----	1990
<b><u>SOUTH</u></b>		
Virginia	1991	-----
North Carolina	1991	1991
Alabama	1991	-----
Louisiana	1992	-----
West Virginia	1992	-----
Texas	1994	1991
Georgia	1992	-----
Florida	1994	1989
Tennessee	1995	-----
<b><u>WEST</u></b>		
Washington	1991	-----
Oregon	1991	1991
California	1989	1989
Nevada	1991	-----
Arizona	1990	1990

Source: Collected from American Paper Institute (API), "Pulp and Paper Factbooks"

(OTA, 1992; Rosenberg, 1993; Ince, 1998); the volatile prices for ONP (Garcia, 1993); the unstable market demand for ONP (NSWMA, 1990); and the supply-side policies creating "supply glut" (Nestor, 1992) hamper a successful recycling market operation.

The three problems may be linked to an imperfect market structure of ONP. First, the lack of de-inking capacity to utilize ONP, among non-newsprint paper mills, can be due to the fact that the capital cost of entry into de-inking market for these mills is very high (Booth, et al., 1991; Nestor, 1992; Rosenberg, 1993). Second, there are few buyers and many sellers of ONP and the fewness of buyers (oligopolies in the output market) may result in market power (Galbraith, 1952). The newsprint mills in regions are few large buyers of ONP with significant demand for ONP input (Table 2). Third, volatile and unstable input prices can be an outcome of imperfect market structure where sudden changes in quantity of input demanded by large potential buyers can have a great impact on prices (Galbraith, 1952). The ONP input

prices have been volatile and unstable across the regions (Gill and Lahiri, 1980), with more unstable prices occurring in years 1989 through 1995 (Hervani, 1997; Ince, 1998). ONP prices fluctuated widely and fell to the lowest levels between 1989 and 1994 with a sudden spike in 1995 (Ince, 1998; Ackerman and Gallagher, 2001), and further, falling back to relatively lower levels throughout 2000. Other explanations offered for the price volatility in ONP input market are: the sudden increase in demand for ONP when the industry is attempting to adjust (due to mandated policies); and the recovered paper price trends were linked to trends in exports in late 1990s (Ince 1998).

One potential factor that has caused a change in the degree of competition between the integrated and non-integrated mills is the new federal environmental regulations for the pulp and paper industry (Bourdages 1993) and the government mandated policies as to minimum content standard. Higher standards of recycled content set by different states can intensify the competition for recyclable materials. The increased competition among newsprint mills for ONP input has had different impacts on ONP prices in various regions of the country. Two state government policies in several specific states were implemented to increase ONP utilization: the mandatory recycling programs (a supply-side policy) and the minimum content standards (a demand-side policy). The supply-side policy would help to increase ONP recovery rates and demand-side policy would help to encourage ONP utilization rate among newsprint mills. The government mandated recycling program was enacted in 1987 in the State of Vermont and the minimum content standards were enacted in 1989 in the State of California. In the following years several other states took similar measures in helping boost their recycling programs and to solve the lack of landfill availability.

The present investigation is significant for three reasons: landfill crisis; lower ONP recovery rates, limited effectiveness of government policies in the presence of market power; and theoretical and empirical contributions to the theory of oligopsony. This study makes theoretical and empirical contributions to the analysis of oligopsony in input market where the game theoretic models have mainly focused on the output market and the measurement of the impacts of sellers' market power in the product market. This research examines the ONP input market and measures the buyers' market power in the input market and further makes an analysis of the effectiveness of government policies in the presence of market power in the ONP input market. This study by examining the underlying factors that hamper the success of recycling programs in the ONP input market, addresses the limited of landfill availability through ONP input where ONP makes up 14% of total waste in MSW and is a significant part of the waste stream.

## **2. NEWSPRINT INDUSTRY STRUCTURE**

The largest market for old newspapers is the recycled newsprint industry. Old newspapers recycled into newsprint make up only 30% of total and the remaining are used in paperboard, tissue, towels, construction paper and board, cellulose insulation, gypsum wallboard, caulk, asphalt coatings, animal bedding, and mulch products made from shredded newsprint (Paper Task Force, 1995). A majority of the grades used in the manufacture of newsprint consists of old newspaper (ONP), old magazines (OMG), and coated flyers (PAMs). There exists a high degree of substitutability between old newspapers and ground woodpulp to manufacture newsprint and other paper products. Production of newsprint consists mainly of two input mixes such as groundwood and kraft and ONP contains both groundwood and kraft. ONP is most often used to make newsprint and several recycled mills can utilize ONP without deinking (i.e., recycled boxboard mills). There are no substitutes for ONP, except for high-grade deinked pulp. The non-newsprint mills such as tissue, towels, recycled boxboard mills have several substitutes to ONP and can utilize corrugated boxboards (OCC) or old magazines (OMG) which are relatively less expensive, therefore, are discouraged to utilize ONP in production of recycled products. The ONP consumption among these mills has declined in the U.S. regions since the late 1980s.

There are four newsprint mills in the U.S. that have produced 100% recycled-content newsprint since the 1970s. In 1990, there were 18 newsprint firms producing recycled content newsprint paper and the number increased to 20 firms in 1995 (24 mills) and there has been very little changes in the structure of the industry in early 2000s. The top four mills in recycled newsprint production had nearly 100% of the market shares of the total recycled newsprint produced in 1972, 59% in 1990, 49% in 1995, and 48% in year 2000. The market shares of ONP consumption among newsprint mills were nearly 16% in 1972

from total ONP consumed in the U.S., 43% in 1988, nearly 40% in 1995 (Hervani, 1997), and 38% in 2000 (AFPA, 2001). The market shares of ONP consumption among newsprint mills were different across regions and newsprint mills in South consumed the greatest amounts, nearly 55% of total recovered ONP supplied, 40% in West, 21% in Northeast, and 31% in Midwest in 1995 (Table 2).

**TABLE 2. NEWSPRINT AND DEINKING CAPACITY LEVELS, SHARES OF NEWSPRINT OUTPUT, AND SECONDARY FIBER, NEWSPRINT FIRMS IN THE U.S., 1995**

MILLS	Newsprint Capacity	Deinking Capacity	ONP Consumption	Shares of ONP in Region	Date of Entry into Deinking Industry
	Shares <sup>a</sup> (%)	Shares (%)	1000 metric tons	Shares (%)	
NORTHEAST	7.8	21.41	364.17	20.45	
Garden State (1)	3.4	16.03	261.892	14.71	1970
Great Northern (1)	4.1	5.38	102.285	5.74	1993
MIDWEST	7.6		809.6	30.45	
Manistique Paper (1)	4.5	12.86	280.952	18.57	1970
FSC Paper (1)	2.1	6.95	164.528	11.88	1970
SOUTH	56.0	33.93	1208.5	54.11	----
Southeast Paper (1)	6.7	14.09	539.191	24.14	1979
Augusta Newsprint (1)	5.6	3.43	91.875	4.11	1988
Alabama River (1)	3.7	1.61	46.558	2.08	1991
Bowater Inc (2) <sup>b</sup>	15.9	3.35	91.875	4.11	1992
Kimberly Clark (1)	4.3	1.21	102.446	4.59	1993
Champion Int'l (2)	13.3	7.70	225.656	10.21	1993
Newsprint South (1)	3.3	2.10	56.345	2.42	1993
Bear Island (1)	3.2	2.04	54.628	2.45	1994
WEST	30.7	45.70	904.02	45.05	-----
Smurfit Newsprint (3)	11.9	21.39	430.252	21.67	1970
Southwest Forest (1)	4.6	9.72	170.402	8.77	1976
North Pacific (1)	4.3	6.73	159.629	7.86	1992
Inland Empire (1)	1.1	1.50	37.431	1.97	1991
Boise Cascade (2)	8.8	6.36	106.307	4.76	1993

Source: Constructed From Lockwood's Posts-Directory, 1996. The Canadian Shares of Newsprint is not Included In Calculations

<sup>a</sup> The newsprint shares from total industry output.

<sup>b</sup> The Numbers in The Parenthesis Present The Number of Mills

The U.S. ONP de-inking capacity increased from 1.7 to 5.5 million metric tons for the period 1975 through 1994 (AFPA, 1995) and declined by 34% over the period 1995-2000 (AFPA, 2001). De-inking capacity among newsprint mills decreased in Northeast and West, increased in South, and remained the same in Midwest. The non-newsprint mills' shares of de-inking capacity increased in Northeast and West, and fell in South and remained the same in Midwest (Tables 2).



De-inking capacity in regions of the U.S. varies, but tends to be concentrated in regions with higher number of paper mills. In 1995, the largest capacity exists in the South (34%), followed by the Northeast (26%), the West (20%), and the Midwest, which made up the remaining 20% (AFPA, 1995). The deinking capacity of newsprint mills increased in Northeast and Midwest and fell in South and West over the years 1995-2000. The recycled and fresh newsprint manufacturers have the largest shares of de-inked pulp production (47%). Other paper and paperboard mills have 31% of total de-inked pulp production and independent de-inking mills, approximately 18% of the total de-inked pulp capacity in the U.S. (PPI, 1994).

The de-inking capacity in the U.S. among newsprint and non-newsprint mills has increased and the largest increases were in the late 1980s and early 1990s (AFPA, 1995). The factors that could have had any significant impact on de-inking capacity increases of non-newsprint de-inking mills and newsprint mills in the years 1988-1995 were the mandated recycling programs in supply-side and the minimum content standards in demand-side.

The industry has undergone few changes in the last decade. The rising landfill disposal fees, the mandated recycling programs, the minimum content standards, and addition of new deinking capacities have led to volatile market for ONP input and recovered ONP prices. The sudden and rapid rise in demand for recovered ONP, led to higher ONP prices in mid 1990s, and this trend continued until the industry was adjusted with sufficient capacity (Ince, 1998). Ackerman and Gallagher (2001) examine several theories that may explain the sudden price hike in wastepaper: market structure and inventory fluctuation; macroeconomic trends; lags in capacity adjustment; government policies designed to promote recycling; changes in export demand; and speculation.

The analysis of ONP input market in this study identifies the following factors that may have contributed to the volatile nature of ONP in 1990s and the price spike in 1995: the rising demand for ONP in early 1990s due to the enactment of the minimum content standards (leading to unexpected increases in ONP input purchases and depletion of inventories), the capacity adjustment lags in ONP input market (the deinking capacity of newsprint mills in four regions were lagging behind ONP recovery rates in 1990s), the overall supply of recovered ONP grew in late 1980s motivated by the mandated supply-side policy, and the ONP export demand grew as ONP prices fell to the lower levels in 1990s.

## **2.1 Industry Cost Structures**

There is no uniform cost structure in the newsprint industry (i.e., nor in the recycled newsprint industry). Several reasons for this could be that: some newsprint firms are integrated while others use recycled input or a combination of virgin material and recycled materials; older machines have lower capacities and require more labor per unit of output than new machines (Booth 1990); larger machines have a higher marginal product of capital; and there are regional differences in input costs, as well as transportation costs to markets. Firms differ in the amount of capacity they own and in the age and production costs of that capacity. Therefore, the cost of production of fresh and recycled newsprint is affected by the degree of integration of the virgin fiber and recycled inputs, among other factors such as the cost of meeting environmental regulations and standards.

The two components of total costs are fixed costs and the variable costs. Fixed costs are dependent upon the total capacity of the firm. Variable costs in the newsprint industry are materials (groundwood, chips, pulp, recycled fiber, chemicals, etc.), labor, transportation, energy, and other materials and supplies such as maintenance of materials and operating materials (Nestor 1992). The two most significance cost components of manufacturing costs for recycled fibers are raw materials and energy.

The importance of these costs varies by firm and region. There are major cost differences between firms and the several factors that account for these differences are the location of a firm's mills, the age and size of its paper machines, the secondary material input costs, the furnish mix of the wood costs, and the proportion of energy purchased as opposed to self-generated energy (Booth 1990).

Newsprint production from virgin and recycled fibers each requires different equipments and technologies. Recycled newsprint production from ONP fiber requires capacity in ONP deinking mills and recycled paper making mills. Technological barriers exist in the paper making process (such as stickies and adhesives) where it utilizes virgin fiber as the input to produce fresh newsprint and the use of deinked ONP fiber to produce recycled newsprint.

Adjustment costs, associated with a switch in production technology from virgin fiber-based to an ONP-fiber based mill, exist (Nestor, 1992). The major difference between the costs of making virgin and recycled paper is in the pulping and stock preparation stages. The cost of building a new mill is considerably greater than the cost of expanding an existing mill. Building a new mill for recycled paperboard can cost 50% more and take twice as long as expanding an existing mill. The cost differential for the fiber itself is much less important in the comparative economics of virgin versus secondary fiber than this capital cost differential.

## **2.2 Deinking Industry**

Deinked pulp is an intermediate input primarily in manufacture of three types of papers: newsprint, tissue, and fine paper. The share of deinked pulp in recycled newsprint production has been increasing (API 1995). Deinked pulp can be a substitute to virgin fiber (i.e., groundwood pulp) utilized in newsprint manufacture. Deinked pulp is an intermediate output for non-integrated mills which own no paper making facilities and are independent sellers of deinked pulp. Deinked pulp is also an intermediate input in recycled newsprint production. The integrated mills which produced newsprint utilizing only virgin fiber have installed their own deinking facilities and are engaged in the production of recycled content newsprint with different recycled contents. The non-integrated mills which are 100% recycled newsprint producers, have their own deinking mills and produce deinked pulp, mainly from ONP, in the manufacture of recycled newsprint. Table 3 shows the deinking capacity among ONP fiber-based mills and virgin fiber-based mills.

Recovered waste paper, or secondary fibers, is used to produce new paper products, construction materials, and miscellaneous products such as animal bedding, insulation, and cushioning. The major grades of wastepaper differ in how they are being used. These differences fall into: ONP use in deinked newsprint, corrugated use in kraft linerboard, corrugated mediums, and pulp substitutes, and high-grade deinked pulp in tissue. The largest concentration of recycled production is in the south, which accounts for about 35% of total production, by value. The north central region and the northeast account for about 25% each. The industry consists primarily of large establishments. Nearly half of all the U.S. paper and paperboard mills are directly associated with a pulp mill. The major grades of waste paper traded include: 1) old corrugated containers (OCC); 2) old newspapers (ONP); 3) mixed grades; 4) high grade deinked paper and 5) insulation and packaging.

Most recycling takes place in mills dependent on paper stock for raw materials. The regional distribution of paper mills that consume waste paper differs somewhat from that of virgin paper mills. The remote location of some mills near timber resources introduces a high paper stock freight cost, which, when combined with the value of the paper stock at market prices, makes paper stock expensive in comparison with virgin wood pulp. The market also varies by area and recycling is more favorable in areas near recycling mills or near ports where export markets provoke demand. The make up of deinked pulp production by type of mills in four U.S. regions are presented in Table 4-5. As shown in the table, the Western region of the U.S. has the highest shares of deinked pulp utilized in newsprint manufacture, followed by the Southern region. Market deinked pulp is mostly produced in South and Northeast.

The use of deinked pulp in tissue production is mainly concentrated in Northeast, Midwest, and South. The use of deinked pulp in manufacture of printing and writing materials is mainly concentrated in Midwest and Northeast. As shown in the Table, three regions (Northeast, Midwest, and South) face tougher competition for deinked pulp from other paper manufacturers and market pulp producers. The only exception is West where the largest market for deinked pulp is controlled by recycled newsprint producers. The regional consumption of ONP in recycled paper mills by type of industries are listed in Table 4-5.

**TABLE 3: THE U.S. & REGIONAL ONP MARKET SHARES BY NEWSPRINT MILLS, 1970-1995**

year	ONP Market Shares By Newsprint Mills							
	ONP Fiber-Based Mills				VIRGIN FIBER-BASED MILLS			
	N. East	Mid-West	West	Total	N. East	South	West	Total
1972	0.10	0.07	0.05	0.21	0	0	0	0
1973	0.09	0.06	0.05	0.20	0	0	0	0
1974	0.09	0.06	0.05	0.20	0	0	0	0
1975	0.11	0.08	0.07	0.26	0	0	0	0
1976	0.10	0.07	0.06	0.23	0	0	0.03	0.03
1977	0.11	0.07	0.06	0.24	0	0	0.03	0.03
1978	0.10	0.07	0.06	0.24	0	0	0.03	0.03
1979	0.10	0.07	0.06	0.22	0	0.05	0.03	0.08
1980	0.10	0.06	0.06	0.22	0	0.06	0.05	0.11
1981	0.10	0.06	0.06	0.22	0	0.06	0.06	0.12
1982	0.09	0.06	0.06	0.20	0	0.06	0.06	0.12
1983	0.09	0.06	0.05	0.19	0	0.06	0.10	0.16
1984	0.10	0.06	0.05	0.21	0	0.06	0.13	0.19
1985	0.10	0.06	0.06	0.21	0	0.06	0.13	0.18
1986	0.09	0.09	0.05	0.24	0	0.05	0.13	0.18
1987	0.09	0.09	0.05	0.24	0	0.05	0.15	0.20
1988	0.09	0.09	0.05	0.24	0	0.20	0.15	0.35
1989	0.08	0.08	0.05	0.21	0	0.19	0.13	0.32
1990	0.07	0.07	0.04	0.19	0	0.17	0.13	0.29
1991	0.06	0.06	0.04	0.17	0	0.17	0.12	0.28
1992	0.06	0.06	0.04	0.16	0	0.18	0.10	0.28
1993	0.06	0.07	0.04	0.17	0.10	0.20	0.13	0.43
1994	0.05	0.06	0.04	0.15	0.10	0.19	0.12	0.41
1995	0.05	0.06	0.04	0.15	0.10	0.19	0.12	0.40

### 2.3 Deinking Market Structure

Recycled newsprint production in the U.S. has a longer history than its counterpart in Canada. There were four newsprint mills in the U.S. which have been producing 100% recycled newsprint since the 1970s. The number of newsprint mills producing recycled content newsprint more than doubled in 1980s and, in 1995, almost all newsprint mills in the U.S. were equipped with deinking plants. The top four mills in recycled newsprint production had nearly 100% of the market share of the total recycled newsprint produced in 1970 and the top four recycled newsprint producers had nearly 59% and 44% of the total recycled newsprint produced in 1990 and 1995, respectively. The market shares of ONP consumption among newsprint mills were nearly 16% in 1970 from total ONP consumed in the U.S., 43% in 1988, and nearly 40% in 1995 (Table 2).

The ONP consumption among newsprint mills in the U.S. is presented in Table 2. As shown in Table, among the U.S. regions, newsprint mills in the West have had the largest shares of ONP consumption since 1970, accounting for nearly 27% of total ONP consumption in the region in 1972 and nearly 77% in 1995. Next to the Western region, the recycled content newsprint producers in Northeast have had a market share of ONP ranging from 21% in 1972 to 36% in 1995 of total ONP consumed in the region. ONP consumption by the newsprint industry in the Northeast has been mainly in the hands of Garden State Paper with Great Northern Paper joining the market in 1993. Southern newsprint mills had 24% of share ONP consumption from total ONP consumed in the region in 1972 and this number increased to 31% in 1995. The same features have been taking place in Midwest where the two newsprint mill's share of ONP consumption from the total ONP consumed in the region has ranged from 16% in 1972 to nearly 23 % in 1995.

**TABLE 4: THE SHARES OF ONP USERS FROM TOTAL ONP RECOVERED & SUPPLIED BY REGIONS, U.S. 1972-2000**

Year	Shares of ONP Use by Sector (%s)							
	N. East		Mid West		South		West	
	Newsprint Mills	Non Newsprint Mills	Newsprint Mills	Non Newsprint Mills	Newsprint Mills	Non Newsprint Mills	Newsprint Mills	Non Newsprint Mills
1972	23.74	65.75	21.33	70.40	0	77.73	25.56	51.77
1973	20.95	67.39	22.03	67.43	0	78.02	20.73	59.26
1974	21.14	64.85	20.30	70.47	0	73.60	25.86	45.96
1975	24.04	56.92	24.04	66.83	0	73.84	31.26	43.59
1976	20.82	50.13	23.46	68.51	0	72.45	37.07	35.23
1977	27.01	59.71	24.05	67.61	0	67.54	33.51	35.55
1978	24.59	57.71	25.34	64.89	0	65.06	32.36	32.16
1979	24.91	58.16	25.32	69.18	11.07	54.18	32.90	34.62
1980	24.30	56.66	26.99	66.92	18.15	52.69	32.61	32.29
1981	26.03	59.56	25.85	68.39	18.86	51.16	30.77	30.25
1982	27.04	63.01	22.64	70.00	16.72	50.13	27.39	38.78
1983	23.41	55.19	23.05	68.85	17.44	55.49	37.92	27.68
1984	27.55	50.20	25.66	66.80	18.12	48.86	40.58	29.63
1985	25.31	44.66	26.77	65.77	17.24	48.67	38.79	31.66
1986	27.67	51.11	26.28	56.02	14.42	51.11	36.08	29.27
1987	25.65	51.05	27.46	55.51	14.97	49.39	37.00	22.33
1988	22.77	48.37	28.78	53.3	13.10	46.99	34.77	16.24
1989	18.83	42.87	29.30	55.38	13.93	51.29	33.65	16.73
1990	17.41	42.61	29.86	56.84	8.97	66.53	39.40	12.87
1991	15.69	37.68	30.97	62.64	34.99	38.26	41.28	18.84
1992	14.95	39.98	31.18	60.75	55.82	22.52	43.57	17.00
1993	16.17	38.58	32.67	53.42	55.90	25.22	41.40	21.10
1994	19.18	41.82	32.88	46.22	57.00	19.62	47.94	17.13
1995	17.54	38.92	33.31	44.64	54.38	9.36	46.89	7.13

In the U.S., secondary paper mills, which use very high-quality secondary fiber, produce high-quality recycled printing and writing paper that is comparable to virgin paper. There exists a high degree of substitutability between old newspapers and ground woodpulp to manufacture newsprint and other paper products. The recycling rates for newsprint were about 43% in 1990, and 55.5% in 1992 (EPA 1994). The old newspapers recycled into newsprint make up only 30% of the total and the remaining are used in construction paper and board, cellulose insulation, gypsum wallboard, caulk, asphalt coatings, animal bedding, and mulch products made from shredded newsprint (EPA 1994).

Individual newspaper's use of recycled newsprint will vary according to their proximity to newsprint mills, contractual obligations, purchasing power, and availability of newsprint. Newspapers that are great distances from the nearest recycled newsprint mill, may not be able to obtain a recycled newsprint supply at a reasonable cost or quantity. The major barriers to increased use of waste paper in newsprint appears to be a lack of markets and higher levels of contaminants found in new supplies of ONP. Almost 70% of newsprint used in the U.S. is manufactured in Canada. About 14% of the newsprint used annually in the U.S. contains secondary fiber (Powell 1990). The integrated mills use virgin fiber to manufacture newsprint. There are 25 newsprint mills in the U.S. Nine use secondary fiber to generate recycled newsprint, which is 24% of total production of newsprint (Sparks 1990). The deinking capacity shares of recycled newsprint mills were presented in Table 3.

**TABLE 5: THE SHARES OF ONP USERS FROM TOTAL ONP RECOVERED & SUPPLIED BY  
REGIONS, U.S., 1972-2000**

Year	Shares of ONP Use by Sector (%s)							
	N. East		Midwest		South		West	
	Exports	Other Uses*	Exports	Other Uses*	Exports	Other Uses*	Exports	Other Uses*
1972	0.03	7.59	0	8.05	6	17.46	18.12	5.93
1973	0.03	8.56	0	10.32	6	17.00	16.12	5.05
1974	0.05	9.46	0	8.93	10	17.87	24.11	5.15
1975	0.04	15.69	0	8.88	8	19.51	20.21	5.93
1976	0.05	25.49	0	7.68	11	18.54	24.14	4.85
1977	0.08	5.89	0	7.91	13	22.44	28.12	4.71
1978	0.09	9.72	0.01	9.21	14	24.06	33.13	3.95
1979	0.08	9.90	0.01	4.98	10	27.46	29.21	4.94
1980	0.10	10.13	0.01	5.37	12	19.60	32.11	4.61
1981	3.10	11.67	0.60	5.19	13.40	19.14	36.13	4.47
1982	5.60	4.61	0.59	6.82	11.73	24.26	31.33	3.64
1983	9.74	12.92	1.31	6.88	12.06	17.07	31.89	3.68
1984	12.19	11.46	1.29	6.34	18.25	18.07	27.66	2.93
1985	16.16	16.54	0.75	6.76	19.88	17.73	27.41	2.94
1986	13.32	9.11	0.46	17.24	22.60	15.35	32.64	2.98
1987	11.56	13.29	1.06	15.97	23.82	15.52	37.31	5.35
1988	13.75	17.52	1.07	16.85	27.41	17.22	35.20	21.30
1989	25.66	16.99	1.27	14.05	23.78	14.43	35.71	21.63
1990	29.10	15.35	1.03	12.27	15.20	10.96	33.69	21.17
1991	20.56	32.82	0.87	5.52	14.59	14.23	38.15	2.80
1992	20.69	30.74	0.97	7.10	8.32	14.55	37.94	2.40
1993	19.17	32.26	1.60	12.31	9.64	10.23	36.08	2.22
1994	18.17	25.45	2.32	18.58	14.05	10.86	33.53	2.11
1995	17.56	26.99	2.55	19.50	13.96	15.62	30.05	9.00

## 2.4 Geographical Segmentation of Regions

There exist different supply and demand patterns in the ONP input market (Tables 2-5), leading to regional differences and geographical segmentation in the ONP input market across regions. Resource recovery, recycling, and related issues are site-specific in nature. Different consumption and generation levels of overall paper products and wastepaper exist in different regions of the U.S. Different regions also express different export opportunities for wastepaper. The existence of recycling mills in various regions creates its own demand for regional recovered wastepaper. The various sources of supply for a mill indicates that each mill faces a separate and particular set of supply, demand, operational, geographic, and demographic variables that affect their decisions on ONP sources, and that each mill must be approached differently as a potential buyer of ONP (BIE, 1980). The State-specific supply and demand patterns for input can result in geographical segmentation in states or regions (Ellison and Glaeser, 1997; Rivers and Yates, 1997; Broadman, 2000).

The regions of U.S. face various resource constraints in paper industry. The differences in the number of pulp, paper, and paperboard mills across regions create different competition levels for newsprint mills in output as well as input markets. The majority of pulp mills are located in the Southern region of the U.S. (46%), Midwest (20%), West (10%) and Northeast (2%), (AFPA, 2002). The largest number of paper mills is located in Midwest (33%), South (28%), Northeast (24%), and West (11%). The largest concentration of the paperboard mills is in Northeast (54%), South (37%), Midwest (23%), and West (13%). The newsprint mills in the South and the Western regions of the U.S. had greater deinking capacity and demand for ONP inputs relative to the newsprint mills in Northeast and Midwest, leading to different competition for ONP input across regions (Tables 4 and 5).

Deinking is very capital intensive for newsprint mills as well as paper and paperboard mills (non-newsprint mills), and the independent non-paper deinking mills (Nestor, 1992; Booth et al., 1993; Rosenberg, 1993). The integrated newsprint mills face the decision to produce deinked fiber or purchase deinked market pulp in order to meet the mandated for recycled content newsprint production. The geographic location of newsprint mills affects the economics of installing a new deinking facility. The cost of installing deinking facility or purchasing deinked pulp vary among mills and is affected by the location and size of the mill and if the mills are integrated (pulp and paper production), and the balance between virgin pulp and paper production (Paper Task Force, 1995).

### 3. LITERATURE REVIEW

Firms in the industry enter a new market to make profits and any entry decision investments in the case of a costly initiation is decided more rigorously on the current market environment. The market environment indicates the presence or the absence of competitive forces within the market, which can be of great concern in entry decisions of potential entrants. In an imperfectly competitive market, the buyers or the sellers have some market power and market power in an industry has a great impact on future capacity decisions of the new entrants.

Market power is more likely to be present when a large share of output or input is controlled by a small number of firms (Robinson 1969). A measurement of market power can be the conditions of the “barriers to entry” into the market (Adelman 1951). Market power is limited when the oligopolist in an output market or the oligopsonist in an input market confronts a powerful buyer or seller (Galbraith 1952). An oligopolist in the recycled or fresh newsprint output market can exercise its market power (i.e., firm’s market share of output or price-leadership) to deter entry by new firms (i.e., by the means of entry-preventing price). An oligopsonist in the ONP input market can also practice its market power to deter entry into input market (i.e., by an entry-preventing price strategy) by setting higher prices for ONP input or by setting lower prices for the output (i.e., intermediate output).

Capacity entry models are extensively examined within the paradigm of the industrial organization framework analysis. Most entry and capacity expansion models have considered either entry preventing pricing, capacity expansion planning, capacity accommodation, or restrictions models. Maskin (1986) stated that uncertainty is the underlying factor for an incumbent to choose a higher capacity to deter entry than he would under certainty. The U.S. newsprint mills in the output market would more likely choose restrictive capacity expansion planning to avoid the high costs of investment and “band-wagon” effects (Gilbert and Liberman 1987).

Strategic behavior is defined as the investment of resources for the purpose of limiting a rival’s choices (Martin 1993). The use of strategic behavior models has been limited to only oligopoly since the existence of few firms cause interdependence among the firms. The analysis of strategic behavior includes cases in which an incumbent firm makes some costly investment to deter future entry. Saloner (1985) shows that a dominant firm may hold excess capacity to induce rivals to reduce output. Ghemawat and Caves (1986) test the hypothesis that maintenance of excess capacity deters entry. The strategies examined in the current literature have included output expansion (limit pricing), predatory pricing, brand proliferation, advertising, technology choice, research and development, and others such as the possibility that incumbents may deter entry by forcing higher costs on rivals rather than accepting higher costs themselves. The literature on the strategic use of excess capacity begins with Spence (1977) who extends the basic limit price model of quantity-setting oligopoly to include an additional decision-variable, an upper limit on output that rivals believe will be fully utilized in the event of entry. Dixit (1980) extends Spence’s model to impose the requirement that the threat to utilize capacity be credible, and Schmalensee (1981) adds a minimum capacity constraint to the Dixit model.

The models of Spence (1977), Dixit (1980), and Schmalensee (1981) are essentially static one-period models. A more deliberately dynamic approach to the issue of investment and entry takes off from Spence (1979), who supposes that firms invest subject to constraints on the rate at which capital stock can be expanded. Fudenberg and Tirole (1986a) extend Spence’s (1979) approach to focus on strategic competition between a single incumbent or dominant firm and a single entrant. Eaton and Ware (1987)



develop non-cooperative limit pricing and examine entry in oligopoly with perfect information where firms do not hold excess capacity. Waldman (1987) examines entry-detering investment by an oligopoly when incumbents cannot collude and the precise entry-detering level of investment is uncertain. Malueg and Schwartz (1991) model entry deterrence when the market is growing and it is possible for entrants to come in at an initially small scale. Masson and Shaanan (1986) estimated a three-equation system explaining excess capacity, price-cost margins, and the market share of new entrants in terms of various structural and behavioral variables and found that the excess capacity has a modestly significant positive effect on price-cost margins, which is consistent with the hypothesis that excess capacity deters entry and allows the exercise of market power.

The strategic planning models are extended to focus their analysis on investigating the determinants of firm strategies as a function of the sectoral market environment (e.g., such as the market share of a firm) and also as a function of the characteristics of the firm (Whistler and Vertinsky 1991). Porter and Spence (1982) developed the first strategic-planning models that consider the interactions between competitors. Booth and Vertinsky (1993) extend their approach, endogenizing the pricing and production decisions and explicitly introducing to the analysis alternative objective functions for competing firms in the North American newsprint industry.

### **3.1 Market Structure, Entry, and Exit**

The current literature also includes analysis of the determinants of market structure by reviewing the role of the concept of entry barriers in the structure-conduct-performance paradigm. Structural indicators of market concentration are often used as proxy indicators of the presence/absence/danger of market power (Alighieri 1993) and these models suggest that structural indicators are imperfect signals of market power. Bain (1956) defined entry conditions in terms of the cost advantages of incumbents over entrants and further explained that the difference between the competitive price and the entry-inducing price is reflected in unit costs that are born by an entrant but not by an incumbent. Bain (1956) emphasized economies of large scale, product differentiation, and absolute cost advantages of incumbent firms compared with entrants as the main determinants of entry conditions. Stigler (1964) criticizes Bain's definition of the barriers to entry to include differentially higher costs faced by entrants, but not by incumbents. In Stigler's sense higher absolute capital requirements of operating at minimum efficient scale are a barrier to entry only if entrants face a systematically higher cost of capital than incumbents do and product differentiation is a barrier to entry if it is costlier for an entrant than for an incumbent to generate a given amount of differentiation. Weizsacker (1980a) argues that a barrier to entry is a cost of producing which must be incurred by a firm which seeks to enter an industry but is not born by firms already in the industry (i.e., which implies a distortion in the allocation of resources from a social point of view). Vickers (1989) and Lambson (1991) define sunk costs as a barrier to entry and further comment that sunk costs are costs that must be paid by a new entrant or operating firm and which cannot be recovered if a firm leaves the market. Farrell (1987), Cubbin (1981), and Bagwell (1990) present highly stylized models in which imperfect information about product quality may have the effect of precluding entry by firms producing high-quality products.

Entry and exit conditions are also examined in a new paradigm by the theory of contestable markets. In principle, the message of contestability theory is that policy intervention in market processes is unnecessary if entry and exit are free and easy and potential competition as well as actual competition will influence market performance. A contestable market is one into which entry is absolutely free and exit is absolutely costless (Baumol 1982). Further, the entrants suffer no disadvantage in terms of production technique or perceived quality relative to the incumbent and potential entrants find it appropriate to evaluate the profitability of entry in terms of the incumbent firms' pre-entry prices. The central feature of a contestable market is its vulnerability to hit and run entry. The results of contestability theory require not only that rapid entry and exit be possible, but that potential entrants make their decisions taking the market price as given.

Cross-section evidence (Kessides 1986) confirms the importance of sunk costs in influencing market structure and performance. These studies also suggest that entrants into concentrated markets are subject to strategic responses by incumbents, responses of a kind that are ruled out by assumption in perfectly contestable markets.

## **4. METHODOLOGY**

The methodological procedures involved in this section are to estimate a deinking capacity entry equation using the industry-level data and capacity level equations using the industry-level data. The impact of several relevant exogenous variables is tested against the number of entries into deinking capacity in the U.S. among newsprint mills. The estimation of the entry deinking capacity equation as specified should produce the parameter coefficients that can be interpreted to evaluate the impacts of: oligopsony and oligopoly market structures of input and output markets; and the demand and supply-sides government policies in both input and output markets on the number of entries.

### **4.1 Capacity Entry Models**

Firms in the industry enter a new market in order to make profits and any entry decision investments in the case of a costly initiation is decided more rigorously on the current market environment. The market environment indicates the presence or the absence of the competitive forces within the market which can be of a great concern in entry decisions of the new entrants. In an imperfectly competitive market, the buyers or the sellers have some market power and market power in an industry has a great impact on the future capacity decisions of the new entrants.

Market power is more likely to be present when a large share of output or input is controlled by a small number of firms (Robinson and Chamberlin, 1963). A measurement to market power can be the conditions of the “barriers to entry” into the market (Adelman, 1951). Market power is limited when the oligopolist in output market or the oligopsonist in input market confronts a powerful buyer or seller (Galbraith, 1952). Oligopolist in recycled or fresh newsprint output market can exercise its market power (i.e., firm’s market share of output or price-leadership) to deter entry to new entrants (i.e., by the means of entry-preventing price). Oligopsonist in ONP input market can also practice its market power to deter entry into input market (i.e., by entry-preventing price strategy) by setting higher prices for ONP input or by setting lower prices for the output (i.e., or intermediate output).

Capacity entry models are extensively examined within the paradigm of the industrial organization framework analysis. Most entry and capacity expansion models have considered either the entry-preventing pricing; capacity expansion planning; and capacity accommodation or restrictions models. Maskin (1986) stated that uncertainty is the underlying factor for incumbent to choose a higher capacity level to deter entry than he would under certainty. The U.S. newsprint mills in output market would more likely choose a restrictive capacity expansion planning to avoid the high cost of investment and the “bandwagon” effects (Gilbert and Liberman, 1987). In what follows is a review of the existing theories on capacity investment planning, a capacity selection section and finally estimation procedures are discussed.

### **4.2 Selection of Entry Capacity Equation**

The theoretical basis of the capacity entry equation specified here comes from the industrial organization framework of analysis. The capacity entry model selected fits the characteristics of an entry where market structures and market environment (i.e., for instance, the mandated legislation can impose a higher bound constraint on needed capacity levels) are the dominant influential factors in the fate of future entries into the market. The market structures of both output and input markets are oligopolistic and oligopsonistic, and therefore, market power is imminent. Market power in both input and output market can be due to several factors such as economies of large scale, higher market shares, product differentiation, and absolute cost advantages of incumbent firms compared with entrants. The capacity entry equation selected here has its theoretical foundation from Bain (1956) where entry conditions is defined in terms of the cost advantages of incumbents (i.e., cost advantage maybe the outcome of market power).

The variables which are theoretically plausible to explain the capacity entry are specified and estimations are carried out. Given the focus of this research is to identify the impacts of (recycled) newsprint and deinking market structures (i.e., firm behavior), and the government policies on deinking capacity plans of firms in the newsprint industry (i.e., aspects of the environment), the capacity entry

equation selected follows the patterns of the models where the market structure becomes the *strategic tool of the mills* (Martin, 1993).

Entrants into deinking market in newsprint industry are affected by both factors in input and output markets which dictate the pricing and profitability of operation. The new entrants into newsprint market in reality are faced with two entry decisions in the input market as well as the output market. The new entrants into deinking market in the newsprint industry must consider the market's output pricing and profitability as well as the mandated minimum content standards. In addition, higher deinking capacity for incumbent mills can indicate larger market share of ONP input and ultimately market power in input pricing. Incumbent mills capacity deterrence strategic planning is the most effective when mills can deter entry by means of output capacity expansion as well the deinking capacity expansion and it seems that incumbent's market power (i.e., the oligopolistic newsprint industry) can help to deter entry into deinking market even more effectively.

The deinking entry equation in the industry- level is defined to be dependent upon several relevant exogenous variables such as: the ONP input prices; capital cost of deinking; realized newsprint prices; minimum content standard; mandated recycling programs; and buyer's market shares. The entry equation is defined as:

$$ENTR_t = f(ONPC_{t-2}, RNPC_{t-2}, BMSH_{t-2}, KPDK_{t-2}, NMCS_{t-2}, OMCS_{t-2}) \quad (1)$$

Two separate estimations were selected to identify the exogenous variables which would explain the new entries into the deinking market. First, the industry level data is used to estimate an industry level deinking entry equation with the specified relevant exogenous variables. Second, the regional data is pooled and a separate estimation of entry equation is undertaken with a different specification of the exogenous variables in the model. The OLS regression method is not appropriate in the case where the dependent variable takes a set of binary values (i.e., Values of zero, one, two, and so on up to seven values). There exist several other estimation methods where the dependent variable is a count data rather than real integer numbers and these alternative models are: Probit; logit; ordered probit and Logit; and the poisson models. The model where the industry level data is being used is estimated with the Poisson, and the model where regional data is used, is estimated with a Probit model. *A null hypothesis will be tested that the coefficient of buyers market shares variable in the entry capacity equations is zero* (i.e., the alternative hypothesis would indicate a value less than zero for oligopsony index coefficient). The rejection of null hypothesis indicates that higher oligopsony power is associated with lower future capacity.

One of the alternatives to OLS estimation method is the use of count data model such as the Poisson distribution models where the dependent variable is allowed to take various values rather than just a one and zero value. The main underlying assumption in the poisson distribution is that the re-occurrences of the events in the sample data is independent of the other events to occur. The justification for selecting the Poisson model was based on two factors: 1) the new entries into deinking market in the industry can indicate that new entries in one region of the U.S. is more or less independent of entries in other regions (i.e., an entry into deinking market in Main is independent of the number of entrants in West of the U.S. ); and 2) the newsprint producers in the U.S. are relatively small producers and have smaller market shares of newsprint output (i.e., and relatively smaller share of deinking capacity) in the industry level. The U.S. newsprint mills act as the followers where the Canadian firms act as the leaders, and this may indicate that new entrant's decisions to enter the deinking market is independent of the other new entrants in the industry.

#### 4.3 Deinking Capacity Level Equation

A capacity investment model as developed by Jergenson (1972) was utilized. This model served as the theoretical basis for capacity planning analysis. The capacity equation selected also follows the patterns of the models where the market structure becomes the strategic tool of the mills (Martin, 1982). The formulation of capacity level equation was based on several previous studies where a capacity level equation for newsprint mills was estimated (Schaefer, 1979, Whistler and Vertinsky 1991; Booth and Vertinsky 1993). Muller (1978), Schaefer (1979) and Booth et al. (1991) estimated econometric models

of the industry, including capacity expansion estimated as a function of variables such as price, cost of capital and lagged capacity. Two capacity level equations were defined for ONP and virgin fiber-based mills since there seemed to be differences in demand among the two types of mills. Several factors explain the different demand levels for ONP such as: (a) recycled fiber-based mills are totally dependent on ONP as the primary fiber input whereas the virgin fiber-based mills utilize virgin fiber as the primary fiber input and use much lower levels of recycled fiber in their newsprint production; (b) recycled fiber-based mills are more reflected with ONP input supply and price levels than the virgin fiber-based mill since there exist nearly no substitute for ONP input; and (c) virgin fiber-based mills are more effected by virgin fiber supply and price levels due to the fact that the plants were originally built to produce woodpulp as the mill's primary input.

The de-inking capacity level (CPVL<sub>t</sub>) for recycled newsprint mills is defined to be dependent on: ONP prices (ONPC); newsprint output prices (RNPC); capital cost of deinking (KPDK); mandated recycling program (NMCS); minimum-content standards (OMCS); buyers market shares (BMSH); and technological change (TE).

$$CPVL_t = B_0 + B_1 ONPC_{t-2} + B_2 RNPC_{t-2} + B_3 KPDK_{t-2} + B_4 OMCS_{t-2} + B_5 NMCS_{t-2} + B_6 BMSH_{t-2} + B_7 SSMH_{t-2} + B_8 (TE) + \xi_t \quad (2)$$

Capital cost of de-inking operation for the period 1972 through 1995 was not available (i.e., except for a one-time figures on cost of specific de-inking capacity operation) for this study and a proxy variable to express this capital cost was constructed. The expected findings from estimation of de-inking capacity levels are based on findings from previous studies and our own expectations. We expect that: newsprint output and ONP input prices to be positively and negatively related to capacity levels, respectively; buyers market shares to have negative impacts; sellers market power to have positive impacts, capital cost of de-inking to have negative impacts, and government policies to have positive impacts on future de-inking capacity expansions.

Three capacity level equations are estimated: the accumulative capacity level equation for the industry; the ONP fiber-based mills, and the virgin fiber-based mills. There are eighteen mills in the industry and the data for the capacity level of these mills is pooled to represent the capacity levels of the recycled newsprint mills in the industry. There are four mills under the ONP fiber-based mills category and fourteen mills under the virgin fiber-based mills category and the data for the capacity levels of these mills is pooled within their groups to represent the capacity levels of the ONP and virgin fiber-based mills in the industry. The capacity level equations are estimated without a lagged dependent variable since there exists high correlation between lagged dependent variable and market power variables and that buyers market power variable and lagged dependent variable are representing the same variable, therefore, could not be utilized in the same regression.

A null hypothesis will be tested that the coefficient of buyers or sellers market shares variable in the capacity level equations are zero (i.e., the alternative hypothesis would indicate a value less than zero for the coefficient). The rejection of null hypothesis indicates that higher market shares or powers are associated with lower future capacities.

## 5. ESTIMATION RESULTS

Two set of equations are estimated: (1) Deinking capacity entry equation; and (2) Deinking capacity level equations. The results are presented in Tables 6 and 7 respectively.

### 5.1 Deinking Capacity Entry Equation

A deinking capacity equation for new entrants into the deinking market was estimated for the entire industry (Table 6). Entries into the deinking market for newsprint were mainly concentrated among the existing virgin fiber-based newsprint mills. Estimation results for the entry equation indicate that the

most influential factors affecting the entrant's decision to make a new investment in entering the deinking market are: 1) realized newsprint prices; 2) ONP buyer's market shares in the input market; and 3) the minimum content standards.

**TABLE 6: DEINKING CAPACITY ENTRY ESTIMATION RESULTS: POISSON REGRESSION  
(MAXIMUM LIKELIHOOD ESTIMATION)**

Variable	Coefficient
Intercept	-0.0885 (7.548)
Realized Newsprint Prices (RNPC <sub>t-2</sub> )	0.0356* (0.014)
Old Newspaper Prices (ONPC <sub>t-2</sub> )	-0.0017 (0.038)
Buyers Market Shares (BMSH <sub>t-2</sub> )	-79.133* (33.47)
Capital Cost of Deinking (KPDK <sub>t-2</sub> )	-0.0701 (0.0527)
Four-firm Sellers Concentration Ratios (SRTO <sub>t-2</sub> )	-19.028 (15.25)
Minimum Content Standards (OMCS <sub>t-2</sub> )	-0.6052 (5.230)
Mandated Recycling Programs (NMCS <sub>t-2</sub> )	33.116** (11.04)
R <sup>2</sup> -p	0.7465
Number of Observations	22
Chi-Squared	9.46145

\* Significant at above 2% and below 10% level

\*\* significant at 1% level or below

The entry into the deinking market for newsprint mills is positively impacted by realized newsprint prices. Higher output prices motivate firms to enter into the newsprint and deinking markets in the anticipation that the market is profitable.

The entry decisions of new entrants into deinking market were negatively affected by the input market structure (as represented by ONP buyer's market shares) as larger market shares of buyers tend to discourage further entries into deinking market. Larger market shares of ONP input by buyers may indicate market power exists which discourages entry. Entry was positively impacted by the minimum content standards legislation. Higher magnitudes of the policy index imply that more states have enacted the legislation and greater populations are being affected which requires higher amounts of recycled fiber being utilized by newsprint mills. The positive impact is explained by the fact the existing newsprint mills installed a new deinking facility to avoid being dependent on non-paper independent deinking mills and also to avoid the higher costs of purchases of market deinked pulp from the independent non-paper deinking mills.

However, the capital cost of a new deinking facility installation had no impact on their entry decisions. The insignificant impact can be explained by the fact that mills installed a deinking plant so that they could sell their recycled content newsprint to newspaper publishers which demanded recycled fiber in their newsprint purchases. ONP input prices also appear not to be a major factor affecting the decisions of new entrants. The new newsprint entrants into deinking markets are more concerned with the output prices and profitability in the industry and, due to the fact a larger portion of their input mix is made of virgin fibers than ONP input, ONP prices are not a significant factor in their decisions to enter the deinking markets. Also, the government mandated recycling variable had no significant impact on the decisions of new newsprint mills to enter the deinking market. The new entries into deinking market

occurred mainly among the existing virgin fiber-based mills, where ONP input made up a small portion of their input mix and, therefore, were not an influential factor in their decisions to enter the deinking market.

## 5.2 Deinking Capacity Level Equation

Three capacity level equations are estimated: the accumulative capacity level equation for the industry; the ONP fiber-based mills, and the virgin fiber-based mills. The capacity level equations are estimated using pooled data (i.e. across mills) with the ordinary least squares (OLS) methods. The null hypothesis is tested as to the coefficient of buyers market shares variable in the capacity level equation is zero and the results of F-Test led to rejection of null implying the presence of buyers' market power. The Durbin-Watson Statistics from estimation of industry-wide capacity level equation indicated first-order autocorrelation. The model was re-estimated to correct for auto-correlation and the results are reported in Table 7.

**TABLE 7: DEINKING CAPACITY LEVELS ESTIMATIONS FOR ONP AND VIRGIN FIBER-BASED MILLS COMBINED (AGGREGATED DATA)**

Variable	Industry	ONP Based mills	Virgin Based Mills
Intercept	-142510 (374790)	268720 (226060)	-157290 (317880)
Realized Newsprint Prices (RNPC <sub>t-2</sub> )	766.59 (567.52)	279.40 (435.37)	455.53 (512.80)
Old Newspaper Prices <sup>a</sup> (ONPC <sub>t-2</sub> )	-210.20 (1008.8)	-847.91 (1152.4)	-1713.8 (1891.8)
Buyers Market Shares (BMSH <sub>t-2</sub> )	-1587400* (890210)	-955330* (542600)	-1157700 (863490)
Capital Cost of Deinking (KPKD <sub>t-2</sub> )	-3610* (1974.4)	1467.4 (1375.8)	-4251.2** (1630.3)
Four-firm Sellers Concentration Ratios (SRTO <sub>t-2</sub> )	1130600* (618210)	-123350 (504790)	846350 (601900)
Minimum Content Standards (OMCS <sub>t-2</sub> )	786650** (296120)	504680** (195710)	478240* (273150)
Mandated Recycling Programs (NMCS <sub>t-2</sub> )	1108600* (544220)	573090* (345210)	585080* (306400)
TE	86925** (18028)	30258** (10339)	77420** (11688)
Rho	0.81134** (0.12756)	0.7798** (0.130)	-0.5416** (0.183)
Model	Adj. R <sup>2</sup> 0.9814 DW 1.6212 # of Obsvn 22	Adj. R <sup>2</sup> 0.9705 DW 1.6609 # of Obsvn 22	Adj. R <sup>2</sup> 0.9832 DW 1.6584 # of Obsvn 22

\* Significant at above 2% and below 10% level

\*\* Significant at below 1% level

<sup>a</sup> All the explanatory variables are lagged two periods.

The estimation of industry-wide equation (after correction for auto-correlation) indicates that the buyers market shares and capital cost of de-inking had negative impact on further capacity levels; and four-firm sellers concentration ratios, minimum content standards and mandated recycling programs, and technological change had positive and statistically significant coefficients. Realized newsprint and ONP prices had statistically insignificant coefficients.

By mill-type estimations results indicate that for ONP fiber-based mills, the buyers market shares had negative impacts, minimum content standards, mandated recycling programs, and technological change had positive impact on future de-inking capacity levels. The realized newsprint prices, the ONP prices,



four-firm sellers' concentration ratios; and capital cost of de-inking had no significant impacts on ONP fiber-based mill's deinking capacity expansion.

By mill-type estimations results for virgin fiber-based mills indicate that the capital cost of de-inking had negative impacts, the minimum content standards, the mandated recycling programs, and technological change had positive impact on future de-inking capacity levels. The realized newsprint prices, the ONP prices, four-firm sellers' concentration ratios; and the buyers' market shares had no significant impacts on virgin fiber-based mill's deinking capacity expansion.

The negative impact of buyers' market shares means greater market power within a region lowered capacity expansion of ONP de-inking mills. This result implies that ONP based mills attempt to lower capacity levels to retain advantage of market power. The advantage of market power (as measured by the buyers' market shares) translated into lower historical ONP prices in four regions with the lowest prices occurring in years 1988-1994 (Hervani, 1997). The negative impact of capital cost of de-inking means that virgin fiber-based mills have to construct a new de-inking plant and, therefore, higher cost of investment in de-inking capacities will discourage these mills to increase further de-inking capacity levels.

The four-firm seller's concentration ratios had a positive and statistically significant coefficient for only industry-wide equation, implying that on aggregate, higher sellers' market shares of newsprint sales, leads the U.S. newsprint producers to increase their deinking capacity levels (the four-firm sellers concentration ratios includes mainly the Canadian firms as the four leading producers).

The minimum recycled content standards had a positive and statistically significant coefficient for three models. Policy encouraged both mill types to expand capacity; policy encouraged the existing virgin fiber-based newsprint mills to increase their de-inking capacity levels as newsprint production increases, in order, to meet the recycled fiber content and avoid purchases of high-cost to policy implementation and by increasing capacity levels these mills have maintained their relative market shares even after policy enactment. The technological change variable is positive and statistically significant indicating that technological change encouraged capacity level additions over-time in the industry.

## **6. DISCUSSION OF RESULTS & POLICY IMPLICATIONS**

A deinking capacity equation for new entrants into the deinking market and capacity level equations were estimated for the entire industry (Tables 6-7). Entries into the deinking market for newsprint were mainly concentrated among the existing virgin fiber-based newsprint mills. Estimation results for the entry equation indicate that the most influential factors affecting the entrant's decision to make a new investment in entering the deinking market are: 1) realized newsprint prices; 2) ONP buyers' market shares in the input market; and 3) the minimum content standards.

The entry into the deinking market for newsprint mills is positively impacted by realized newsprint prices. Higher output prices motivate firms to enter into the newsprint and deinking markets in the anticipation that the market is profitable.

The entry decisions of new entrants into deinking market were negatively affected by the input market structure (as represented by ONP buyers' market shares) as larger market shares of buyers tend to discourage further entries into deinking market. Larger market shares of ONP input by buyers may indicate market power exists which discourages entry. Entry was positively impacted by the minimum content standards legislation. Higher magnitudes of the policy index imply that more states have enacted the legislation and greater populations are being affected which requires higher amounts of recycled fiber being utilized by newsprint mills. The positive impact is explained by the fact the existing newsprint mills installed a new deinking facility to avoid being dependent on non-paper independent deinking mills and also to avoid the higher costs of purchases of market deinked pulp from the independent non-paper deinking mills.

However, the capital cost of a new deinking facility installation had no impact on their entry decisions. The insignificant impact can be explained by the fact that mills installed a deinking plant so that they could sell their recycled content newsprint to newspaper publishers which demanded recycled fiber in their newsprint purchases. ONP input prices also appear not to be a major factor affecting the decisions of new entrants. The new newsprint entrants into deinking markets are more concerned with the output prices and profitability in the industry and, due to the fact a larger portion of their input mix is made of virgin fibers than ONP input, ONP prices are not a significant factor in their decisions to enter the deinking markets. Also, the government mandated recycling variable had no significant impact on the decisions of new newsprint mills to enter the deinking market. The new entries into deinking market occurred mainly among the existing virgin fiber-based mills, where ONP input made up a small portion of their input mix and, therefore, were not an influential factor in their decisions to enter the deinking market.

## REFERENCES

- Ackerman, F, and Gallagher, K, "Mixed Signals: Market Incentives, Recycling and the Price Spike of 1995", Global Development and Environment Institute, Working Paper, 2001, 01-02.
- Adelman, M.A, "The Measurement of Industrial Concentration", Review of Economics and Statistics, 33 (4), 1951.
- Alighieri, Dante, "Advanced Industrial Economics", in Advanced Industrial Economics, Martin, Stephen (ed.), Blackwell Publishers, Cambridge, Mass, 1993.
- American Forest and Paper Association (AFPA), (1995), (2001), (2002).
- American Paper Institute (API)., "Annual Statistical Summary Recovered Paper Utilization", Paper Recycling Group, American Forest & Paper Association, 1995, 1996, 2001.
- Bagwell, Kyle. and Ramey, Gary, "A Capacity, Entry, and Forward Induction", D.P. # 888, Northwestern University, Mimeo, 1990.
- Bain, J.S., Barriers to New Competition, Cambridge: Harvard University Press, Mass, 1956.
- Baron, David. P. and Myerson, Roger. B., "Regulating a Monopolist with Unknown Costs", Econometrica, 50 (4), 1982, 911-930.
- Baumol, William. J., "Contestable Markets: an Uprising in the Theory of Industry Structure", American Economic Review, 72 (1), 1982, 1-15.
- BIE, Waste papers in Four South Atlantic States, Marketing Information Report, # 102, 1980.
- Booth, Darcie. lee., A Strategic Capacity planning tool for a Firm in the Newsprint Industry, Unpublished PH. D. Dissertation, University of British Columbia. July 1990.
- Booth, D. L., Kanetkar, V., Vertinsky, I., and Whistler, D., "An empirical model of Capacity Expansion and Pricing in an Oligopoly with Barometric Price Leadership: A case study of the newsprint industry in North America", Journal of Industrial Economics, 39 (3), 1991, 255-276.
- Booth, Darcie. and Vertinsky, Ilan, "The Strategic Capacity-Expansion Model for a Newsprint Firm", IEEE Transaction Engineering Management, 40 (2), 1993.
- Bourdages, Jean-Luc, "Paper Recycling in Canada: A New Reality", Research Background Paper, Research Branch, Library of Parliament, Montreal, Canada, 1993.
- Broadman, Harry G., "Reducing Structural Dominance and Entry Barriers in Russian Industry", Review of Industrial Organization, 9 (17): 2000, 155-176.
- Cubbin, John S., "Advertizing and the Theory of Entry Barriers", Econometrica, 48 (8), 1981, 289-98.
- Dixit, A.K., "The Role of Investment in Entry Deterrence", Economic Journal, 90, 1980, 90-106.
- Eaton, B.C. and Ware, R., "A theory of Market Structure with sequential Entry", Rand Journal of Economics, 18, 1987, 1-16.
- Ellison, G., and Glaeser, E. L., "Geographic Concentration in U.S. Manufacturing Industries: A databoard Approach", The Journal of Political Economy, 105(5), 1997, 889-927.
- Environmental Protection Agency (EPA), Municipal Solid Waste Factbook, Version 1.2, Washington, D.C., 1994.
- Environmental Protection Agency (EPA), Waste Characterization Report, Franklin & Associates., 1992.
- Farrell, Joseph, "Cheap Talk, Coordination, and Entry", Rand Journal of Economics, 18, 1987, 34-39.

- Fudenberg, D. and Tirole, J., Dynamic Models of Oligopoly, in A. Jacquemin (ed)(1986), Fundamentals of Pure and Applied Economics, 3, New York: Harwood., 1986a.
- Galbraith, J. American Capitalism, the Concept of Countervailing Power. Boston, MA: Houghton, Mifflin, 1952.
- Garcia, D. A., "Wastepaper market out of kitler", Pulp and Paper, 8., 1993.
- Ghemawat, P. and Caves, R. E., Capital Commitment and Profitability: an Empirical Investigation, Oxford Economic Papers, Supplement (November), 38, 1986, 94-110.
- Gilbert, R.J. and Lieberman, M., "Investment and Coordination in Oligopolistic Industries", Rand Journal of Economics, 18, 1987, 17-33.
- Gill, G., and Lahiri, K., "An Econometric Model of Wastepaper Recycling in the U.S.A.", Resource Policy 6, 1980, 434-443.
- Gill, Gurmukh and Lahiri, Kajul, "An econometric model of waste paper recycling in the USA", Resources Policy, 12, 1980, 320-325.
- Hervani, Aref A., Oligopsony Elements in the Recycled Wastepaper Market: Existence and Implications, Unpublished Ph.D. Dissertation, 1997, West Virginia University, Morgantown, WV.
- Ince, Peter, North American Paper Recycling Situation and Pulpwood Market Interactions, USDA Forest Services, Forest Products Laboratory, Madison, Wisconsin., 1998.
- Kessides, Ioannis. N., "Advertising, Sunk Costs, and Barriers to Entry", Review of Economics and Statistics, 68 (1), 1986, 84-95.
- Lambson, A. Eugene, "Industry Evolution with Sunk Costs and Uncertain market Conditions", International Journal of Industrial Organization, 9, 1991, 171-196.
- Jergenson, D.W., "A Investment Behavior and the Production Function", Bell Journal of Economics, 3, 1972, 220-251.
- Malueg, David. A. and Schwartz, Marius, "Preemptive Investment, Toehold Entry, and the Mimicking Principle", Rand Journal of Economics, 22 (1), 1991, 1-13.
- Martin. Stephen, "Industrial Demand Characteristics & the Structure-Performance Relationship", Journal of Economics and Business, 34, Jan. 1982, 59-65.
- Martin, Stephen, Advanced Industrial Economics, Blackwell Publishers, Cambridge, Mass., 1993.
- Maskin, E., "The Existence of Equilibrium with Price-Setting Firms", American Economic Review, 76, 1986, 382-386.
- Masson, Robert, and Shaanan, Joseph, "Excess Capacity and Limit Pricing: An Empirical Test", Econometrica, 53 (8), 1986, 365-378.
- Muller, R. A., "Econometric analysis of environmental policy: Estimation of a model of Canadian pulp and paper industry", Canadian Journal of Economics, 11 (2), 1978, 263-286.
- National Solid Waste Management Association (NSWMA), The Future of Newspaper Recycling, 5., 1990.
- Nestor, Deborah. V., "Partial Static Equilibrium Model of Newsprint Recycling", Applied Economics, 24, 1992, 411-417.
- Office of Technology Assessment (OTA), Dioxin treatment technologies, Background Paper for Congress of the U.S., Office of Technology Assessment, 1992.
- Paper Task Force, The Economics of Manufacturing Virgin and Recycled-Content Paper, Duke University, Environmental Defense Fund, White Paper No. 9., 1995.
- Porter, M. E., and Spence, A.M., The capacity expansion process in a growing oligopoly: the case of corn wet milling, Economics of Information and Uncertainty, J.J. McCall (ed), Chicago, IL : University of Chicago Press., 1982.
- Powell, Jerry, "The further development of the deinked newsprint maker", Resource Recycling, 3., 1990.
- Pulp and Paper International, International Pulp and Paper Director, PPI, Miller Freeman Publications, San Francisco., 1994.
- Ready, M.J. and Ready, R.C., "Optimal Pricing of Depletable, Replaceable Resources: The Case of Landfill Tipping Fees", Journal of Environmental Economics and Management, 28: 1995, 307-323.
- Rivers, M. J, and Yates, B. M., "City Size and Geographic Segmentation in the Municipal Bond Market", Journal of Economics and Business, 37: 1997, 633-650.

- Robinson, Joan, The Economics of Imperfect Competition, London: Macmillan, and St Martin's Press, 1969, 2nd edition.
- Rosenburg, Jim, "Paper makers will add little capacity", Editor and Publisher, 12, 1993, 28-30.
- Saloner, Garth, "Excess Capacity as a Policing Device", Econometric Letters, 18, 1985, 83-86.
- Schaefer, G. P., "The Canadian newsprint industry: Econometric models of different market structures", Bank of Canada Technical Report No. 17., 1979.
- Schultz, T. W ., Agriculture in an unstable Economy, New York: McGraw-Hill., 1945.
- Schmalensee, R., "Advertising and Entry Deterrence", Journal of Political Economy, 90, 1983, 636-653.
- Sparks, Edward. P., "What's ahead for the wastepaper markets?", BioCycle, 1., 1990.
- Spence, A.M., "Entry, Capacity, Investment and Oligopolistic Pricing", Bell Journal of Economics, 8, 1977, 534-544.
- Stigler, G., The Theory of Oligopoly, The Theory of Price, New York:Macmillan., 1964.
- Yang, Dori. James, "Timber could go through the roof", Business Week, 1., 1993.
- Vickers, John, "The Nature of Costs and the Number of Firms at Cournot Equilibrium", International Journal of Industrial Organization, 7 (4), 1989, 301-310.
- Waldman, Michael (1987), "Noncooperative Entry Deterrence, Uncertainty, and the Free Rider Problem", Review of Economic Studies, 54 (2), 1987, 301-310.
- Weizsacker, Von. C.C., "A Welfare Analysis of Barriers to Entry", Bell Journal of Economics, 11 (2), 1980a, 399-420.

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## SELLING THE DESERT: ENTERING THE KOREAN MARKET TO PROMOTE DUBAI AS A TOURIST AND COMMERCIAL DESTINATION: A DTCM APPROACH

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### ABSTRACT

*From 1988 to 1995, the Korean outbound travel increased by 526% to 3,818,740 in 1995. A decade has passed and still Korean outbound travel continues to increase, passing the 10 million mark for the first time in 2005. The rapidity of this increase has caught many destinations unprepared. One such example is Dubai, United Arab Emirates (U.A.E.), which has only recently recognized the potential of Korean tourism and business. The Dubai Government's Department of Tourism and Commerce Marketing (DTCM) has already opened offices in 14 countries throughout the world, including Hong Kong for the Far East, to promote its city as both an internationally astute business hub and tourist haven. For tourism product development and the promotion of destinations in the nowadays-competitive age, it is necessary to achieve a clear profile of the travel behavior and preferences of actual and potential clients. However, DTCM has yet to recognize that Korean businesspeople and tourists' expectations differ from those of their Far Eastern neighbors. As a result of failing to provide an adequate pull strategy for this target market, this study proposes the opening of an office in Korea and illustrates how DTCM is able to adapt its strategic, marketing and promotional needs in this new office. It focuses on assessing the Korean market based on screening factors, gives significant information on the mode of entry and describes the recommended implementation strategies to use in order to target the Korean market. Consequently, not only will DTCM benefit from its new office in Korea, but this office will become an essential and valuable tool for both the public and private sectors in Dubai that are interested in receiving tourists and business partners from Korea.*

**Keywords:** Korean Market, Culture, Political Tension, Business Hub, Tourist and Tax Haven, Pull Strategy, Market and Segment Screening, Mode of Entry, Positioning Strategies

### INTRODUCTION

Dubai has changed dramatically over the last three decades, becoming a major business centre with a more dynamic and diversified economy. In 2006, according to the Dubai Department of Economic Development (DDED), Dubai enjoys a strategic location and serves as the biggest re-exporting centre in the Middle East. Its low logistical and operational costs and excellent infrastructure, international outlook and liberal government policies are attracting investors effectively. The DDED states that activities such as trade, transport, tourism, industry and finance have shown steady growth and helped the economy to achieve a high degree of expansion and diversification. In 2003, the Dubai International Airport catered to 18 million passengers, while in 2004, it catered to 21.7 million people and 60 million passengers are projected by 2010 (as reported in Dubai International Airport website, 2007). Despite war in Iraq in 2003 and terrorism elsewhere in the Middle East, Dubai enjoys safety and security earning name as the world's safest destination (Byung-II, 2007). According to Dubai Government's Department of Tourism and Commerce Marketing (DTCM) Director General Khalid bin Sulayem, aggressive marketing and promotions have resulted in visitors to the UAE increasing from 1.2 million in 1990 to over six million in 2002. The World Tourism Organization has praised the UAE for posting a record growth of over 30 per cent in arrivals in the year 2002 and the current 272 hotels in Dubai are expected to increase by 120 more properties in the next 15 years (Byung-II, 2007). The Palm, Dubailand, the region's largest water park and Dubai Festival City are among the ambitious projects that are set to broaden the appeal of Dubai as a year-round business and leisure destination. Furthermore, a five billion dollar project to offer the Middle East a theme park similar to Disneyland is getting underway. Whether its palm fringed beaches, sports, shopping, dining, or entertainment, Dubai is well equipped to cater for the diverse needs of individual travellers, families or incentive groups. In an interview with DTCM in January 2004, the Seoul Times states, "the fascinating blend of modern and ancient is a key factor in Dubai's development as a tourism destination".

## DEPARTMENT OF TOURISM AND COMMERCE MARKETING (DTCM) OVERVIEW

DTCM was established in January 1997 and its role is two folded: to promote internationally Dubai's commerce and tourism interests and to act as the principal authority for the planning, supervision and development of the tourism sector in the emirate (as reported in DTCM website, 2005). DTCM plans and implements an integrated programme of international promotions and publicity activities such as exhibition participation, marketing visits, presentations and road shows, familiarisation and assisted visits, advertising brochure production and distribution, media relations and enquiry information services. In addition to its head office in Dubai, DTCM has 14 overseas offices in: New York (for the USA), London (for the UK and Ireland), Paris (for France), Frankfurt (for Germany), Stockholm (for Scandinavia), Milan (for Italy), Moscow (for the Russian Federation, CIS and Baltic States), Sydney (for Australia), Johannesburg (for South Africa), Mumbai (for India), Hong Kong (for the Far East), Tokyo (for Japan), Saudi Arabia and Zurich (for Switzerland and Austria). DTCM collaborates with its overseas offices to promote and create awareness of Dubai by projecting a clear, consistent message to the public and its trade associates, specifically targeted and released in international markets. This includes a comprehensive range of periodicals and manuals to promote Dubai's infrastructure and facilities both for tourists and business partners available in more than twelve languages. Table 1 on Product/Market matrix depicts DTCM's current strategic business direction:

**Table 1: Product-Market Matrix**

<b><u>Market Penetration</u></b> Through active marketing, DTCM encourages more international tourists and investors into Dubai from its existing overseas offices in fourteen countries. Emphasis is on building market share through the current offices across the world.	<b><u>Product Development</u></b> DTCM has an opportunity for its overseas offices to evolve into full-fledged marketing and promotional bodies and further act as trade and investment consultants to companies that wish to set up operations in Dubai.
<b><u>Market Development</u></b> DTCM can further develop its market by globally expanding into potential markets in a planned and phased manner. As a consequence of this strategy, Korea is being considered as a feasible option.	<b><u>Diversification</u></b> DTCM can look at options for strategic alliances. For instance, it can diversify into offering cruise terminal services, opening convention bureaus, creating middle eastern or GCC packages, etc.

As one of its strategic business directions, DTCM is seriously considering Korea as an option to further expand and develop its global market.

## MARKET SCREENING

Several phases of market screening must be conducted before entering a new potential market (Ball et al, 2006). Figure 1 on screening process and phases will enable DTCM to narrow down various factors concerning Korea and to make a decision based on the screening findings and results.

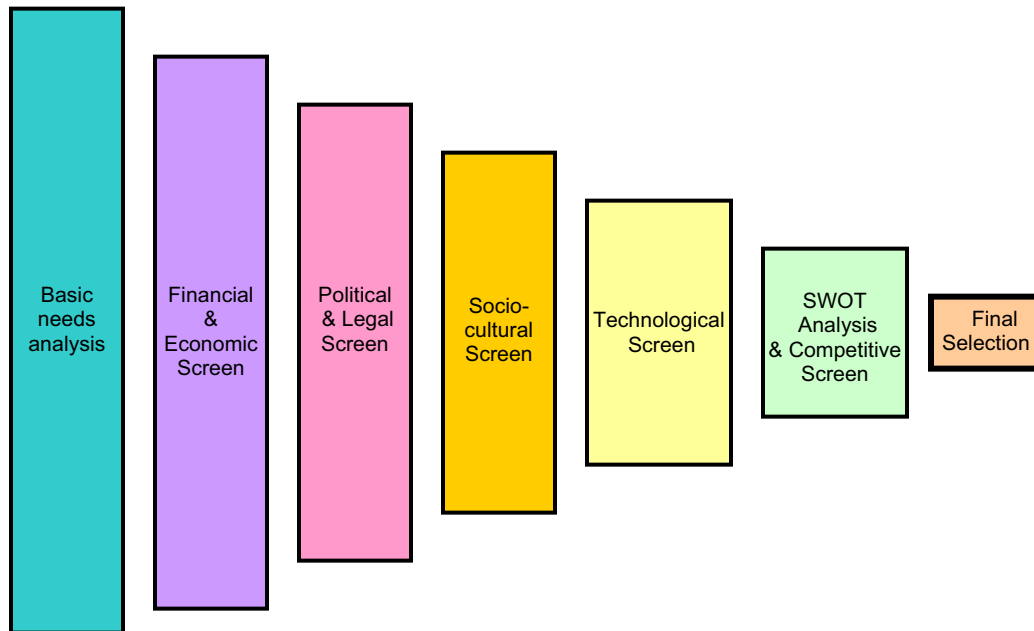
### Initial Screening

#### ***Basic Needs Potential***

This primary screening process is important before undertaking further market research. DTCM needs to consider whether Korean businesses have a need to enter the Dubai market. Dubai is the Middle East's booming hub and do Korean companies have a need to enter Dubai? Perhaps the presence of a Korean Business Development Centre already operating in Dubai is a clear sign of the huge potential for Korean businesses in Dubai. According to Joon Jae-Lee, the South Korean ambassador to the UAE, there are already more than 70 Korean companies who have opened their branch offices in Dubai and they are very active in the Middle East. These include top companies such as Daewoo, Hyundai Group, Kia Motors, LG Electronics, Samsung Group and Renault Samsung Motors. In fact, the construction of one of



the world's tallest buildings, Burj Dubai, is being undertaken by one of the major South Korean construction companies, Samsung (Jae-Lee, 2007). Korea is the largest modern world economy in Asia after Japan and China (De Mente, 2001). The current companies located within the U.A.E. are only a fraction of large Korean organizations, and the success of these companies should be an example for others in Korea who are interested to invest in Dubai. If Dubai was able to attract such companies without an office in Korea, imagine what the potential would be with aggressive promotion within the country. Due to Dubai's strategic location and logistical advantages, Korean businesses can highly benefit with an office in Dubai.



**Figure 1: THE MARKET SCREENING PROCESS**

For tourist attraction, DTCM should consider whether Dubai has what Koreans are looking for in an ideal vacation? Tourism Queensland's research, in 2006, discovered that Korea's outbound tourism has increased due to a growing middle class, more flexible and fewer working hours and a change in consumer perception towards a focus on overseas travel as being an integral part of life (2006). These factors, along with the strong economic growth in Korea and current high levels of domestic travel indicate the strong potential for outbound travel to continue to grow at a respectable pace (Buggy et al, 2006).

In a research conducted regarding Korean tourism in the USA (Sung, 2003), it was found that Koreans are showing an increased desire of non-Asian destinations due to the diversity of tourism opportunities not easily available back home, including varieties of shopping, theme parks, cultural attractions, historic attractions, nature and relatively inexpensive golfing experiences (Sung, 2003). Dubai offers a similar bundle of benefits: a huge variety of shopping (the world's biggest mall will be opening in Burj Dubai by 2009), Arabian culture and hospitality, theme parks (Dubailand which is due to open in 2009 will offer 45 different developments built on a two-billion-square-foot of desert), water parks, and amazing golf fields. Unfortunately, the United Nations World Tourism Organization (UNWTO) report of 2006 found that nature and local cultures are what attract Korean travelers, while they prefer not to have beach and spa holidays. Dubai is famous for its desert and pristine palm fringed beaches, something which Koreans are not particularly interested in for their ideal vacation. Furthermore, due to Dubai's youngness as a country, there is not much history nor deeply embedded culture. To attract a larger segment of the Korean market, heavy marketing and image positioning can overcome such weaknesses.

### ***Foreign Trade and Investment***

There is already a reasonable amount of foreign trade and investment between Korea and the U.A.E. The UAE is the second largest oil supplier to South Korea and also the largest export market for South Korea (Jae-Lee, 2007). In 2006, South Korea's imports from the UAE were worth \$12.9 billion (Dh47.3 billion), including \$10.5 billion (Dh38.5 billion) of oil, while South Korea exported goods worth \$2.9 billion (Dh10.6 billion) to the UAE (Jae-Lee, 2007).

Jae-Lee (2007) added that the UAE is not only a major oil supplier but also one of the important partners for South Korea. Many South Korean companies are participating in infrastructure projects in the UAE. Furthermore, the number of visitors reflects the close relationship between UAE and Korea. In 2006, 63,650 South Koreans visited the UAE, more than double the number in 2004 (Jae-Lee, 2007).

### **Second Screening- Financial and Economic Forces**

#### ***Market Indicators***

What is the potential for companies of the world's 13<sup>th</sup> biggest economy to expand into Dubai? The World Competitiveness Yearbook (2005) ranked Dubai is ranked 6th for Economic Performance out of 61 economies. In addition to being the Middle East region's leading trading hub and its key re-export centre, there are numerous lucrative incentives that make Dubai an ideal venue for these growing, profitable industries and activities: meetings, conferences, exhibitions, tourism, corporate regional headquarters, regional transport, distribution and logistics centre, banking, finance and insurance, business and industrial consulting and information & communications technology (as reported in DDED website, 2006). Dubai's strategic location acts as a time zone bridge between the Far East and Europe on the East-West axis and the CIS and Africa on the north-south axis. Dubai is a gateway to a market that is large, growing, prosperous and diversified. According to DDED (2006), Dubai's well established trading links exist with greater than 1.5 billion people in the neighbouring region covering the Gulf, Middle East/Eastern Mediterranean, CIS, Central Asia, Africa and the Asian sub-continent. Dubai's total international trade has grown on average by over 11% per year since 1988 and regional economic growth and liberalization should boost demand further (Rosselet-McCauley et al, 2005). Dubai is a buoyant local economy strategically located in one of the world's richest regions and has ample supplies of cheap energy and primary aluminium. It is also adjacent to major regional suppliers of vital agro-export commodities. Dubai's varied and significant import requirements generate opportunities for product suppliers and re-exporters.

Dubai's economy has been kept open and free to attract investors and businesses. Government control and regulation of private sector activities is kept to a minimum. The DDED states that there are no direct taxes on corporate profits or personal income except for oil companies that pay a flat rate of 55% and branches of foreign banks that pay a flat rate of 20% on net profit generated within Dubai. A stable exchange rate exists between the US Dollar and the UAE Dirham (US\$1.00=AED 3.678). Also, the UAE enjoys financial and monetary stability. Its well-developed, sophisticated banking system features extensive credit facilities and sample liquidity. International companies setting up in Dubai can obtain significant cost advantages not generally available internationally. The DDED further states that there are no foreign exchange controls, no trade barriers or quotas, competitive import duties (4% with many exemptions), competitive labour costs (labour force is multi-lingual and skilled), competitive energy costs, competitive real estate costs, competitive financing costs and high levels of liquidity. Dubai has a strong local commercial tradition and a wide choice of potential business partners who have successful experience with international partnerships in franchising, licensing and joint ventures in various sectors of the economy. The DDED praises Dubai's foreign trade network which extends to 179 states consequently offering the investor a great choice of potential global marketing outlets for a diverse portfolio of goods and services. As a member of the UAE federation, Dubai is also part of the world's third-largest export and re-export centre after Hong Kong and Singapore.

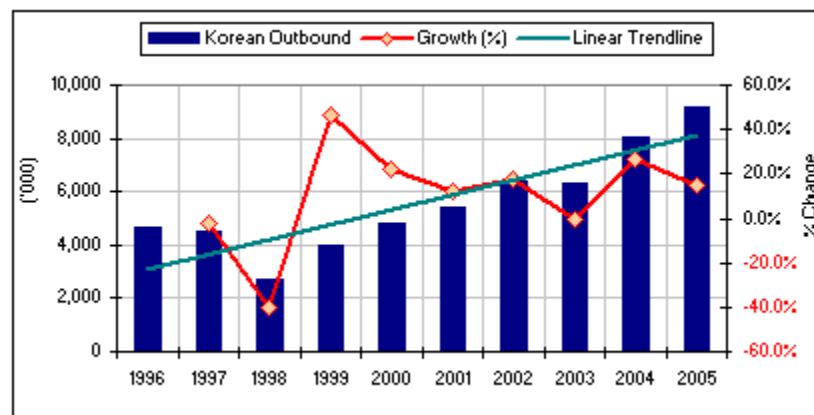
The World Competitiveness Yearbook 2005 classifies Dubai as number one out of 61 economies due to its extremely high tourism receipts (16% of GDP), clearly indicating the trend in the growing number of attractions, offshore resort developments, leisure parks and hotel accommodations. Tourism continues to boom in the entire United Arab Emirates region, due in part to increased inter-Arab tourism within the Gulf. Tourism's contribution to domestic GDP is significant, representing \$4.8 billion in 2004, and could

double within a decade (Rosselet-McCauley et al, 2005). The number of tourists is estimated to reach 15 million by the year 2010 and tourism activities contribute strongly to the surge in infrastructure development and construction (as reported in DTCM website, 2005).

### ***Korean Outbound Tourism Trend Analysis***

So what is the potential of Koreans travelling to Dubai? According to Grace Sung (2003), in a research conducted for the US. Department of State, “Koreans’ rapidly rising GNP, their gradual increase in more free time, heightened globalisation, and greater awareness and interest in developments outside the Korean peninsula are spurring their interest in international travel. Korea’s per capita GDP has risen to almost US \$10,000, placing it securely in the ranks of the middle-income countries along with most European countries and Japan. Korean consumer confidence also has increased along with a sharp rise in discretionary spending for such activities as overseas travel for both business and leisure”. Jae-Lee (2007) stresses that Dubai is becoming very popular with the high-class young Koreans.

According to the United Nations World Tourism Organisation (UNWTO) Report, the average annual growth rate of Korean outbound travellers over the period since 1996 has been 8%, albeit over a lower base. With reference to the figure below, 1996 was a good year for outbound travel from Korea. While numbers declined dramatically during 1997-98 (the Asian economic crisis), double-digit growth trends continued during the period 2001-02. It was not until 2003 (the Iraq War and SARS) that Korean outbound travel recorded a decline and then only a small 0.5%, with numbers more than recovering the following year.



Note: Excludes Crews  
Source: TFI based on KNTD data

**Figure 2: Korean Outbound Travelers 1996 to 2005**

The Pacific Asia Travel Association (PATA) article released in February 2006 declared Korea as a ‘Tourism Superpower’ due to Korean travellers’ numbers passing the 10 million mark in 2005, growing at a rate of 14.2% for the year. The outbound surge was particularly strong in the Korean summer with more than one million Koreans travelling abroad in both July and August, the country’s peak outbound season. As depicted in the above trend analysis, since 1999, Koreans have showed an overall increasing trend to travel abroad. As such, Dubai should capitalize on this growing market before other competitors capture this market.

### **Third Screening- Political and Legal Forces**

#### ***Entry Barriers***

In opening an office in Korea, DTCM will not have entry barriers due to operating as a government concern, linked with the U.A.E. Consulate. The U.A.E. Consulate or Embassy in Korea will handle any legal issues.

According to DDED in 2006, Dubai is served by over 120 shipping lines and linked via 85 airlines to over 130 global destinations. Dubai Ports is the region's foremost port and terminal operator and it has been ranked as 8th Top Container Port Worldwide having handled 8.92 million twenty-foot equivalent units (TEUs) in 2006 which represents a 17% increase in throughput, over 2005 (as reported in DP World Website, 2007). Furthermore, the U.A.E. local airline, Emirates, now connects Dubai and Seoul with daily, direct flights. In attracting tourists, location-wise, Dubai is an 11-hour ride from Seoul, further away from its Asian competitors, but much closer than European and other American destinations.

In expanding their operations to Dubai, Koreans have low entry barriers. Business customs duties are low at 4% with many exemptions; there are no foreign exchange controls, trade quotas or barriers. Liberal visa policies permit easy importation of expatriate labor of various skill levels from almost all over the world. Foreigners are permitted ownership rights of up to 49% for limited liability companies established within the Emirate of Dubai and up to 100% for professional companies, branches and representative offices of foreign companies. In Free Zone Areas, the most famous of which are Dubai Airport Free zone, Jebel Ali Free Zone, Dubai Media City and Dubai Internet City, all companies are exempted from taxation and customs duties and benefit from attractive investment incentives. The World Competitiveness Yearbook 2005 ranks Dubai as number one out of 61 economies for the sub-factor 'Fiscal Policy' mostly due to exceptionally high rankings for its tax system. The tax burden remains extremely low in comparison to the industrialized nations, with no tax levied on personal income and corporations, with the exception of foreign banks. Most importantly, 100% repatriation of capital and profits is permitted.

### ***Policy Stability***

Despite Dubai's massive economic growth and the social dislocation caused by an explosion in the population, it has enjoyed political stability. In addition to its political stability, Dubai was ranked highly for policy stability as well (9<sup>th</sup> out of 61 economies) due to its capitalization on strengths of sound macroeconomic policies, stable political environment, attractive tax policies and unrestrictive government legislation (Rossetlet-McCauley, 2005). The DDED confirms that Dubai has a well-defined, sound legal framework for business and a clear set of ownership rules.

Furthermore, there is a solid rapport between Korea and the U.A.E. As reported in the Khaleej Times on 9 June 2007, the UAE and South Korea agreed to cement their existing economic relations and cooperation building on the exchange of high profile state visits by His Highness Sheikh Mohammed bin Rashid Al Maktoum, Vice-President and Prime Minister of the UAE and Ruler of Dubai, and Roh Moo-hyun, Korean President. Korean Deputy Prime Minister and Minister of Finance and Economy Kwon O-kyu expressed his country's keenness on boosting bilateral economic relations with the UAE and Sheikh Mohammed called for transforming their trade relations into relations of partnership (Khaleej Times, 10 June 2007).

### **Fourth Screening – Sociocultural Forces**

PATA Director for Strategic Intelligence, John Koldowski (2006), says, "For many years Korea had a reputation for isolation - the 'hermit' kingdom, as it was known. Now Korea's culture, consumption patterns and investments are an integral part of the Asia Pacific success story. Korea is a strong example of a country that operates by the principle of 'total tourism'—a belief that inbound, outbound and domestic tourism delivers a range of socio-cultural benefits".

Tourism Queensland in 2006 commented that middle and upper class Koreans prefer long haul destinations to see countries that they haven't experienced before. According to their research, it was found that international travel represents an opportunity to become more worldly and sophisticated and is an important source of personal growth, learning and rejuvenation for Koreans. Koreans are becoming more diversified and looking for more alternative travel options. The rapidly expanding five-day work system and higher disposable incomes mean travelers are becoming more experienced; encouraging the move towards Fully Independent Traveler (FIT) travel (as reported by Tourism Queensland, 2006). This trend has led to an increase in agents establishing real time solutions and online hotel reservation booking engines, which DTCM will have to ensure to keep at par with its competitors. Agents are introducing 'Do It Yourself' packages and adding FIT elements to group packages.

Most Koreans have not traveled extensively as such their method for choosing their travel destination depends a lot on icons and images in popular culture and mass media, especially if they are also recommended by friends and family (Sung, 2003). This is a main reason why it is so important for DTCM Korea to be in Korea and to be correctly positioned in the Korean mass media.

In the next ten years, Tourism Queensland predicts that there will also be an increase in the 'Silver Generation', Korean baby boomers born between 1955 and 1960 after the Korean War who now total more than 10 million. It is forecasted that this market, with its ample wealth and time to spare, will have a large impact on outbound travel from Korea and will be the main consumer source for the group market over the next few decades. These consumers are proficient users of technology, including the Internet and prefer high quality travel options. Their preference for group travel stems from language difficulties and their preference for fixed itineraries (as reported by Tourism Queensland, 2006).

The Australian Department of Foreign Affairs and Trade (DFAT), in a project undertaken in 2001, in partnership between the Australia Department of Industry Science and Resources, the Korean Ministry of Culture and Tourism, the Korean Tourism Research Institute, the Australian CRC for Sustainable Tourism and the Australia-Korea Foundation stated that if a tourism industry wishes to gain a greater share of Korean outbound tourism it will need to develop a greater understanding of Korean culture and style of business. The Confucian basis of Korean society remains a mystery to many countries but is a central feature of Korean society and business practice. It is vital for both tourism and business stakeholders to be informed about Confucian practices as well as be familiarized with Korea's main religions (majority being Christianity and Buddhism). DFAT further states that the Korean market is very price sensitive. Thus, the Korean outbound tour industry has concentrated on developing package tours based on low price rather than quality. DFAT believes that this is because many Korean travellers choose an overseas trip based on price alone - the destination and the program contents are of secondary importance. Tourism Queensland also confirms that most inbound operators must rely on commissions from shopping outlets to compensate for low- or under-priced land 'packages' quoted to outbound agents. Dubai inbound operators will have to find a balance of price and quality based on the expectations of their target market.

Furthermore, Dr. Roger March, Director of the Australian Inbound Tourism Studies Centre, conducted in 2003 an in-depth field report on five key Asian markets and noted that the Korean outbound agents trust only Korean-owned inbound operators. Dr. March also found that the national characteristics of Koreans differ somewhat from that of their Asian neighbours. For example, Korean shoppers differ from the Japanese as they are known for their aggressive behaviour.

The Asia Pacific Management Forum in 2001 warned businesspeople that working practices, structure and hierarchy, working relationships, business practices and business etiquette in Korea are quite different from those of its neighbouring countries. Korea is a culture where social harmony is essential and the ability to identify another's state of mind is crucial to successful business ventures (De Mente, 2001). For this reason, one must be aware of subtleties in communication, observing non-verbal and indirect cues that often suggest the true sense of what is being communicated. As a collectivist society, consensus is an important element in promoting and maintaining harmony in Korea. The Confucian beliefs and values of contemporary Korean society highlight a plethora of social concerns, and include obligation towards others, respect for family, elders and authority, loyalty, and honour. In Korea, personal relations take precedence over business and how one negotiates is just as important as what is being negotiated (De Mente, 2001). Any sign of impatience from the foreign side during negotiations will be exploited by the Korean side. Under the best of circumstances, the negotiating process in Korea is usually long and drawn out, not only because a fairly large number of people have to be satisfied with the details of any agreement, but also because communication and understanding take longer, and there is an unusually strong element of caution on the Korean side because they feel so strongly that they cannot afford to make mistakes. Korean etiquette, especially during the early periods of getting acquainted, often gives the impression that Koreans are easy to please. In reality, their politeness masks a shrewd, never give up, never lose, business sense. The above are Korean characteristics that differentiate them from their Asian neighbours. As such, DTCM and its partners must take note of the above seriously and be culturally sensitive with tourists as well as business partners from Korea.

### **Fifth Screening – Technological Forces**

Korea is a technology country and has become a producer of major hi-tech machinery, computer accessories and popular automobiles. According to the International Telecommunication Union (ITU) World Telecommunication Indicators Database, in 2004, computer penetration rates by household were 78.9 % in Korea. Internet access by household was 92.7% in Korea and Korea lead the world in broadband penetration, with high-speed lines serving more than a quarter of the population meaning 25 broadband lines for every 100 people (as reported by ITU, 2004). Furthermore, Tourism Queensland's research in 2006 stated that according to the Korea National Statistical Office, 48.7% of Koreans use the Internet for online shopping and reservations. The UNWTO statistics reported in 2006 that air was easily the most preferred mode of travel for Koreans with Seoul's Incheon airport capturing 80.9% of all outbound movements.

The DDED's deliberate policy of investing heavily in transport, telecommunications, energy and industrial infrastructure has enabled it to have one of the best infrastructure facilities in the world. Dubai features a network of seven industrial areas, one business park and four highly successful, specialized free zones of international distinction, two world class seaports, a major international airport and cargo village, a modern highway network, state-of-the-art telecommunications and reliable power and utilities all of which deliver efficiency, flexibility, reliability, reasonable cost and size. As such, Dubai's technology and infrastructure are able to fulfill the requirements of Korean companies' operations as well as Korean tourists.

### **Sixth Screening- SWOT Analysis and Competitive Forces**

The SWOT and competitive forces analysis is undertaken below to assist DTCM in understanding its current organizational position before finalizing its international market strategy and market plan. It will enable DTCM to better position itself correctly on the strategic map of where it is going.

#### ***Strengths***

Tourism Queensland's research revealed that obtaining a visit visa is a hassle for Koreans going to many countries. Japan continues its no-visa system and the US seeks to introduce a Visa Waiver Program for Korean travelers by 2008. Dubai already has a program that allows Korean travelers to visit the U.A.E. visa-free for business or leisure for up to 90 days. Dubai has political stability and is a safe city to live in. Dubai has numerous investment incentives especially in its free trade zone areas. The U.A.E. has a solid rapport with Korea as well as a historically established trade relationship. Through its office in Hong Kong, DTCM has a reasonable understanding of the market and business environment. The pioneering spirit of DTCM has made Dubai the first city in the GCC to have set up a Tourism Promotion Board. Dubai has a 16.6% market share of the Middle East tourism market, second only to Egypt (24.9%) due to the active role played by the DTCM (as reported in DTCM website, 2005). Furthermore, managing 15 offices worldwide has given DTCM a wide exposure and better understanding of tourism in global markets. DTCM also has well-experienced teams in the overseas offices. DTCM is Dubai government owned thus giving it full support for further developments. DTCM claims that it has a great system where knowledge is effectively shared within the group and its offices abroad.

#### ***Weaknesses***

DTCM's weaknesses include a poor understanding of the Korean local culture and the needs of the customers (both tourist and trade). DTCM has a Korean cultural problem due to lack of experience in operating in Korea and their marketing communications methods, which suit other countries, may not be suitable for Korea. An increasing amount of countries, like Australia, also have working holiday visa schemes that are attracting the younger Korean segment, something that Dubai Immigration has yet to embark on. DTCM's biggest weakness for the tourism sector is Dubai's topographical features. DTCM is essentially offering the desert of Dubai with artificial development surroundings which is not something that the majority of Korean tourists want for their holiday. Koreans prefer nature and history as ideal attractions rather than spa or sunbathing at beaches, which Dubai is most famous for (Cooper, 2006).

### ***Opportunities***

There are many opportunities that DTCM can take advantage of by entering the Korean market. There is an immense opportunity to further encourage trade, investment and tourism with limited financial implications. Tourism Queensland claims that Korea is the 13<sup>th</sup> biggest economy and one of the biggest manufacturing nations in the world. DTCM has a vast potential to attract Korean international companies that can have a base in Dubai. Koreans believe that international travel represents an opportunity to become more worldly and sophisticated. If Dubai is positioned correctly, Koreans will think that visiting this fusion city of modernity and Arabic hospitality is a sophisticated thing as well. Koreans may be curious to meet the Arabs and to see what they look like. They will be curious to ride a camel and to taste kebabs instead of eating traditional Korean foods. If promoted correctly, Koreans may be induced to change their present mindset and appreciate the cultures of the Arabs. Once Koreans are enticed for a different taste of culture, they will love experiencing Dubai.

### ***Threats***

All countries know that tourism is great as there is no risk involved and tourists pour money into the country. Almost all countries in the world are increasing their attractions and creating more and more attractive tourist packages. The 2005 statistics released from PATA and the Korea Tourism Organization show that the most popular destination regions were Asia (72.6%), the Americas (8.1%), Europe (5.8%), and the Pacific (4.5%). According to the UNWTO 2006 statistics, the top five Korean destinations in Asia-Pacific were China (mainland), Japan, Thailand, Philippines and Hong Kong. PATA confirmed that the two most popular countries, China (PRC) and Japan, together captured 51.1% of the total Korean outbound market. In 2005, the USA was the leading non-Asian destination for Koreans and the third most popular destination overall (7% of total). 4.5% of Korean travelers visited the Oceania region in 2005. In Europe, Germany and the UK were first and second most popular destinations with 141,606 and 111,845 arrivals respectively. Travel for pleasure accounted for 60% of Koreans' trips (business 22.5%). The pleasure travel category accounted for 77% of all Koreans' trips to the Pacific; 62% of all trips to Asia; 51.8% of all trips to Europe; and 38% of all trips to the Americas.

The Queensland Tourism Board reported that tourism organization that already have opened offices in Seoul include Canada's Alberta and British Columbia provinces, Las Vegas, New Zealand, Victoria (Australia) and Western Australia. These offices are heavily marketing themselves in Korea.

There are a number of emerging new competitors that increase the number of options available to the Korean outbound market. Low Cost Carriers operating out of Incheon and Busan international airports have boosted capacity and visitor numbers to short-haul intra-Asian destinations. Chinese airlines are continuing to extend service routes and Korean national carriers are adding additional routes to destinations such as Fiji, Las Vegas and Paris. General demand for long-haul destinations remains but has been impacted by short-term price led offers to short-haul destinations.

In addition, competitors are doing inter-related tourism grouping. For example, Singapore sells packages of Singapore and Malaysia together so that tourists have great history and culture in Malaysia and stop by Singapore for great shopping. North American packages, Central America packages, Europe packages, and Asian packages entice tourists because they offer a balance of attributes. Furthermore, DTCM's competitors use virtual tourism as a promotional item to give potential tourists a 3-D taster of what they can offer.

As reported by DTCM in 2005, a nearby Middle Eastern competitor is Egypt. Egypt has lots of nature, history and culture that Dubai doesn't have. Currently, Dubai holds a 16.6% share of the Middle Eastern tourism market, which is second to Egypt (24.9%).

Commercial competition includes Malaysia, India, Thailand, Singapore, Taiwan and China. These countries give Korean businesses incentives for opening investments, businesses and offices. These countries have very strong competition, especially China due to its low manufacturing advantage for both labour and material.

Due to limitations of this study, we recommend DTCM to perform a thorough competitor analysis and customer analysis to further analyse the number, size and financial strength of competitors, their market shares, their marketing strategies, the apparent effectiveness of their promotional programs, the quality levels of their product lines, their pricing policies, their distribution channels and their coverage of the market. This will give a more accurate image of where DTCM stands and perhaps DTCM may even find niches that are currently poorly served (Ball et al, 2006).

## **FINAL SELECTION OF NEW MARKET**

### **Government-Sponsored Trade Missions and Trade Fairs**

DTCM, with its government-owned support, organizes numerous trade missions where U.A.E. firms are sent to a country to learn firsthand about the market, meet important customers face to face and make contacts with people interested in representing their products or bringing their branches to the U.A.E. Czinkota et al (1998) mentioned the impact of a group visit is greater than that of an individual. "Before their arrival, the consulate or embassy officials will have publicized the visit and made contact with local companies they believe are interested" thus enabling the country's executives to have more exposure with potential partners" (Hill, 2005).

In a Khaleej Times article, on June 9, 2007, just two weeks after Sheikh Mohammed bin Rashid's South Korea visit, it mentioned that the UAE and Korea ran the largest business event in the U.A.E., i.e. a marathon forum and exhibition which attracted nearly two thousand industrialists and businessmen from Korea. The exhibition showcased activities of over 90 institutions and firms both in the private and public sectors in the UAE. Private and public sector institutions in the UAE and South Korea reached deals worth \$4 billion at the end of the three-day UAE-South Korea Forum and Exhibition for trade and investment opportunities.

There are numerous outbound tourism exhibitions internationally that DTCM participates in on a yearly basis. Besides making contact with prospective buyers and agents, DTCM can use these fairs to learn more about their target market and gather competitive intelligence. By doing so, not only will DTCM receive feedback from visitors to their exhibits but it will also have the opportunity to observe its competitors in action.

### **Field Trip**

A personal visit is irreplaceable once a highly potential market has been found (Keegan and Green, 2003). DTCM should send an executive to visit Korea to develop a first-hand feel for what is really going on in the country. Before leaving Dubai, the executive should look over all researched information from the previous screenings and any other new data. Based on this review and from experience in making decisions for entering the 14 other DTCM markets, the executive should prepare a list of points on which information must be obtained on arrival. Upon his return, the executive will present DTCM management with the facts uncovered by the five screenings as well as a firsthand report on the market, which will include information on competitive activity and a recommendation of the suitability of the firm's present marketing mix and the availability of additional facilities for attracting the Korean market with the DTCM office in Seoul. The purpose of this exercise is to try to develop a first-hand feel for what is really going on in the country, which cannot be accomplished quickly. The executive will have to stay for quite some time in Korea for some cultural details may not be known until after spending a few months in a country.

### **Research in the Local Market as Practiced**

Once a thorough research has been conducted and should DTCM still find some pertinent secondary data unavailable (ie: "Who is the decision maker while going on vacations?"; "What are Koreans' vacation and business destination decisions based on?"), they then must collect more primary data. DTCM may face complications due to cultural differences. Even though a research team may be borrowed from the DTCM head office, it is suggested that management hire a local research group to do the work. Translation difficulties, questions to avoid as stated by the government, distribution of questions, social desirability biasness upon interviews, tax assessor suspicion and cultural differences may cause data results to be skewed or inappropriate (Hodgetts and Luthans, 2003). Local research companies will have the experience to avoid such complications. Furthermore, once DTCM has started its heavy marketing



within Korea, market research should be an ongoing process to keep ahead of competitors' strategies and their target markets changing needs.

## **SEGMENT SCREENING**

Dubai must find a target segment of the Korean outbound market that will strategically fit with what it offers as a tourism and business destination. At this juncture, secondary data can assist DTCM with preliminarily segmenting the Korean market. Unfortunately, available segmentation research work into the Korean market is limited thus in-depth research is needed to further refine the key target market segments.

Additional data from Tourism Queensland indicates that the majority of Korea's 49 million population is centered around Seoul – 10.2 million and Busan – .6 million. The UNWTO statistics reported in 2006, highlighted that 52% of Koreans took at least 4 international trips. The 2005 statistics released from PATA and the Korea Tourism Organization show that more than half (52.4%) were aged 40 years or younger, with a significant number (29.1%) aged 30 years or younger. Koreans over 60 years old only accounted for 9.3% of the total. Tourism Queensland envisages that in the decades to come, there will be an increase in the Silver Generation (Korean baby boomers born between 1955 and 1960 after the Korean war, approximately 10 million people) who will have ample wealth and time to travel consequently increasing the Korean outbound tourism. As per the UNWTO reports in 2006, the average Korean traveller stays 10.9 days abroad. Package tours tend to be longer (13.5 days) than individual tours (7.3 days). VFR (visiting relatives and/or friends) and training/study travellers stay longer than business or pleasure travellers. January, July and August are peak seasons for Korean outbound travellers, where 68% of Korean travellers stay at hotels and 21% use relative or friend's houses. The Queensland Tourism Authority verified that the major segments for Korean outbound tourism are the business sector, education sector, MICE (Meeting, Incentive, Convention and exhibition) sector, working holiday sector, and the holiday sector. They added that the lucrative Korean segments for the FIT leisure market include honeymooners and weddings, high-end family groups and special interest groups (golf, study tours etc). Tourism Queensland also noted a growing Working Holiday Visa segment from Korea, characterized by a younger FIT market with a high level of language skills that are more willing to disperse throughout Australia (one segment that DTCM cannot target as Dubai has yet to introduce the Working Holiday Visa for the younger generations).

Age, income, geography and psychographics (lifestyles) are the essential means of identifying market segments (Cateora and Graham, 1999). The market segment chosen must be definable, large, accessible (reachable for either promotional or distribution purposes), actionable (the marketing 4 P's can be changed) and capturable (if segments are completely captured by the competition, the task is difficult). Once the secondary data is available, DTCM can first segment geographically. Korea can target primarily the Seoul and metropolitan areas of Busan rather than the rural areas as these urban cities' residents have already traveled to numerous locations outside of Asia and have the curiosity to discover new destinations outside intra-Asia. The second process of segmentation should include age and income. DTCM should concentrate on attracting well-educated, higher net-worth travelers in the 25 - 40 age bracket and plant the seeds for the Silver Generation who will be retiring within the next 10 years and who are a relatively untapped niche market of approximately 10 million Koreans, as reported by Tourism Queensland. The professions of DTCM's target market should include but are not limited to retirees (or those who will be retiring within the next decade), professionals, administrators (office ladies and salary men), golf players, honeymooners and couples in the 40 or younger bracket and businesspeople. DTCM should avoid targeting the lower-income segment of outbound travelers because these segments are completely captured by the competition (as mentioned previously in the Threat section of the SWOT Analysis). Basically, the most suitable segments for DTCM to target are the high yielding Korean visitors who provide the most economic value. DTCM can consider doing further segmentation within each segment, especially the holiday, MICE and business segments in order to understand target market needs and even find untapped niches that Dubai can capitalize on (ie: the Silver Generation). Once these segments have been further examined, DTCM can establish the most attractive holiday, MICE and business experiences for Korean travelers.

## KEY STRATEGIES TO BE IMPLEMENTED

### Strategies for Entry Mode

There are two options for DTCM's mode of entry to the Korean market. One option is to use its office in Hong Kong (set up for the Far East) to heavily target the Korean market. The second option is to open an office in Seoul, Korea (the most urban city) for its target market.

DTCM is currently using its Hong Kong office to promote Dubai all across the Far East. The Hong Kong office uses the aid of Marketing Garden, a local agent, who advises them on how to carry about their promotional activities. The advantages of using this office in Hong Kong is that DTCM can save the costs of running an additional office in Korea and paying salary for its administrators in that office. DTCM can use the know-how of its experienced executives in Hong Kong to adopt a marketing strategy for the Korean target market. The UNWTO, based on the differences of characteristics of outbound tourism found in a study of seven Asian countries (including Korea), highly advises against this first option. The UNWTO warns countries wishing to increase their share of emerging markets to translate their promotional materials and differentiate their marketing activities according to the particularities of each country. By having an office based in Hong Kong promoting for Korea, the executives will naturally be inclined to think as if they were targeting the Chinese market. As stressed by Keegan and Green (2003) "the point of understanding your target market is to live in the market and get 'a feel' for the market which doesn't happen quickly". So how can executives in Hong Kong, who have never lived, worked, or interacted with Korea truly understand the cultural sensitivities of the country? Prideaux (1997) pin pointed that numerous countries that do not understand that Korean tourists have expectations that differ from those of other Asian visitors fail to provide a product that lives up to the expectations of tourists.

DTCM must understand that China and Korea have very different cultures. In order for DTCM to position Dubai correctly in Korean's mindset, the promotion must be tuned to Korea. DTCM ought to tackle Korea as Korea itself, not as a part of its Far Eastern market. It should also study the Korean segmentation which is very different than Chinese segmentation. Even the ways that Koreans choose their destinations are different than those of Chinese. For example, Chinese are restricted to the Approved Destination Status (ADS) which does not allow purely travel for pleasure to non-ADS countries that China doesn't have bilateral agreements with. Furthermore, Chinese visas are restricted by the itinerary, which has to be fixed at the beginning of the trip where travelers are obliged to travel in a tour group and are not allowed to extend their stay or apply for other types of visas. Koreans, on the other hand, are much more liberal in their choice of travel destinations and according to Tourism Queensland, FIT travel is an increasing trend.

Furthermore, there is much political tension between China and South Korea. China is basically feeding its communist neighbor, North Korea, which is South Korea's political enemy. How can a communist country like China understand the business culture and consumer needs of a democratic country like South Korea? South Koreans will not even trust dealing with their Chinese neighbor. In fact, March (2003) states that the Korean outbound agents will deal only with Korean-run inbound operators overseas with the possible exception of Canada. Differences in languages are also a major barrier in conducting research, interpreting data and adapting the marketing and promotion of a company.

DTCM Hong Kong uses a different strategy to attract Chinese businessmen than it should use to attract Korean business because the nature of their country's businesses is different. While China is a manufacturing super-power due to its low costs, Korea is famous for its technology-based products. Korean businesspeople will be interested in coming to Dubai for investment in terms of a logistical hub (distribution center) or a sales and marketing arm. All the above reasons convince DTCM to enter directly to Seoul rather than promote from Hong Kong.

"The present-day increase in business opportunities in Korea only increases the importance of cultural knowledge for those wishing to enter into this modern day market" claims De Mente (2001). DTCM has to tackle issues such as cuisine, language difficulties and poor itineraries in order to avoid miserable images due to lack of cultural sensitivity while Koreans are in Dubai. This cannot be done unless a clear understanding has been established of what Koreans expectations are which can only be understood if

DTCM is based in Korea. Cateora and Graham (1999) stress that consumer needs and wants are constantly changing, and to be one step ahead of the competition, companies must monitor these changes. In such a volatile market, it would be very difficult for DTCM Hong Kong to monitor changes of travellers' needs and wants when their office is not even based in the country. Consequently, even if DTCM does finally reach a leading image in their target markets' eyes in Korea, they are unlikely to stay a leader if they do not have an office in Korea. Therefore, it would be wisest if DTCM didn't adopt any marketing activities or materials from its Far Eastern office in Hong Kong but rather open an office in Korea itself. This will allow DTCM Korea to build a unique plan as characteristics of target segments in Korea are different from those in other Far Eastern Countries.

### **Strategies for Marketing in Korea -Selling the Desert**

This section concentrates on the methods in selling the desert to the Koreans for both tourism and business. Given the competitors that Dubai has (mentioned in the Threats section of the SWOT analysis), how can Dubai position itself competitively?

As discussed earlier, DTCM's biggest weakness for the tourism sector is Dubai's topographical features. The product DTCM is selling (essentially, the desert of Dubai) is not something that the majority of Korean tourists want in their holiday. Koreans prefer natural and historical things rather than spa or sunbathing at beaches, which Dubai is most famous for. Koreans are said to believe that international travel represents an opportunity to become more worldly and sophisticated. As such, if Dubai is positioned correctly, Koreans will think that visiting this fusion city of modernity and Arabic hospitality is a sophisticated experience as well. Koreans may be curious to meet the Arabs and to see what they look like. They will be curious to ride a camel and to taste kebab instead of their traditional Korean dishes. As mentioned earlier, if promoted correctly, Koreans will be encouraged to change their mindset in appreciating the culture of the Arabs. Once Koreans are enticed for a different taste of culture, they will love experiencing Dubai.

There is an immense opportunity to further encourage trade, investment and tourism with limited financial implications. Korea is 20<sup>th</sup> largest outbound visitor producing country in the world Dubai has accounted for only 0.27% of this huge market. And as indicated by Tourism Australia earlier, Korea is the 13<sup>th</sup> biggest economy and one of the biggest manufacturing nations in the world. DTCM has a vast potential to attract Korean international companies that can have a base in Dubai.

As such, DTCM must heavily market Dubai's strengths as well as portray a positive image of its high standards of hospitality (much higher than U.S. or European hotels), the beauty of the desert and the Arabian culture, which is something that is so different than the Korean lifestyle. And for the commercial investors, DTCM must market Dubai as a key strategic business and logistical hub, which is safe, with vast potential for investment growth and yet tax-free.

The following positioning is proposed for Dubai as a tourist destination:

"A Desert Mystery With Intriguing Culture, People and Hospitality – Discover and Unfold Dubai Today"

As for commercial investors, the following positioning is proposed:

"A Safe Strategic Tax Haven Where Investment Growth Has Limitless Possibilities"

### **RECOMMENDATIONS FOR DTCM KOREA TRAVEL & INVESTMENT PROMOTIONAL ACTIVITIES**

A lot of DTCM's competitors are providing stimulating packages for the Koreans. Since Dubai is lacking in history and nature which Koreans like, one of the recommendations is for it to sell a GCC package or a Middle Eastern package. In this package, Koreans can spend a few days in a more historical and naturally beautiful nearby country, like Egypt or Turkey (a few hours away by plane, respectively), and then spend their next few days shopping and entertaining themselves in Dubai. This way, DTCM would have met all of the Korean's wants from an ideal vacation. DTCM will be able to gain more by proposing this idea to neighbouring countries and teaming up with them, rather than competing with them.

In conjunction with key wholesale partners, DTCM Korea can increase preference for Dubai through cooperative marketing activities. Once they have captured a share of the market, DTCM can increase the visitor market share by focusing on additional regions within Korea that are urbanizing. It should also ensure that all consumer marketing activities are clearly linked to specific wholesale or airline calls to action. It can work with the Dubai government, its owner, to increase investment in cooperative marketing activities. DTCM can focus its consumer marketing efforts on high yielding market segments

DTCM should utilize the most suitable distribution channels in order to provide product and information to the priority Korean target markets. Once its Korean website is set up, it must increase consumer traffic to its website with strong Korean language and Korean attractions, including having a Korean language option on the main website. It must work with wholesalers and airline partners to increase the distribution of its product via online distribution channels. DTCM should also promote virtual tourism, especially for the technologically high Korean target market. Virtual tourism is used as a promotional item to give Koreans a taster of Dubai and entice them to visit. By having a virtual tour of Arabian hospitality, the golden sand dunes, the beautiful palm fringed beaches, the variety of shopping, the mix of modernity with an Arabian touch, the Koreans will become interested to experience Dubai in real life. Another virtual tour can show an example of a prosperous Korean company who opened a sales and marketing office in Dubai portraying all the benefits that Koreans have while setting up businesses in Dubai. Given that 48% of Koreans use the Internet to buy things online and make reservations, the virtual tourism will be a great tool to attract their target segment both for tourism and business.

DTCM Korea should enhance its relationship with public relations stakeholders and with the media. DTCM executives should develop skills and knowledge of existing media in Seoul and Busan, and offer additional creative opportunities for emerging media. It should develop a variety of tools to increase media exposure of Dubai's experiences and products. DTCM should significantly increase consumer and trade media awareness of Dubai and its experiences via increased targeted PR activity. It should work with its Dubai office to maximize the benefits for Dubai when they invite visiting Tour Leaders and Journalists to experience Dubai for the sake of public relations. DTCM should also increase the exposure of Dubai through participation and promotion of events in Korea and Dubai to make the advantages of tourism and business in Dubai well known.

Engaging with wholesalers to increase presence of mono itineraries to suit changing market requirements would be another advantage. DTCM should increase trade awareness and understanding of Dubai's products and expand current itinerary. It should maintain focus on Seoul and Busan based trade while developing additional relationships with trade based in urbanizing areas. It should engage with trade to build demand for charter and scheduled services direct into Dubai. Developing and implementing a trade familiarization program to support existing product and experiences and introduce new experiences and products is another step it should take. Once DTCM has loyal partners, it should work with these key partners to encourage quality, higher yield visitors.

It is also recommended that DTCM continue to work with and lobby airlines to encourage charter/seasonal and scheduled services direct into Dubai. It can develop and implement joint marketing campaigns with airlines to ensure the ongoing viability of inbound flights from Korea to Dubai and encourage additional services.

DTCM should cooperate with U.A.E. based Inbound Tour Operators (ITOs), wholesalers and the Dubai industry to encourage reengagement in the Korean market and provide better education and training on Dubai's products and experiences. It should ensure adequate research is available to accurately assess market trends and visitor behavior. This research must be made available to the U.A.E. industry and its partners. DTCM should also work closely with its government partners to increase Dubai industry development through ongoing programs that raise the awareness level and knowledge of the Korean market for the Dubai industry. Furthermore, DTCM should ensure that service quality matches expectations via increased communication to the Dubai industry and provision of the training options. If unethical practices regarding inbound tour operators occur, DTCM must encourage the Government to

implement tight national regulation for unethical practices as well as qualification and certification arrangement for tour guides.

DTCM Korea should raise Dubai awareness among major Korean corporations and associations by annual seminars/workshop to investor/trader groups in Seoul and Busan, participating in trade show in Korea where Dubai has appropriate free zones and incentives available, develop trade and investment collaterals in Korea and conduct ongoing business media promotions. DTCM Korea should set up ties with the Korean Business Development Centre in Dubai and set up a link where it can help attract Korean businesses to expand to Dubai, and once they have moved to Dubai, the Korean Business Development Centre can help the businesses settle in. Thus, the whole process for Korean businesses is much easier and more efficient, and consequently both DTCM and the Korean Business Development Centre can have more businesses settle in Dubai.

Working with the DTCM's Destination Management Division and the Dubai Government can further ensure destination development activities meeting the needs of the Korean market. DTCM should work creatively to adapt its product and experiences in the market and match appropriately with target segments in Korea. Most importantly, DTCM should ensure that the product and experience Dubai offers for both businesses and tourists match through a better understanding of the Korean market requirements and expectations. It should ensure an implementation of a highly targeted approach to marketing in Korea, focusing on the identified priority regions of Seoul and Busan.

## **CONCLUSION**

DTCM has already opened offices in 14 countries throughout the world, including Hong Kong for the Far East, to promote its city as both an internationally astute business hub and tourist haven. As one of its strategic business directions, DTCM is seriously considering Korea as an option to further expand and develop its global market.

However, DTCM has yet to recognize that Korean businesspeople and tourists' expectations differ from those of their Far Eastern neighbors. As a result of failing to provide an adequate pull strategy for this target market, DTCM is strongly urged to open an office in Korea and to adapt its strategic, marketing and promotional needs in this new office, as one step forward in achieving a clear profile of the travel behavior and investment preferences of actual and potential clients. It should focus on assessing the Korean market based on the screening factors and phases as discussed earlier to obtain relevantly significant information on the mode of entry into the Korea.

It is recommended that DTCM sells a GCC package or a Middle Eastern package. In conjunction with key wholesale partners, DTCM Korea can increase preference for Dubai through cooperative marketing activities. It should consider utilizing the most suitable distribution channels in order to provide product and information to the priority Korean target markets. Through its Korea website it must strive to increase consumer traffic with strong Korean language and Korean attractions. Working with wholesalers and airline partners, it should increase the distribution of its product via online distribution channels. Virtual tourism can be used as a promotional item to give Koreans a taster of Dubai and entice them to visit. Tour Leaders and Journalists should be invited to experience Dubai for the sake of public relations while it work to increase the exposure of Dubai through participation and promotion of events in Korea and Dubai to make the advantages of tourism and business in Dubai well known.

DTCM should maintain focus on Seoul and Busan based trade while developing additional relationships with trade based in urbanizing areas. It should raise Dubai awareness among major Korean corporations and associations by annual seminars/workshop to investor/trader groups in Seoul and Busan, participating in trade show in Korea where Dubai has appropriate free zones and incentives available, develop trade and investment collaterals in Korea and conduct ongoing business media promotions. DTCM Korea should set up ties with the Korean Business Development Centre in Dubai and set up a link where it can help attract Korean businesses to expand to Dubai, and once they have moved to Dubai, the Korean Business Development Centre can help the businesses settle in. Thus, the whole process for

Korean businesses is much easier and more efficient, and consequently both DTCM and the Korean Business Development Centre can have more businesses settle in Dubai.

Most importantly, DTCM should ensure that the product and experience Dubai offers for both businesses and tourists match through a better understanding of the Korean market requirements and expectations. On the other hand, DTCM Korea will become an essential and valuable tool for both the public and private sectors in Dubai that are interested in receiving tourists and business partners from Korea.

## REFERENCES

- Ball, Don A., Wendell, H. McCulloch, Jr., Frantz, Paul L., Geringer, J. Michael and Minor, Michael S., International Business: The Challenge of Global Competition, McGraw-Hill/Irwin Publishing, New York, 2006.
- Buggy, Paul, Kyung, Michelle and Ashford, Gabrielle, Tourism Queensland Korea Market Strategy 2007-2010, 2006; Tourism Queensland., [www.tq.com.au/shadomx/apps/fms/fmsdownload.cfm?file\\_uuid=C0A384A1-FCC9-0E96-C4C7-1BE6EFB85A03&siteName=tqcorp\\_06](http://www.tq.com.au/shadomx/apps/fms/fmsdownload.cfm?file_uuid=C0A384A1-FCC9-0E96-C4C7-1BE6EFB85A03&siteName=tqcorp_06).
- Business Times Journalist, UAE and South Korean reach deals worth \$4b, June 2007; Khaleej Times Online., [www.khaleejtimes.com/DisplayArticle.asp?xfile=/data/business/2007/June/business\\_June272.xml&section=business](http://www.khaleejtimes.com/DisplayArticle.asp?xfile=/data/business/2007/June/business_June272.xml&section=business).
- Business Times Journalist, UAE, South Korean agree to cement economic relations, June 2007; Khaleej Times Online., [www.khaleejtimes.com/DisplayArticleNew.asp?xfile=/data/business/2007/June/business\\_June240.xml&section=business&col](http://www.khaleejtimes.com/DisplayArticleNew.asp?xfile=/data/business/2007/June/business_June240.xml&section=business&col).
- Byung-II, Min, Dubai Cited as World's Safest Destination, June 2007; The Seoul Times., <http://theseoultimes.com/ST/?url=/ST/db/read.php?idx=481>.
- Cateora, Philip R. and Graham, John L., International Marketing, McGraw-Hill/ Irwin Publishing, New York, 1999.
- Cooper, Chris, 'Asian Outbound Tourism Takes Off'; United Nations World Tourism Organization Report; Macau, June 2006.
- Czinkota, Michael R., Ronkainen, Ilkka A., Moffett, Michael H. and Moynihan, Eugene O., Global Business, Harcourt Brace College Publishing, Florida, 1998.
- De Mente, Boye Lafayette, Negotiating Korean Style, October 2001; Asia Pacific Management Forum., [www.apmforum.com/columns/boye46.htm](http://www.apmforum.com/columns/boye46.htm).
- Dubai Government's Department of Tourism & Commerce Marketing, About DTCM, 2005; Dubai Government's Department of Tourism & Commerce Marketing., [www.dubaitourism.ae/about/default.asp](http://www.dubaitourism.ae/about/default.asp).
- Dubai International Airport, New Projects, 2007; Dubai International Airport., <http://www.dubaiairport.com/DIA/English/TopMenu/About+DIA/New+Projects/>.
- Dubai Ports World, Dubai Ports Terminal, June 2007; DP World., [www.dpworld.ae](http://www.dpworld.ae).
- Government of Dubai Department of Economic Development, Dubai Economy Quarterly Indicators and Economic Statistics, September 2006; Government of Dubai Department of Economic Development., [www.dubaied.gov.ae/main/gn/DubaiEconomy/QuarterlyIndicators.htm?o=.%2fmain%2fgn%2fDubaiEconomy](http://www.dubaied.gov.ae/main/gn/DubaiEconomy/QuarterlyIndicators.htm?o=.%2fmain%2fgn%2fDubaiEconomy).
- Hill, Charles W.L., International Business, McGraw-Hill Publishing, New York, 2005.
- Hodgetts, Richard M. and Luthans, Fred, International Management: Culture, Strategy, and Behavior, McGraw-Hill Publishing, New York, 2003.
- ITU World Telecommunication Indicators Database, Information and Communication Technology Penetration, Accessibility and Use Statistics, 2004; International Telecommunication Union, [www.itu.int/ITU-D/ict/statistics/ict/index.html](http://www.itu.int/ITU-D/ict/statistics/ict/index.html).
- Jae-Lee, Joon, New era in the relationship between UAE and South Korea, May 2007; Gulf News., <http://archive.gulfnews.com/articles/07/05/19/10126212.html>.
- Keegan, Warren J. and Green, Mark C., Global Marketing, Prentice Hall Publishing, New Jersey, 2003.
- Korean Ministry of Culture and Tourism, Korea Tourism Research Institute, Australia Department of Industry, Science and Resources, Australia CRC for Sustainable Tourism and Australia-Korea

Foundation, Destination Competitiveness: Development of a Model with Application to Australia and the Republic of Korea, October 2001; Australian Government Department of Foreign Affairs and Trade., [www.dfat.gov.au/akf/program\\_activities/destination\\_competitiveness.pdf](http://www.dfat.gov.au/akf/program_activities/destination_competitiveness.pdf).

March, Roger, Australia's Booming Asian Tourism Markets: An in-depth field report on five key Asian markets: Indonesia, Thailand, Taiwan, South Korea & Japan, 2003; Australia Inbound Tourism Studies Centre., [www.inboundtourism.com.au/article\\_five.html](http://www.inboundtourism.com.au/article_five.html).

OECD's Statistical Warehouse Data, Query: Korea, Dataset: Country Statistical Profiles, June 2007; OECD.stat., <http://stats.oecd.org/wbos/viewhtml.aspx?queryname=322&querytype=view&lang=en>.

PATA Communications, Korea Now a Tourism 'Superpower', February 2006; Pacific Asia Travel Association., [www.pata.org/patasite/index.php?id=1343&backPID=1343&tt\\_news=226](http://www.pata.org/patasite/index.php?id=1343&backPID=1343&tt_news=226).

Prideaux, Burce R., "Korea Outbound Tourism: Australia's Response", *Journal of Travel & Tourism Marketing*, Vol. VII (7), 1997, 93-102.

Rosselet-McCauley, Suzanne, Garelli, Stephane and IMD's World Competitiveness Center Team, World Competitiveness Yearbook: Dubai in World Competitiveness, 2005; Government of Dubai Department of Economic Development., [www.dubaied.gov.ae/Statistics2006/wcy/intro/Competitiveness.pdf](http://www.dubaied.gov.ae/Statistics2006/wcy/intro/Competitiveness.pdf).

Sung, Grace, United States: A Leading Non-Asian Destination for Korean Outbound Travelers in 2002, May 2003; U.S. & Foreign Commercial Service and U.S. Department of State., <http://strategis.ic.gc.ca/epic/site/imr-ri.nsf/fr/gr116250f.html>.

Tourism Futures International's Asia Pacific Analyst, Asia Pacific Analyst Worldwide Snapshot of Travel and Tourism Trends, February 2006; Tourism Futures International., [www.tourismfuturesintl.com/tourismanalystnlogin/2006/february/highlights1.html](http://www.tourismfuturesintl.com/tourismanalystnlogin/2006/february/highlights1.html).

UNWTO Reports, Asian Outbound Tourism Takes Off, June 2006; United Nations World Tourism Organization., [www.unwto.org](http://www.unwto.org).

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# DURATIONAL LIMITS ON A COMMERCIAL RIGHT TO PUBLICITY: WHERE'S JOHNNY?

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## ABSTRACT

*The commercial right to publicity finds its origins in the Constitutional right to privacy. It evolved as one of four forms of privacy invasion recognized in the Restatement (Second) of Torts. It is protected, in large part, by state common law and in approximately one half the states, through statutory law. The right of publicity gives an individual the exclusive right to use, or license, the commercial right to their own name, likeness or caricature. Other forms of intellectual property are generally subject to time limitations after which they expire. This paper examines the issue of a durational limit on a commercial right to privacy.*

**Keywords:** Right of Privacy, Right of Publicity, Contract, Commercial Appropriation, Trademark, Copyright, Property Rights - Post Mortem.

## 1. INTRODUCTION

The right of publicity is ironically a sub-set of the tort of invasion of privacy. Publicity and privacy would seem to be opposites and yet, the two are cached under the same rubric. Therein lies some of the discord. To understand the historical antecedents of the modern concept of a right of publicity (or commercial appropriation) one needs to look at the development of the right of privacy.

## 2. DEVELOPMENT OF THE RIGHT TO PRIVACY

Until 1890, no American or English court had recognized a cause of action based on a right of privacy, although, Judge Cooley, in 1888, in his work on Torts had coined the phrase "the right to be let alone." (Prosser, 1971, p. 802). The often referenced article on "The Right to Privacy," by Samuel Warren and Louis Brandeis appeared in the Harvard Law Review in 1890 (Warren and Brandeis, 1890, p. 193) and was perhaps the first authoritative articulation of a specific cause of action based in a right of privacy. This principle was accepted in the lower courts of New York, but denied in the Court of Appeals, prompting the state legislature to enact a statute making it a misdemeanor and a tort to make use of the name, portrait or picture of any person for "advertising purposes or for purposes of trade" without his written consent (Prosser, 1971, p. 803).

### 2.1 The Restatement of Torts

Shortly thereafter, in a leading case *Pavesicle v. New England Life Insurance Co.*, (122 Ga 190, 50 S.E. 68, 1905), the Supreme Court of Georgia accepted the views of Warren and Brandeis. By the 1930s the right of privacy was accepted in nearly all jurisdictions, as a matter of case law and in a few by state statute. With the advent of the Restatement of Torts there emerged not a single tort but four separate categories of the same tort (Prosser, 1971, p. 804). In both Prosser's work on torts and the Restatement, four acts qualify as invasions of privacy:

The use of a person's name, picture or other likeness for commercial purposes without permission.  
Intrusion on an individual's affairs or seclusion.  
Publication of information that places a person in false light.  
Public disclosure of private facts about an individual that an ordinary person would find objectionable.  
(Clarkson, Miller, Jentz, and Cross, 2004, p. 106).

### 2.2 Privacy Rights Outside of the Commercial Area

In 1965, the US Supreme Court, in *Griswold vs. Connecticut*, articulated for the first time a Constitutional right of privacy on the same level as freedom of religion, speech, press and other fundamental rights, *Griswold v. Connecticut*, (381 U.S. 479, 85 S. Ct. 1678 (1965)). A Constitutional right of privacy was held to be implied by the First, Third, Fourth, Fifth, and Ninth Amendments. The Court did not particularly define the right but the inference was that this new constitutional right would have application to the states in the area of tort liability (Prosser, 1971, p. 816).



In the 1970s, privacy issues came to the forefront with the advent of computerized credit and bank records. The Congress of the United States passed the Fair Credit Reporting Act, giving the consumer the right to see their credit report and limiting access to the individual's credit record. In 1974 the Congress passed the Privacy Act giving individuals access to records concerning themselves and restricting record keeping of national agencies. This Act also established the Federal Privacy Protection Study Commission. In 1974 the Congress passed the Family Educational Rights and Privacy Act (FERPA), regarding privacy rights of students and/or parents. In 1974 Congress also created a National Commission on Electronic Funds Transfer to prevent possible invasions of privacy in the cashless society created by electronic transfers (Scaletta and Cameron, 1982, p. 86). These and other Federal and State Statutes have combined with the Constitutional Right of Privacy as well as the emerging tort of the invasion of privacy on the state level to give individuals a shield of privacy from various forms of intrusion, both by governmental agencies as well corporate entities and other individuals. Recently the Federal Trade Commission has also been active in protecting privacy rights of online consumers.

### **3. PRIVACY RIGHTS VERSUS PUBLICITY RIGHTS**

In the 1980s and to the present, the state legislatures have wrestled with the concept of the right of publicity as a sub-set of the tort of invasion of privacy. The state courts have been flooded with cases involving the first category of the tort, i.e. the right of publicity, also known as commercial appropriation or in some jurisdictions as commercial misappropriation. Since these cases are concerned with publicity rights, many of them have high profile plaintiffs. Rudolf Valentino, Laurel and Hardy, John Dillinger, Elvis Presley, Farrah Fawcett, Johnny Carson, Charlie Chaplin, Vanna White, Bette Midler, Bob Marley, Malcolm X, Crocodile Dundee, Teenage Mutant Ninja Turtles, Johnny and Edgar Winter, the Soprano's, Tom Waits, Miss Piggy, ET the Extraterrestrial, Disney's Lion King, Tom Cruise and Nicole Kidman, Jim Davis – creator of Garfield the cartoon cat, Tiger Woods, Lance Armstrong, and none other than the governor of the state of California, Arnold "The Terminator" Schwarzenegger; among others have all filed suits in state courts alleging an invasion of their right of privacy vis-à-vis a commercial misappropriation of their right to publicity without license or consent. A number of these cases have been brought, post mortem, by the heirs and/or assigns of the deceased celebrity.

### **4. POST MORTEM PUBLICITY RIGHTS (ROLL OVER ELVIS)**

Most of the above cases have addressed, at least in part, the following questions germane to the issue of durational limits on a commercial right to publicity. Are publicity rights transferable during lifetime? Should the rights extend beyond one's lifetime? Should post-mortem rights be conditioned on exploitation of publicity during one's lifetime? Should a post-mortem right be transferable? Should there be a "fair use" type exemption before and/or after death? In the Valentino case mentioned above, a nephew of the silent screen star sought to enjoin the making of a TV movie based on his uncle's life. He was disallowed because Valentino, during his lifetime had never exploited his own name, thereby failing to create a property interest, or contract right that would be descendible, *Jean Gugliemi v. Spelling-Goldberg Productions et. al.*, (25 Cal.3d 860; 603 P.2d 454; 160 Cal. Rptr. 352; 1979 Cal. LEXIS 347; 5 Media L.Rep. 2208; 205 U.S.P.Q. (BNA) 1116). In contrast, the heirs of Laurel and Hardy were allowed to assert such a right because the comedy duo had in fact exploited their names through merchandising during their careers, *Price et. al. v. Hal Roach Studios et. al.*, (400 F. Supp. 836; 1975 U.S. Dist. LEXIS 11698, and 455 F. Supp. 252; 1978 U.S. Dist. LEXIS 16417; 4 Media L. Rep. 1301), and *Larry Harmon Pictures Corp. v. Worldvision Enterprises, Inc.*, (603 F.2d 214; 1979 U.S. App. LEXIS 16290). The presumed death of Elvis Presley spawned not only a series of cases dealing primarily with descendible publicity rights, but an entire army of "Elvis Police," to enforce those rights. In one case, the Tennessee court held that under the common law of the state, Elvis did have a descendible right to his name and persona. This right had been transferred during his lifetime to his manager, Colonel Tom Parker, who subsequently sold it to Factors Etc. Inc., which was granted an injunction preventing the manufacture of Elvis statues. The U.S. Court of Appeals for the Sixth Circuit reversed, finding that once the entertainer died, his name and persona became part of the public domain, *Memphis Development Foundation v. Factors Etc. Inc.*, (616 F. 2d 956 (Sixth Cir.) 1980). This prompted the state to pass the Tennessee Personal Rights Act in 1984, allowing descendible publicity rights. Previously, the Georgia Supreme

Court held that the right of publicity was descendible irrespective of whether the public figure had exploited their image for commercial advantage during their lifetime. (Binder, 2002, p. 300).

## **5. HERE'S JOHNNY**

In the case that is referenced in the title of this article, Johnny Carson sought to enjoin a Michigan manufacturer of portable toilets from branding his product as "Here's Johnny...", *Carson v. Here's Johnny Portable Toilets, Inc.*, (698 F. 2d 831 (Sixth Cir.) 1983, U.S. App Lexis 30866). This case was brought during Carson's lifetime and the Sixth Circuit Court of Appeals, in effect, allowed the Tonight Show host to remove the two-word phrase from the public lexicon, at least when the words were used in that word order. The rationale was that the public associated the phrase with the opening of the show and with the persona of the entertainer to the extent that they (the public) might be confused, or mislead into thinking that Carson somehow endorsed, or had a financial interest in the toilets, which was probably an accurate assessment at the time. However, the instant question is when, over time, and particularly after the celebrity is deceased, do we reach a stage where younger generations do not remember the show, except for late night commercials for "The Best of Carson" on CD. In fact, do younger members of the public, even within months of Johnny's demise, now associate the phrase "Here's Johnny" more closely with the acting of Jack Nicholson in the movie "The Shining" based on the Stephen King novel than they do with a show that has not been live on TV for a number years.

### **5.1 Who Owns the Letter X?**

In another case along the same lines, Curtis Management Group (CMT), an Indianapolis, IN based publicity licensing firm, represented the heirs of Malcolm X, the slain civil rights leader. For a time, merchandise such as t-shirts and baseball hats with a distinctive letter X were popular and CMT sought to prevent others from profiting from such publicity without license or consent. Does this mean that just as Carson was allowed to remove the two words from the merchandising vocabulary, CMT should be allowed to remove a letter from the alphabet to the exclusion of all others who have a profit motive?

## **6. TRADEMARKS AND COPYRIGHT**

The latter case raises the question of the relationship of the right of publicity to trademark law and for that matter, copyright law. As mentioned in the opening paragraph, trademarks, copyrights and other forms of intellectual property tend to have durational time limits. A trademark is a distinctive, mark, motto, device or implement that a manufacturer uses to identify their goods on the market. Statutory protection for trademarks is provided at the federal level by the Lanham Act of 1946 (Clarkson, Miller, Jentz, and Cross, 2004, p. 144). In 1995 Congress amended the Lanham Act by passing the Federal Trademark Dilution Act. Trademarks may be registered with the state or federal government. Registration is renewable between the fifth and sixth years and every ten years thereafter (every twenty years for those trademarks registered after 1990), (15 USC, Sec 1125). The principal U.S. law governing copyrights is the Copyright Act of 1976, which contains a fair use exception for educational and other non-commercial purposes. Copyrights in works created after Jan 1, 1978, are given protection for the life of the author (or the last surviving author if more than one) plus seventy years. Copyrights owned by publishers expire ninety-five years from publication or one hundred twenty years from date of creation, whichever is first. Copyrights may be registered with the U.S. Copyright Office (Clarkson, 2004, p. 150).

### **6.1 A New Standard?**

One writer has suggested that a new standard of a right to publicity based on trademark dilution law should be adopted either by amending the FTDA (above) or by passing a new federal statute (Konsky, 2005, p. 347). Another commentator believes publicity rights are more comparable to copyrights and that under the Visual Artist Rights Act (VARA) of 1990 publicity rights could be subsumed into federal copyright law. Publicity rights of celebrities currently enforced through a hodge-podge of state law would be governed by federal copyright law and a constructed persona would be considered a "writing" within the meaning of the Constitution (Kwall, 2001, p. 151). Another writer believes it is more appropriate to dismantle descendible publicity rights altogether, the argument being there is no uniformity within the state jurisdictions. Descendible rights of publicity fail to distinguish between appropriation for a commercial advantage and a dedication. Likewise, devisable publicity rights have encroached upon

aspects of creativity and expression and in the writer's opinion; it is in the best interest of society to preclude all causes of action after a person is deceased (Binder, 2002, p. 307). In some states the right of publicity is protected under common law trademark rules of unfair competition. Most states have adopted the Model Trademark Bill or the Uniform Deceptive Trade Practices Act. Since trademarks are protected as part of the law of unfair competition, in many states the right of publicity is also protected through the law of unfair competition. Actions for a wrongful attempt to "pass off" a product as endorsed or produced by another help protect publicity rights. If a persona can establish any aspect of their identity as a trademark, protection may be provided under federal trademark law. The federal Lanham Act can also provide protection where a person's identity is used to falsely advertise a product or designate its origin (Trademark Law, Cornell University, 2005).

## **7. A HOME FOR PUBLICITY RIGHTS**

It becomes clear that the right of publicity is seeking a home and it may be instructive to return to its birthplace in Prosser's work and its embodiment in the restatement of torts. Three of the original four forms of invasion of privacy (mentioned above) may be inconsistent with the right of publicity. Every person has a right of publicity, celebrity or not; and an appropriation of their name or likeness would be an invasion of privacy. The commercial appropriation of a celebrity's identity, however, is more like an infringement of their right of publicity. The last three forms of privacy invasion are based on different elements than the first. In the last three, the right is a personal right which does not extend to members of the family and these rights are neither assignable nor descendible after death unless the descendants own privacy is invaded along with that of the deceased. Therefore a valid defense to the last three forms of privacy invasion is that the plaintiff is deceased since these rights are personal in nature. The right of publicity on the other hand, in the view of Prosser and others is considered a property right which can be transferred during lifetime by contract or assignment and/or devised by will, including intestate succession (Smith, 2002, p. 11). Since post mortem rights may attach to the first category, the question becomes what part of the publicity right remains after death and what would be a reasonable length of protection?

### **7.1 The View Outside the U.S.**

In most common law countries these rights of personality developed out of concepts of property, trespass and intentional tort. In some jurisdictions publicity rights and privacy rights are not properly distinguished, and the term publicity rights are generally used. The issue in a publicity rights case is usually whether the public would be misled into believing that a commercial arrangement has been concluded between a plaintiff and defendant suggesting that the plaintiff has endorsed or licensed the defendants products. In two Australian cases in 1988 and 1989 involving the film *Crocodile Dundee*, the court granted relief holding that the inventor of a famous fictional character having certain traits may prevent others from using that character to sell goods "passed off" as being licensed by the Plaintiff. England followed the Aussie development in a case involving fictitious characters known as "The Teenage Mutant Ninja Turtles". In these common law countries, however, "publicity rights" did not survive post mortem. Only in a 2002 case from Jamaica involving the estate of Bob Marley has it been found anywhere in a common law jurisdiction that a personality right may be transferred by devise in a will. In contrast with common law jurisdictions, most civil law jurisdictions have civil code provisions that protect an individual's image, personal data, and other generally private information. Unlike most common law jurisdictions, however, personality rights under civil law are generally inheritable. In France, personality rights are protected under Article 9 of the French Civil Code. Likewise in Germany, personality rights are protected under the German Civil Code and the Code provides for a ten year post mortem duration. In the new civil code of Quebec, the right to privacy is an attribute of a personality and using one's name, image, likeness or voice is considered a privacy invasion. In the Peoples Republic of China, rights of personality are established by statute (Badin, 2000, note 43).

### **7.2 Case and Statutory Law in the States**

In the U.S., publicity rights are currently a matter of state law and are protected by common law, statute or both. Most states recognize the right of publicity as a descendible and assignable property right. As a property right, it would include unauthorized post-mortem use of a deceased identity. In the states that recognize it, a post mortem right of publicity, where stated, is limited to a duration of anywhere between ten and one hundred years. A Tennessee statute requires the right holder to continually exploit the

commercial value of the identity, even after death and in many jurisdictions; the exploitation requirement also applies prior to death. As of March 2002, twenty-eight states provide a remedy for an infringement of the right of publicity. Eleven states provide only common law protection; ten states provide statutory protection and seven states provide both, (see state chart). Courts in New York, Nebraska and Puerto Rico have held that a common law right of publicity does not exist (Marr, 2003, p. 866); however, the majority view is that the right exists by common law in every state that does not have a defined statutory provision (Smith, 2002, p. 11). A number of states have taken the position that rights to publicity are property rights, freely transferable and descendible in whole or in part (Smith, 2002, p. 27). The U.S. Supreme Court in a one time case, *Zacchini v. Scripps-Howard Broadcasting Co.*, recognized a state right of publicity. The plaintiff was a "human cannon ball" whose sixteen second performance consisted of being shot into a net two hundred feet away. A television reporter filmed the performance and the reporter's station aired it in its entirety. The Court affirmed that such use violated his right of publicity under state law (Konsky, 2005, p. 350).

### **7.3 The California and Indiana Approach**

Two states have been in the forefront of recognizing post mortem publicity rights and extending the durational period. California, not surprisingly, has a progressive statute that originally extended post mortem rights to fifty years and recently amended it to extend them to seventy years. Indiana, somewhat surprisingly, has perhaps the most comprehensive and progressive right of publicity statute in the United States with a durational period of one hundred years post mortem (Farber, 2000, p. 24). This may be due in large part to the presence of Curtis Management Group (CMG) in the capital city of Indianapolis. CMG represents more than two hundred of the greatest legends of the twentieth century; including Marilyn Monroe, Sophia Loren, James Dean, Babe Ruth, Chuck Berry, Duke Ellington, Malcolm X, Amelia Earhart, Jack Kerouac, Oscar Wilde, and Frank Lloyd Wright, among others.

## **8. THE INDIANA CODE**

An examination of the pertinent parts of the Indiana Code is instructive, as many states, including California have used it as a model for their own statute. The 1994 addition to the Indiana Code is found in Sections 32-36-1-1 through 32-36-1-20 (Burn's Indiana Code, 2004). Subsection 1(a) is interesting because it indicates that this Chapter applies to an act or event that occurs within Indiana, regardless of a personality's domicile, residence, or citizenship. This provision alone has been subject to debate. One writer believes the Indiana statute is Constitutionality problematic for three reasons. First, it violates legislative due process by overriding the policy of the state, controlling the succession of intestate property. Second, it imposes heavy burdens on interstate commerce and copyright registration with its expansiveness. Third, the First Amendment concerns surrounding the right of publicity are magnified by Indiana's expansive statute. She concludes, however, that an amendment allowing domicile to control the statute's application may save it from inevitable judicial correction (Eades, 2001, p. 1312).

The Indiana Code also indicates in Section 1(b), that the Chapter does not affect privileges that apply to a news reporting or entertainment medium. Under subsection 1(c) the Chapter also does not apply to the following:

The use of a personality's name, voice, signature, photograph, image, likeness, distinctive appearance, gestures, or mannerism in any of the following:

- Literary works, theatrical works, musical compositions, film, radio, or television programs.

- Material that has political or newsworthy value.

- Original works of fine art.

- Promotional material or an advertisement for a news reporting or an entertainment medium that uses all or part of a past edition of the medium's own broadcast or publication; and does not convey or reasonably suggest that a personality endorses the news reporting or entertainment medium.

- An advertisement or commercial announcement for a use described in this subdivision.

The use of a personality's name to truthfully identify the personality as:

- The author of a written work; or

A performer of a recorded performance;

Under circumstances in which the written work or recorded performance is otherwise rightfully reproduced, exhibited, or broadcast.

The use of a personality's name, voice, signature, photograph, image, likeness, distinctive appearance, gestures, or mannerisms in connection with the broadcast or reporting of an event or a topic of general or public interest.

In Section 2(a) the Chapter defines "commercial purpose" as the use of an aspect of the personality's right of publicity as follows:

On or in connection with a product, merchandise, goods, services, or commercial activities.

For advertising or soliciting purchases of products, merchandise, goods, services, or for promoting commercial activities.

For the purpose of fundraising.

Section 3 indicates "name" is defined as the actual or assumed name of a living or deceased natural person that is intended to identify the person. Section 5 defines "persons" as a natural person, a partnership, a firm, or corporation, or an unincorporated association.

In Section 6 "Personality" is defined as a living or deceased natural person whose name, voice, signature, photograph, image, likeness, distinctive appearance, gesture or mannerisms have commercial value, whether or not the person uses or authorizes the use of the person's rights of publicity for a commercial purpose during the person's lifetime. Rights of publicity are defined in Section 7 as a personality's property interest in the personality's name, voice, signature, photograph, image, likeness, distinctive appearance, gesture or mannerisms.

### **8.1 Durational Limits**

Section 8 addresses the issue of durational limits on post mortem rights. "A person may not use an aspect of a personality's right of publicity for a commercial purpose during the personality's lifetime or for one hundred (100) years after the date of the personality's death without having obtained previous written consent. This 100 year post-mortem period, along with the Oklahoma statute of 100 years are the two longest durational periods in the United States and perhaps in the world. California follows with the second largest period of 70 years (See State Chart) (McCarthy, 2001, Farber, 2000, p. 28, Rev. Code, State of Washington, 2005).

### **8.2 Jurisdiction**

Regarding Jurisdiction, Section 9 indicates that a person who:

- 1) Engages in conduct within Indiana that is prohibited under section 8;
- 2) Creates or causes to be created within Indiana goods, merchandise, or other materials prohibited under Section 8 of this chapter;
- 3) Transports or causes to be transported into Indiana goods, merchandise, or other materials created or used in violation of section 8 of this chapter; or
- 4) Knowingly causes advertising or promotional material created or used in violation of section 8 of this Chapter to be published, distributed, exhibited, or disseminated within Indiana; submits to the jurisdiction of Indiana courts.

### **8.3 Liability Provisions**

The liability provision in Section 9 provides that a person who violates Section 8 may be liable for any of the following: damages in the amount of \$1,000 or actual damages including profits derived from the unauthorized use, whichever is greater, and treble or punitive damages as the injured party may elect if the violation under Section 8 is knowing, willful or intentional. In addition, under Section 12, the Court may award to the prevailing party reasonable attorney's fees, costs, and expenses; and may order temporary or permanent injunctive relief.

Section 16 makes it clear that the rights recognized under this Chapter are property rights, freely transferable and descendible, in whole or in part, by the following: contract, license, gift, trust, testamentary document or operation of the laws of intestate succession applicable to the state administering the estate, regardless of whether the state recognizes the property rights set forth in the Chapter. Finally, a deceased personality's rights that were not transferred by contract, license, gift, trust, testamentary document and if there are no surviving persons to whom the deceased personality's rights pass by intestate succession, the deceased personality's rights set forth in the Chapter terminate.

## 9. FUTURE ISSUES TO BE ADDRESSED

In the future, the law relative to the right of publicity that has been developing under state common law and statute may be addressed as a potential area for federal regulation. If so, there are several issues that need to be resolved.

- 1) Whether a federal statute would pre-empt state right of publicity laws.
- 2) Whether the right of publicity may be transferred during one's lifetime.
- 3) Whether the right of publicity should extend beyond a person's lifetime and if so, for what duration.
- 4) Whether the right should be conditioned upon a person's exploitation of the right during their lifetime and/or post mortem.
- 5) Whether there should be a Federal Registry to register a claim of ownership;
- 6) The extent of appropriate remedies for violation of a right of publicity.
- 7) Whether there should be exemptions for "fair use" and news reporting.

### RIGHT OF PUBLICITY

State	Common Law Rights	Post Mortem Rights	Statutory Rights	Post Mortem Rights (Years)
AZ	Y			
AL	Y			
CA	Y		Y	70
CN	Y	Y		
FL	Y		Y	40
GA	T.M.	Y		
HI	Y			
IL	Y		Y	50
IN			Y	100
KY	Y	50	Y	50
MA			Y	No
MI	Y			
MN	Y			
MO	Y			
NE			Y	Not Specified
NV			Y	50
NJ	Y	Y		
NY			Y	No
OH	Y		Y	60
OK			Y	100
PA	Y			
RI			Y	No
TN			Y	10
TX	Y		Y	50
UT	Y	Y	Y	No
VA			Y	20
WA			Y	50
WI	Y	N	Y	No

## REFERENCES

- Badin, R. "USA and Germany Publicity Protection-Recent Developments," 2000 *Entertainment Law Review* 2000, note 43
- Binder, William H. "Publicity Rights and Defamation of the Deceased: Resurrection or R.I.P.?" *DePaul-LCA Journal of Art & Entertainment Law* Vol. 12 Fall 2002, p. 297
- Burn's Ind. Code Ann., Title 32, Property, Article 36, Publicity, Chapter 1, Rights of Publicity, Sec.'s 32-36-1-1 through 32-36-1-20, 2004
- Clarkson, Miller, Jentz and Cross West's Business Law 9<sup>th</sup> Ed. West's Educational Pub. Co. USA 2004
- Eades, Melinda R. "Choice of Law and the Right of Publicity: Domicile as an Essential First Step," *Brooklyn Law Review* Vol. 66, Summer 2001, p. 1312
- Farber, Jonathan L. "Indiana: A Celebrity-Friendly Jurisdiction" *Res Gestae* March 2000 p. 24
- Konsky, Sarah M. "Publicity Dilution: A Proposal for Protecting Publicity Rights" *Santa Clara Computer and High Tech Law Journal* Vol. 21 January 2005 p. 347
- Kwall, Roberta R. "Preserving Personality and Reputational Interest of Constructed Persons Through Moral Rights: A Blueprint for the Twenty-First Century," 2001 *University of Illinois Law Rev.* 2001, p. 151
- Marr, Jeremy T. "Constitutional Restraints on State Right of Publicity Laws" *Boston College Law Review* Vol. 44, May 2003, p. 866
- McCarthy, J. T., *The Rights of Publicity and Privacy*, 2<sup>nd</sup> Ed., 2001, Vol. 1, sections 6.3, 6.6, and 6.8 and Vol. 2, sections 9.1 to 9.37
- Prosser, William *Law of Torts* West Publishing Co. New York 1971
- Rev. Code, State of Washington, Chapter 63.60, sections 020 and 040, as of Jan. 20, 2005, located at <http://www.leg.wa.gov/rew/>
- Scaletta and Cameron *Business Law* Business Publications Inc Texas 2004
- Smith, II, George P. "The Extent of Protection of the Individual's Personality Against Commercial Use: Toward a New Property Right," *Santa Clara Law Review* Vol. 54, Fall 2002, p.11
- Trademark Law: Right of Publicity: An Overview 2005; Legal Information Institute, Cornell University <http://www.cornell.edu>
- Warren, Earl and Brandeis, Louis "The Right to Privacy" *Harvard Law Review* Vol.4, 1890, p. 193

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## THE SINGLE GLOBAL CURRENCY - COMMON CENTS FOR BUSINESS

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### ABSTRACT

*As globalization continues, businesses are increasingly importing and exporting from countries with different currencies. To conduct that business, they (whether one or both parties) must pay fees for exchanging one currency for another and they must determine the exchange rate for a particular time. If the transaction is to be conducted over time, they may purchase currency instruments to hedge against currency fluctuation. All of these tasks add up to an average of about 5% of revenue for international businesses. As an increasing number of international businesses understand that these expensive tasks are unnecessary for trade conducted within a monetary union, these businesses are likely candidates to lead the effort to implement a Single Global Currency, to be managed by a Global Central Bank within a Global Monetary Union. In short, a "3-G" world. It's common cents.*

**Keywords:** Currency Crisis, euro, European Central Bank, European Monetary Union, Exchange Rates, Foreign Exchange, Global Central Bank, Global Monetary Union, Hedge, Monetary Union, Single Global Currency.

### 1. INTRODUCTION

For approximately 2,500 years, the world has lived with multiple currencies and we have coped with the differences in valuations of goods and services by different currencies, and with their unpredictable fluctuations. The valuation discrepancies and the fluctuations are expensive, but have been assumed to be a necessary part of living and working in an increasingly globalized, but still multicurrency world. The only way to eliminate those fluctuations over the long term is to reduce the number of currencies to one, within a Global Monetary Union. While monetary unions have been tried many times, it was in the 20th century that their prospects for long term success were assured when central banks became an integral part of every monetary union and when member country currencies were replaced by the currency of the monetary union.

Led by the example of the European Monetary Union, countries around the world are exploring the creation and expansion of monetary unions. However, the largest benefits of monetary union will come only with the establishment of a Global Monetary Union where there are zero transaction costs for foreign exchange trading within the 13 member monetary union, and zero fluctuations of values of goods and services due to currency changes.

Long dismissed as utopian, a Global Monetary Union is the inevitable conclusion of the ongoing trend toward a smaller number of currencies. The questions remaining are how long the implementation process will take and how much additional cost, risk and loss will be borne during that process?

### 2. LITERATURE REVIEW

Among the articles about the Single Global Currency are Richard Cooper's Fall 1984 article in *Foreign Affairs*, "A Monetary System for the Future" (Cooper, 1984) which was updated by his 2006 article with Michael Bordo, "Proposal for a Common Currency among Rich Democracies." (Bordo, Cooper, 2006). The leading proponent of a Single Global Currency is Robert Mundell, beginning with his 1961 article, "A Theory of Optimum Currency Areas." (Mundell, 1961). In 2005, he wrote, "The Case for a World Currency," (Mundell, 2005) but that fell short of calling for the replacement of existing currencies with a Single Global Currency, available to all the people in the world in one Global Monetary Union.

The only book in the world entirely devoted to the Single Global Currency is *The Single Global Currency - Common Cents for the World*, by the author of this article. (Bonpasse, 2006, 2007) The book describes the several routes to that goal, including international monetary conferences and the creation of new regional monetary unions and the expansion of existing monetary unions.



### 3. THE EXISTING MULTICURRENCY SYSTEM AND ITS COSTS.

Every trading day, the equivalent of \$2.5 trillion is exchanged on the foreign exchange markets around the world. Much of that money is needed to enable businesses to conduct their operations for their global customers who use different currencies. This multicurrency system is costly in several ways, beginning with transaction costs.

Transaction costs are the fees charged to trade currencies, which go to pay the wages of the traders and all the corporate and informal infrastructures which support them, and the purchases and maintenance of the computers and all the associated costs of buying and selling complex securities. These costs are often invisible as they are bundled into transactions, and they must be calculated and extracted from the total costs.

In general, credit card companies charge 1 percent for consumer foreign exchange transactions and many banks add another 1 percent. PayPal, now a division of E-Bay, "adds a 2.5 percent spread above" the Interbank rate, and it also charges 1 percent "cross-border fees" which may include foreign exchange charges.

Foreign exchange trading at border crossings is the most expensive. The European Council's 1990 study, One Market, One Money, cited a 1988 Belgian experiment which involved a hypothetical person traveling through 10 European Community countries and converting all his/her cash at each border. Beginning with 40,000 Belgian francs, the traveler ended the hypothetical journey with 21,300 Belgian francs, showing a cost of 47 percent, for an average of 4.7 percent cost for each transaction. (Emerson, et al. 1992, pp. 65-66). If a similar traveler had traveled in 2006 from Belgium with €40,000 to all of the 146 other currency areas, with each charging 4.7 percent for currency exchanges on average, his or her funds would have diminished to less than €1,000 by the 78th currency, and dropped to €35.45 by the 146th. These high transaction cost hypotheticals were for cash, and the foreign exchange transaction charge percentages decline dramatically for large, non-cash transactions. Nonetheless, even small charges still add up. If the border exchanges charged only 2 percent, the worldwide "€40,000" traveler would have returned with only €2,094.

In studies prepared during the run-up to the introduction of the euro, it was estimated that foreign exchange transaction costs were approximately .3 percent (.003) of the value of the currency being traded. (Jayaraman, 2004). Applying that percentage to the daily \$2.5 trillion traded, the daily worldwide transactions cost would be \$7.5 billion. Using a 260 trading day year, the annual cost to the world would be \$1.95 trillion per year.

Since the European Commission studies were done fifteen years ago, the automation of the currency markets has continued and the percentage costs of trading have dropped. To be conservative about the current transaction costs, this article assumes that the average transaction cost is .062 percent, (.00062) of the value of the transactions, and thus one-fifth of the .3 percent level previously determined in the 1990 European Commission study. This estimate includes the initial foreign exchange trading costs as well as all the charges and markups to customers at various levels, and it's applied only to the total for "traditional" foreign exchange transactions, and does not include the dollar volume for derivatives or over-the-counter transactions. At the .062 percent rate, the annual worldwide transaction costs for foreign exchange trading are estimated to be \$403 billion, which are rounded to \$400 billion here.

Another such cost is the administrative burden of requiring some parties to contracts to designate the a foreign currency as the contract's currency. The European Commission's One Market, One Money study estimated that there would be a .05 percent GDP benefit to the European Community member countries when corporations and others engaging in international contracts could denominate their obligations in their home currency rather than in a foreign currency, such as the dollar. (Emerson, et al, 1992, p. 25).

Another way to summarize the total cost of transactions is to express them as a percentage of GDP. "Focusing only on the transaction costs that are incurred in the Canadian foreign exchange market," John Murray found those costs to be \$3.0 billion (CAD) annually, or .4 percent of GDP. (Murray, 1999).

The One Market, One Money study found that "Overall, transaction costs can be conservatively estimated to amount to around 1/2 percent of GDP...." (Emerson, et al, 1992, p. 64). In 1996, the IFO Institute of Munich found that "foreign exchange management costs within the EU amounted to almost 1 percent of the EU12 GDP in 1995," and explained that more up-to-date data accounted for the increased estimate. (European Commission, 1997).

Although trade and international financial transactions accounted for a larger percentage of the GDP for European countries than for others in 1990, the world has globalized significantly since then, so that the 1 percent estimate can be fairly applied to the rest of the world. Hugo Mendizabal found that the savings to the EMU from the elimination of the foreign exchange costs of intra-EMU transactions could be as much as .69 percent of EMU GDP, which accounted for one-half of members' international trade foreign exchange transactions. (Mendizabal, 2002). For all transactions, including those with non-EMU countries, the percentage would be 1.38 percent.

If those percentages were conservatively adjusted downward to .95 percent, and assumed to include all transaction costs at all levels, and applied to the world's estimated 2005 GDP of \$42.2 trillion, that would bring the annual cost of transactions to \$400 billion.

Thus, using either method, whether by calculating from each transaction or from summing up total costs and expressing as a percentage of GDP, the annual total transaction costs of worldwide foreign exchange operations are estimated conservatively here to be \$400 billion. Again, it is noted that these estimates are for the total transaction costs, and not only those incurred at the currency trading desk.

The \$400 billion estimate here is intended to be conservative, and more research is welcomed to better determine the actual cost of worldwide foreign exchange transactions. Each international corporation might determine its own costs imposed by the multicurrency system.

#### **4. THE MULTICURRENCY SYSTEM AND INTERNATIONAL CORPORATIONS**

International corporations make investments and sell products and services around the world and must constantly be on the alert for currency risk. They have to price their products and services in the currencies of their customers and always be alert that the exchange rates will not eliminate their profits. In addition to paying a percentage on all their foreign exchange transactions, international corporations have to cope with the fluctuations of foreign exchange values, in two areas: reporting and worldwide allocation of resources.

Using the pound sterling as its home currency, the U.K.-based Reuters reported in 1999 that it "has significant costs denominated in foreign currencies with a different mix from revenue. Reuters profits are, therefore, exposed to currency fluctuations." The Annual Report continued, "...the impact of an additional unilateral 1 percent strengthening of sterling would have been a reduction of approximately £10 million on operating profits." (Reuters, 1999). Thus, a 1 percent increase in value of the pound from \$1.7000 to \$1.7171 will mean an increase in Reuters profits by £10 million, and a similar drop would bring a decrease. Does this make cents?

It's estimated that Nissan Motor gains about \$440 million in profits for each 1 percent drop in value of the yen against the US dollar. For Toyota, the gain would be about \$1.2 billion. (Sapsford and Shirouzu, 2006). The reverse would also be true, but do these possible shifts make cents? Why should the fortunes of these companies be so subject to the whims of currency values over which the corporations have no control?

Honda stated in its 2004 Annual Report that it "generates a substantial portion of its revenues in currencies other than the Yen. Honda's results of operations would be adversely affected by an appreciation of the Yen against other currencies, in particular the US dollar." (Honda, 2004)

In 2003 Nestle, the world's largest food company, headquartered in Zurich, announced that its profits for the first half of 2003 fell by half from the year previous, hurt by a strong Swiss franc. (Langley, 2003) For

some corporations, the effect is larger than Nestle's lost profit opportunities. Also in 2003, Nintendo estimated a loss of 3 billion yen (\$27 million, computed at 111.11 yen to the dollar), which was its first loss since its shares were first listed in 1962. The primary reason for the loss was its booking of a 40 billion yen loss (\$360 million) due to foreign exchange fluctuations. The problem was that Nintendo had approximately \$5 billion in cash deposits in the United States, and a 7.2 percent drop in the value of the dollar relative to the yen caused the loss. (WSJ clip, 2003). Does this make cents?

Of course, these reports of harm were likely balanced for other corporations by the increase in profits due to currency translation, except that in the annual reports of those corporations, the credit for such profits was not as likely to be allocated to currency translation. Sometimes, such windfalls are reported. In 2002 Avon Products hedged against the devaluation of Latin American currencies; but when that devaluation didn't occur, the appreciation of Avon's holdings contributed to its profits. (Reuters clip, 2002). The problem is not so much profits and losses as it is uncertainty and risk--each an anathema to corporations. In a standard text, Corporate Risk- Strategies and Management, currency risk is featured in seven of its thirty chapters. (Brown and Chew, 1999). All international corporations have people and departments to manage the foreign exchange risk. Joachim Herr is the head of risk management at BMW International where he has approximately five people trading currencies with the goal of making "sure that the fluctuations of a currency do not impact our operating business, which is producing and selling cars... What we see ourselves as is hedgers...we have long-term strategic hedging, where we do very long, deep analysis on currency movements, and we have short-term technical hedging, where we decide how to cover the remaining open risk in the coming months...." For each country where BMW operates, there is a Treasurer who is responsible for local currency exposure, and Herr estimates that such foreign exchange work takes about 10 percent of such treasurers' time. (Rosenstreich, 1992 pp. 109-114). Such expenditures of cash and time are unnecessary and obsolete.

Richard Cooper noted that one of the widest fluctuations in currency values, the 70 percent increase of the yen to the US dollar between 1995 and 1998, may have thrown many otherwise healthy firms into bankruptcy. Further, he surmises that the prolonged nature of the late 1990s--2000s recession in Japan was partly caused by Japanese firms investing in other currency areas in order to hedge against losses in yen due to currency fluctuations. (Cooper, 2000).

Many international corporations do more on the foreign exchange markets than hedge to control currency risk. One article noted, "Currency speculation has always had a vast influence on systems of flexible exchange rates. A large variety of empirical, experimental, computational, and theoretical investigations deal with this topic. But what determines the speculative decision of a firm? Why do non-financial firms speculate [in the currency markets]? How do they deal with exchange rate uncertainty?" (Kaiser and Kube, 2005). For many banks, trading currencies for their customers represents a sizable portion of revenue. The European Commission 1990 report found that such trading represented 5 percent of European banks' revenues. (Emerson, et al. 1992, p. 64). The Bank of America trades approximately \$100 billion per day, according to Steve Nutland, Director of North American trading. Of the foreign exchange markets generally, he stated, "many people believe Forex is a necessary evil. On the institutional/hedge fund side of the business, many view it as the largest casino in the world. I like to see it that somewhere in between the two lies the truth." (Rosenstreich, 2005, pp. 114-23). Whether a casino or necessary evil, the foreign exchange markets are an expensive and vestigial holdover from an obsolete system.

As part of its trading business and in order protect its own international operations, the Bank of America "manages interest rate and foreign currency exchange rate sensitivity predominantly through the use of derivatives. Fair value hedges are used to limit the Corporation's exposure to total changes in the fair value of its fixed interest-earning assets or interest-bearing liabilities that are due to interest rate or foreign exchange volatility. Cash flow hedges are used to minimize the variability in cash flows of interest-earning assets or interest-bearing liabilities or forecasted transactions caused by interest rate or foreign exchange fluctuation." (Bank of America, 2004). Scotiabank is a leading Canadian Bank, and does extensive business in the United States, Mexico, South America and the Caribbean. Its 2005 Annual Report financial results depended in substantial part on a critical change over which it had no control: the Canadian dollar "strengthened" in relationship to the US dollar by 8 percent, from .7586 to .8217 per US

dollar. (Scotiabank, 2005). Scotiabank reported a net income of \$3.184 billion (CAD), which was \$292 million (CAD) greater than the year before. However, it also noted a negative effect of \$145 million (CAD) due to currency translation, meaning that without the currency translation, net income would have risen by that additional amount. The oft-repeated phrase in the report is, "Before the impact of foreign currency translation...." The effect is summarized, "In the absence of hedging activity, a one percent increase(decrease) in the Canadian dollar against all the currencies in which we operate, decreases(increases) our earnings by approximately \$23 million (CAD) before tax. A similar change in the Canadian dollar would decrease (increase) the foreign currency translation account in shareholders' equity by approximately \$81 million (CAD)." (Scotiabank, 2005). To illustrate, a 1 percent increase in the value of the Canadian dollar from \$.87000 to \$.87870 or \$.88 would decrease Scotiabank's profits by \$23 million (CAD) and decrease shareholders' equity by \$81 million (CAD).

## **5. THE COST OF LOW ASSET VALUES DUE TO CURRENCY RISK.**

When calculating the value of an asset, an investor or owner must determine the likelihood of getting a real return on that investment; and such return will be adversely affected in inverse proportion to currency risk.

When the value of an asset is artificially low, compared to similar assets in other situations or places, the difference in value can be said to be a cost or opportunity cost. That is, owners of such undervalued assets are losing the opportunity to use that asset for other purposes that might be available if valuation were not artificially deflated by currency risk.

One down-to-earth illustration of the effect of high exchange risk on asset values is the status of the home mortgage market around the world. The issue in the United States or Europe is not whether there are mortgages available, but whether they are for ten, fifteen, twenty, or thirty years and whether they have a fixed rate or an adjustable rate, to be moved up or down with the linked prime rate. In some parts of the world, mortgages are not available because of the high long term currency risk. When mortgages are unavailable, demand for homes is crippled, leading to low prices which are a small fraction of their equivalent value in a similar city and neighborhood in the United States or Europe. For example, using Argentina with its high currency risk as an example, a three-bedroom home in London might be worth €490,000, but the same home in Buenos Aires might be worth about €70,000.

Similarly, the values of financial assets in the less developed, or high currency risk or sovereign risk, world, are undervalued because of that currency risk, i.e. the risk that a currency might severely inflate or collapse. Due to currency risk, the ability to earn reliable interest on an asset far into the future is in doubt, and therefore potential lenders are unwilling to lend. Financial assets such as stocks and bonds are also undervalued due to the uncertainty of future return.

The IMF Global Financial Stability Report estimates that the total value of the world's financial assets in 2005 was \$144 trillion. (IMF, 2006). If all currency risk were lowered to the same level as the developed world, it's estimated here that an additional \$36 trillion would be added. Hence that amount could be called a cost of the existing multicurrency foreign exchange system.

## **6. A SINGLE GLOBAL CURRENCY.**

Moving the world to a Single Global Currency, managed by a Global Central Bank within a Global Monetary Union will eliminate these costs and risks. As former U.S. Federal Reserve Chair, Paul Volcker, has said, "A global economy requires a global currency." While the precise design of the structure of the union and central bank await negotiations among the stakeholders at future international monetary conferences, it seems likely that the Global Central Bank will be similar to the European Central Bank and the central banks of other monetary unions.

The easiest savings to understand with a Global Central Bank will come from the elimination of transaction costs. Willem Buiter, a supporter of the euro, wrote that "The transaction cost saving advantages of a common currency are familiar.... The usefulness to me of a medium of exchange is

increasing in the number of other economic agents likely to accept it in exchange for goods, services and securities. By eliminating the need for the exchange of one currency for another, monetary union saves real resources." (Buiter, 1999).

The other benefits, such as the increases in asset values in countries where currency risk was high, will occur slowly and throughout the implementation period of the Single Global Currency.

## **7. HOW TO GET THERE FROM HERE.**

*The Economist* magazine predicted in 1988 the implementation in 2018 of a global currency, which it called the "Phoenix". (*Economist*, 1988). That date is now only 11 years away. Richard Cooper's 1984 proposal for a common currency among the industrialized democracies anticipated implementation by 2009, only two years away. What takes time is the work required for the establishment of the goal and the date for implementation. By comparison, actual implementation will take little time. Once the euro was given its current name in 1995, it only took four more years to introduce the currency to the banks and financial institutions of the European Monetary Union.

The 21st century began with 159 currencies among 189 U.N. members. By 2005, the number of currencies had declined to 147. (Single Global Currency Assn. 2007). At that rate of 12 every five years, the journey to 1 will take 62 years until 2067, the 200th anniversary of the 1867 Paris International Monetary Conference. The number declined to 146 in 2007, with the adoption by Slovenia of the euro, and will decline to 144 in 2008 with the addition of Malta and Cyprus to the euro. If the political decisions were made by just a few major countries to proceed with the project, the implementation could be accomplished in less than five years. Bryan Taylor wrote in 1998, "Once the transition to a single currency for Europe and the United States was made, the transition to a single currency for the entire world could come with a speed that might surprise many. The world might easily move from having almost 200 currencies today to having one within a decade, and twenty-five years from now, historians would wonder why it took so long to eliminate the Babel of currencies which existed in the twentieth century." (Taylor, 1998).

Paul De Grauwe and Jacques Melitz wrote of the shift of view during the runup to the euro, "However, at some point monetary union began to be seen as something inevitable, as something that was written in the stars. At that point, professional opinion largely rallied in its favor. There can be no doubt that the mere existence of European Monetary Union has changed economists' outlook about monetary union." (DeGrauwe and Melitz, 2005, page 2).

There are several routes to the Single Global Currency, including the enlargement of existing monetary unions and the creation of new unions. Small countries can "ize", as in dollarize or euroize, their currencies by adopting a more stable currency as their own. Ecuador and El Salvador took this step in 2000 and 2001, respectively. A Single Global Currency Institute can be established to fully research the issues, including a comprehensive study of the costs and benefits of a Single Global Currency. International conferences can be convened to begin planning and among the identified early tasks could be a worldwide nomination and voting process to determine the name of the Single Global Currency. That process would contribute popular support to the Single Global Currency.

At the business level, corporations can research for themselves the extent to which they would benefit from a Single Global Currency. For the very few corporations who derive substantial revenue from the existing system, such research would include planning for the transitioning of some of its work to other fields. Corporations can contribute to the Single Global Currency Association and/or form their own association in support of that goal, following the example of European corporations and their associations which supported the planning for the euro and its implementation.

Guidliemo Carchedi explained the lobbying efforts for the euro in some detail in his book, For Another Europe, "Perhaps the most influential of all these groups is the European Roundtable of Industrialists (ERT), which was founded in 1983 by Umberto Agnelli of Fiat, Wisse Dekker of Philips and Pehr Gyllenhammer of Volvo. The ERT has dramatically increased contacts among European corporations. Its

members are forty-five 'captains of industry', that is, the Chief Executive Officers of the most important European oligopolies, also called transnational corporations, which in 1997 had a combined turnover of ECU 5501m and three million employees world-wide. The ERT has some ten working groups covering major areas of interest (e.g. competition, education)...

This new alliance between the European Commission and the ERT played a crucial role during preparations for the Internal Market. In 1985, ERT chairman Wisse Dekker launched his proposal and timetable for the removal of all obstacles to trade within the European Economic Community. The European Commission was easily convinced. This pressure from industrial leaders for unification of European markets was precisely the momentum towards further European integration that the Commission was seeking.... Alongside the ERT, there is also the Union of Industrial and Employers' Confederation of Europe (UNICE). While the ERT influences the general criteria informing European legislation, UNICE reacts to specific pieces of legislation and makes sure that they are tailored to business's interests...

In the autumn of 1993 the ERT prepared its report 'Beating the Crisis'. In December 1993, the Delors 'White Paper on Growth, Competitiveness and Employment' was released. The two reports were prepared in close co-operation between the ERT and the Commission and 'are strikingly uniform in their calls for deregulation, flexible labour markets and transport infrastructure investments'... As early as 1985, the ERT had argued that the Internal Market must be completed with a single currency. The EMU continued to be a leading ERT demand in its 1991 report Reshaping Europe. This report also presented a timetable for EMU implementation which bears remarkable similarity to the one incorporated in the Maastricht Treaty a few months later. However, the main work preparing the ground for the EMU was not done by the ERT, but rather by (one of its off-springs) the Association for the Monetary Union of Europe (AMUE). The AMUE was founded in 1987 by five transnational corporations, each of which was also represented in the ERT. The AMUE enjoys the same privileged access to high decision-making bodies as the ERT and its co-operation with European oligopolies and the EU is close. The Commission not only provides financial support to the AMUE but also frequently consults it on monetary questions. The AMUE also has close contacts with the European Central Bank." (Carchedi, 2001).

The ERT and AMUE model could be useful for international corporations as they join together in support of the Single Global Currency. If corporations were to contribute as little as \$100,000 annually for the next 17 years, until 2024, to the Single Global Currency Assn., and if the association's use of that \$1.7 million accelerates the implementation date of the Single Global Currency by only one year, the world will save approximately \$400 billion and promote the increase of world wealth by many \$trillion. For the sake of mathematical simplicity, the benefit from the acceleration by one year could be set conservatively at \$1.7 trillion, for a return on the investment of 100 million%. Such a return is staggering and makes a lot of cents.

In Switzerland, the Chief Economist of the Swiss National Bank, Ulrich Kohili, noted in a 2003 speech lauding the European Monetary Union, that there was pressure in his country from industry and the unions to join the euro because the strong Swiss Franc was hurting exports, especially to the Eurozone. Even though he urged continued Swiss abstinence from the EMU, his speech showed that maintaining a national currency, even for a country with a sterling reputation for prudent banking, has its costs. (Kohili, 2003).

For the campaign for the Single Global Currency, worldwide business and trade organizations, such as the International Chamber of Commerce, will need to be mobilized. The publication of research articles in business association and academic publications will help generate momentum for the 3-G world. In 1996, the American Chamber of Commerce in Belgium published in its AmCham magazine, "The Case for a Single Global Currency" by Brian Warburton. (Warburton, 1996). Even for corporations whose self-interest would appear to be damaged by a common currency, there is often a silver lining. At a recent annual meeting of the Directors of HSBC Malta, the Maltese subsidiary of the international HSBC bank, CEO Shaun Wallis was asked about the effect of the upcoming implementation of the euro, and he replied, "Yes, we will have lower foreign exchange profits, that's true. But the introduction of the common currency will create more trading opportunities. It will provide stability because 60% of Malta's trade is

done within European Union borders." (Carabott, 2006). Finally, corporations do not all have to be "international" in order to support the implementation of a Single Global Currency. In Ecuador in 2000, the Chamber of Commerce supported the dollarization in order to achieve financial stability and not necessarily because of its perspective on globalized trade.

## 8. CONCLUSION.

Implementing the Single Global Currency will bring considerable benefit to almost everyone in the world and business can play a substantial role in moving the world in that direction. The years 2024, 2034 or even 2044 are not so far away that business cannot begin researching, planning and organizing now.

## REFERENCES

- Bank of America, "Financial Review: Statement and Notes: Note 1, Summary of Significant Accounting Principles," 2004 Annual Report, at [http://www.bankofamerica.com/annualreport/2004/backmatter/cfsn/cfsn\\_note1.cfm](http://www.bankofamerica.com/annualreport/2004/backmatter/cfsn/cfsn_note1.cfm)
- Bonpasse, Morrison, *The Single Global Currency - Common Cents for the World*, Single Global Currency Assn., Newcastle, ME 2006, 2007.
- Bordo, Michael and Cooper, Richard, "Proposal for a Common Currency among Rich Democracies." Oesterreichische National Bank, Working paper #127, September, 2006, at [http://www.oenb.at/de/img/wp127\\_tcm14-42690.pdf](http://www.oenb.at/de/img/wp127_tcm14-42690.pdf).
- Brown, Gregory W. and Chew, Donald H., Editors, *Corporate Risk - Strategies and Management*. Risk Books, London, 1999.
- Buiter, Willem, "Optimal Currency Areas: Why Does the Exchange Rate Matter?" given at the Royal College of Physicians, Edinburgh, on 26 October 1999, at <http://www.nber.org/~wbuiter/scotland.pdf> p. 2.
- Carabott, Michael, "HSBC announces Lm36.7 pre-tax profit", *The Malta Independent Online*, 17 February 2006, at <http://217.145.4.56/ind/news.asp?newsitemid=28383>.
- Carchedi, Guidliemo, *For Another Europe*, Verso Publishers, London 2001.
- Cooper, Richard, "A Monetary System for the Future", *Foreign Affairs*, Fall 1984.
- Cooper, Richard, "Toward A Common Currency?" June 2000, p. 22-23, presented at the conference on the Future of Monetary Policy and Banking, organized by the IMF and the World Bank, at <http://www.worldbank.org/research/interest/confs/upcoming/papersjuly11/cooper.pdf>.
- Cover Story, *The Economist*, "Get Ready for the Phoenix", 9 January 1988, pp. 9-10.
- De Grauwe, Paul and Melitz, Jacques, editors, *Prospects for Monetary Unions after the Euro*, MIT Press, Cambridge, Mass., 2005.
- Emerson, Michael; Gros, Daniel; Italiener, Alexander; Pisani-Ferry, Jean; and Reichenbach, Horst, *One Market, One Money - An Evaluation of the Potential Benefits and Costs of Forming an Economic and Monetary Union*. Oxford: Oxford University Press, 1992.
- European Commission, "The Cost of Multicurrency Management - A remaining barrier to trade and investment," *EUROPEAN ECONOMY*, a semi-annual publication of the European Commission, No. 63, 1997, at p. 85, at [http://europa.eu.int/comm/economy\\_finance/publications/european\\_economy/1996/eers4\\_1996en.pdf](http://europa.eu.int/comm/economy_finance/publications/european_economy/1996/eers4_1996en.pdf)
- Honda, "Annual Report 2004", "Risk Factors" at <http://www.world.honda.com/investors/annualreport/2004/10.html>
- IMF, "Global Financial Stability Report," International Monetary Fund, 2006, Table 3 in Statistical Appendix, at p. 171, at <http://www.imf.org/External/Pubs/FT/GFSR/2005/02/pdf/statappx.pdf>.
- Jayaraman, T.K., "A Single Currency for the Pacific Island Countries: a Stepwise Approach", *Asia Pacific Development Journal*, June 2004.
- Kaiser, Johannes and Kube, Sebastian, "Currency Speculation Behaviour of Industrial Firms: Evidence from a Two-Country Laboratory Experiment," 9 December 2005, at <http://econwpa.wustl.edu/eps/exp/papers/0511/0511005.pdf>.
- Kohili, Ulrich, Chief Economist, Swiss National Bank, 1 December 2003 speech, at <http://www.swissplus.ch/newsletter-nov-2003?newsid=5531>.

- Langley, Alison, "Strong Franc Helps Reduce Nestle's Profit," *The New York Times*, 21 August 2003, p. W1.
- Mendizabal, Hugo R., "Monetary Union and the Transaction Cost Savings of a Single Currency," *Review of International Economics*, Vol. 10, Issue 2, 2002, pp. 263-77.
- Mundell, Robert, "A Theory of Optimum Currency Areas", *American Economic Review*, May 1961.
- Mundell, Robert, "A Theory of Optimum Currency Areas", *American Economic Review*, May 1961.
- Mundell, Robert, "The Case for a World Currency", *Journal for Policy Modeling*, June 2005.
- Murray, John, "Why Canada Needs a Flexible Exchange Rate," July, 1999, for a conference at Western Washington University, 30 April 1999, at [http://epe.lac-bac.gc.ca/100/200/301/bankofcanada/working\\_papers-ef/1999/99-12/wp99-12.pdf](http://epe.lac-bac.gc.ca/100/200/301/bankofcanada/working_papers-ef/1999/99-12/wp99-12.pdf).
- Reuters Clip, "Company News; Avon Says It Will Meet or Beat Analysts' Expectations. *The New York Times*, 27 June 2002.
- Reuters, "Annual Report 1999," Section 7 "Treasury Management," at <http://about.reuters.com/ar1999/frandstat/oandfr/treasman.htm>
- Rosenstreich, Peter, *FOREX Revolution - An Insider's Guide to the Real World of Foreign Exchange Trading*. Prentice-Hall, New Jersey, 2005.
- Sapsford, Jathon and Shirouzu, Northiko, "Japan's Rate Boost Would Come With Risks," *The Wall Street Journal*, 1 March 2006, p. 1.
- Scotiabank, "2005 Annual Report," Toronto, available at [http://www.scotiabank.com/cda/content/0,1608,CID7148\\_LIDen,00.html](http://www.scotiabank.com/cda/content/0,1608,CID7148_LIDen,00.html)
- Single Global Currency Assn., table of "Currencies by Country" at [http://www.singleglobalcurrency.org/currencies\\_by\\_country.html](http://www.singleglobalcurrency.org/currencies_by_country.html).
- Taylor, Bryan, Chief Economist at Global Financial Data, "The Eurodollar", 1998, page 5, at <http://www.globalfinancialdata.com/articles/euro.htm>.
- Warburton, Brian, "The Case for a Single Global Currency", *AmCham Magazine*, American Chamber of Commerce, Belgium, 1996, No. 514, p. 28.
- WSJ Clip, "Loss is Expected for First Half on Foreign Exchange Setback," *The Wall Street Journal*, 6 October 2003, p. B3.

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## AWARDING GRADES WHILE AVOIDING GRADE INFLATION

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### ABSTRACT

In the current environment of rampant grade inflation at all educational levels, faculty members are slowly losing sight of the primary purpose of grades as an accurate indicator/assessment measure of student performance in a course. This paper discusses grading, in general, and the causes and effects of grade inflation in detail. More importantly, the paper seeks to revive the sanctity and importance of tying grades to performance and presents some useful guidelines on how one can grade fairly and accurately while avoiding grade inflation.

**KEYWORDS:** *Grade, Grade Inflation, Assessment*

### 1. INTRODUCTION

The current system of awarding letter grades to students on a five point scale (A-F) has been in use for a very long time. The scale itself is reflection of the system's desire to classify a student's performance in a course as either "A -exceptional scholarship," "B-distinctively above average," "C-average," "D-below average/barely passing," or "F-failure". The system works fine as long as grades are truly reflective of student performance (a measure of student learning) in the course. It is when we are faced with the problem of grade inflation that the system breaks down and grades become meaningless.

### 2. GRADING – ITS PURPOSE AND FUNCTIONS

Grading through the ages has been influenced by the personal philosophies of the grader and to a large extent by their psychology. The personal philosophies of graders could vary ranging from one as simple as grade being an indicator of a student's knowledge and skill relative to other students in the class to one where grades are subjective assessments of a student's learning and knowledge in relation to his/her individual potential. Regardless of personal philosophies, grades are really meant to be a measure of the intellectual performance of a student in the classroom, which in turn is a proxy for their knowledge and skill. This goal is achieved if grading is conducted in a standardized objective manner and based on clearly defined criteria that are fair and reasonable. This would then allow for the process itself to be repeatable over time without significant deviation in the results.

Grading serves five primary purposes. The first one is obviously to provide feedback to the students about how they are performing in class. This can be a useful tool if additional information is given to the students about their deficiencies and how they can address them. A second purpose of grading is to provide information to the student, and others, about the grader's professional assessment of the student's performance in course in relation to the content being studied. The above two purposes can be accomplished through the following functions of grading. First, grading should objectively evaluate the merit of the work completed. Second, it should inform the instructor of what the students have learned and what they have not. Third, it can help students to identify good work and thus, stimulate and motivate them to do it. Finally, it can serve as a tool for instructors to identify outstanding students. The instructors can then choose to reward these students and also provide career guidance by advising them to pursue higher studies.

Grades are always an area of concern for both students and instructors. Students can sometimes take bad grades as a personal affront and form a negative opinion of the instructor. Instructors, on the other hand, have to walk the thin line between being strict and lenient. However, as long as grading policies are objective, fair, and reasonable and communicated ahead of time, both instructors and students can avoid undue stress.

There are several techniques that instructors can adopt to minimize student complaints regarding grading. These include setting clear grading policies in the course syllabus and discussing these in class, having clear policies for work submitted late, providing students with ample opportunities to demonstrate their knowledge, keeping accurate records of grades, communicating directly with students dissatisfied with their grades, encouraging poor performers, and above all, avoiding changes in grading policies during the term.

### **3. GRADE INFLATION**

What is grade inflation? The simplest definition would be that current students receive higher grades for the same quality and quantity of work done than students in the past. Alternatively, weaker students or students with poorer academic skills, currently, receive the same grades that stronger students did in the past. Grade inflation can also be caused by deflating the content or requiring less work and consequently less learning. [Cohen, 1984]

The current educational environment is strife with grade inflation. Even the supposed pinnacle of American education, Harvard University, is not above grade inflation. Merrow [2006] says that former Harvard Dean Henry Rosovsky reported finding that in 2006 nearly 70 percent of Harvard students got a B+ or better as compared to only 15 percent in 1950, while in 2005, 50 percent of the grades at Harvard were either A or A-, significantly higher than the 22 percent in 1966. Dean Rosovsky also reported that 91 percent of seniors graduated with honors. [Merrow, 2006] An earlier study [Mansfield, 2001] reports 91 percent of all undergraduate grades awarded at Harvard in 1992 being B- or higher and 83.6 percent of all Harvard seniors graduating with honors in 1993. A long-term critic of grade inflation Dr. Harvey C. Mansfield [2001], says that “the grades that faculty members now give -- not only at Harvard but at many other elite universities -- deserve to be a scandal.”

Harvard is not the only elite institution of higher learning struggling with the problem of grade inflation. Stanford University until recently did not even permit faculty to award an “F” grade. [Leo, 1993] Merrow [2006] further reports that 80 percent of the grades are A's and B's at the University of Illinois, and 50 percent of Columbia University students make the Dean's List.

Grade inflation exists regardless of discipline. It is more pronounced in some areas but nevertheless it exists across all disciplines. [Shea, 1994] The current trend of grade inflation was revived in the mid-1980s and has continued to grow. Some researchers have pointed out that grade inflation originally began in the 1960s, when professors gave good grades to their male students to keep them from being drafted. [Mansfield, 2001] The researchers further assert that current faculty members were students then and retain similar grading styles that lead to grade inflation. In fact, Goldman [1985] blames faculty as being solely responsible for grade inflation and for failing in their traditional role as gatekeepers.

Grade inflation in higher education has been a topic of hot debate for the last two decades. The problem of grade inflation has increased to such an extent that some Universities are now trying to adopt measures to fight it.

#### **3.1 Causes of Grade Inflation**

Many causes of grade inflation have been cited in literature. These include (1) faculty seeking to get good student evaluations by awarding higher grades, (2) content deflation by faculty, (3) faculty hoping to retain more students, (4) faculty hoping to become and remain popular with students, (5) faculty hoping to be labeled as someone “who cares” about students, (6) faculty giving in to pressure from students, and (7) faculty resorting to more subjective forms of grading that often result in grade inflation.

Untenured or tenure-track faculty often award higher grades to “buy” good student teaching evaluations. This is a major source of grade inflation and is very difficult to prove or prevent. Since teaching evaluations are a critical component of the tenure application packet, new faculty are often pressured by fears of being denied tenure due to poor teaching evaluations and resort to grade inflation in hopes of getting good ones.

Some faculty resort to “content deflation” as a more subtle way of awarding higher grades. If a current student is expected to study less “content”, do less homework and is tested on this reduced material, then the grade the student receives is automatically inflated when compared to a past student who would have been expected to cover more content and do more work to earn a similar grade.

A major issue that most faculty struggle with frequently is one of student retention. No faculty likes to have too many students withdrawing from his/her course. If a faculty member is having trouble retaining students in his/her course(s) on a regular basis, then this could give rise to the person seriously doubting his/her teaching ability and could lead to low self-esteem. Too often faculty members resort to grade inflation in order to stem the flow of students withdrawing from their courses. Although this might work in the short term, the faculty are leaving themselves open to contempt from the students.

Some faculty award inflated grades in order to achieve “popularity” with the students. It makes the faculty member feel good to hear of how students “love” the way the class is taught and what a great person the faculty is. Almost all faculty members, tenured or otherwise, can fall prey to this type of ego boosting from students and give higher grades.

Most faculty members truly “care” about their students. However, caring about one’s students does not necessarily have to translate into grade inflation. But this is just what some faculty members do. They feel the need to go the “extra mile” to prove to students that they care. An easy way for the faculty to do this in addition to lending students a sympathetic ear and addressing specific student issues would be to award higher grades in their courses.

Mostly new and inexperienced faculty members succumb to pressure from students for grade inflation. A new faculty member is constantly “pushed” by students in the direction of grade inflation. New faculty members are especially sensitive to student complaints about their teaching and are often pressured into awarding higher grades. They feel that giving higher grades to students in the first few semesters of teaching will minimize student complaints and allow the faculty member to establish themselves as “good” teachers. A favorite technique of students in a new faculty member’s class is to wait until the first exam grades are given and then go and complain to the department chair that the faculty member cannot teach or that they (the students) cannot understand the faculty member, etc. All it takes then is just one phone call from the department chair to scare the new faculty into “toeing the line” (in the students view) and start awarding higher grades.

In order to be fair and consistent, the grading process needs to be totally objective. The further away from objective grading a faculty member gets the more is the danger of grade inflation. Subjective grading is to be avoided under all circumstances. Subjectivity opens the door to grading being influenced by the faculty member’s personal opinions and feelings. Although, subjectivity more often than not results in higher grades being awarded, there is still a very real danger of it resulting in “lower” grades in some cases.

### **3.2 Effects of Grade Inflation**

Grade inflation does not help anyone in the long run. If grades are highly inflated then the basic purposes of grading as presented earlier are not being served. Inflated grades do not provide accurate feedback to the students regarding their performance in the class. The students do not get to identify their areas of weakness or recognize gaps in their knowledge. Inflated grades do not communicate “good information” about the students’ level of knowledge and skills either to the students or to their potential employers. If employers are consistently faced with a severe disparity between a student’s Grade Point Average (GPA) and his/her actual performance on the job, then they might stop relying on GPA and resort to other methods of gauging the knowledge and skill level of applicants. If the problem remains unresolved then employers might even stop recruiting from the schools where grade inflation is rampant.

Grade inflation hurts the “good” students, especially the ones that truly study hard and work diligently to master the course content. These students resent the entire concept of grade inflation which results in weaker, under-prepared, students receiving similar grades to them. A serious student would not feel good about receiving an “A” from a class where nobody receives less than a “B”, or where students doing

half the work receive "A's". Faculty members have been known to proclaim that a grade of "A" meant something in their classes while awarding "A's" to 95% or more of their classes.

Grade inflation results in undermining the sanctity of academics and leads to a reduction in the value of getting a college education. In a certain instance, when continued virulent grade inflation over many years had completely devalued a certain University's prestige in town, residents were overheard remarking that even a monkey could sit through classes there and graduate with a perfect 4.0 GPA.

### **3.3 Fighting Grade Inflation**

So, what can we do about this cancer eating away at the roots of academia? There is no one correct response to this question but it is clear that whatever needs to be done must be done quickly to prevent further deterioration of the value of a college education. The fight against grade inflation must begin with individual faculty members at the classroom level. Faculty members need to regain their sense of duty and pride and not be swayed into awarding higher grades for short term personal gratification.

There are several immediate steps that can be taken by faculty members to make grades more meaningful. Faculty can detail clear objective grading policies in their courses and tie them to reasonable yet high expectations of student performance. A faculty member can grade fairly and accurately by simply doing the following, (1) state clear grading policies upfront and communicate them to students, (2) grade objectively only on a student's mastery of the subject content, (3) keep accurate grades, preferably numerical ones of their students performance, (4) communicate grades to students and keep them continuously appraised of their progress in the course, and (5) avoid changing grading policies in the middle of the semester.

Setting high but achievable standards that are reasonable would be a first step in avoiding grade inflation. Some have argued against the existence of grade inflation saying that students today are smarter and better prepared than students in the past. There is no data available in support of this argument. In fact, most of the data seems to point the other way. But even if students nowadays are more prepared then should not the professors challenge them even more and expect more of them instead of lowering their standards? It is true that our kids know a lot more about certain things than us. But does this not place the onus upon us to raise the standard and challenge them to higher performance? If we fail to do this then we would have failed to safeguard the sanctity and integrity of academic and condemned these students to a life of mediocrity and underperformance.

Minimize the impact of student teaching evaluations on the tenure decisions by using other instruments to evaluate teaching performance of tenure-track faculty. This could include surveys of students, peer-review by faculty who rotate sitting in on courses taught by untenured faculty, announced classroom visitations by the department chair or even the dean, or in some cases department visitations by certified education (teaching) specialists. A new instrument could also be devised that calculates an overall teaching score for the faculty member taking into account the grade distribution in the class, the student evaluations scores, the discipline of the course taught, the level of the course taught, the newness of the course preparation, the number of courses taught and preparations by the faculty member, and the class sizes thereof. Such a comprehensive instrument would minimize the impact of only the student teaching evaluation on a faculty member's tenure decision.

Adopt common standardized comprehensive final exams for multi-section courses and ensure that the final exam grade is a large enough percentage (to be same across all the sections) of the student's final grade for the course. This will ensure uniform content coverage and minimize the ability of individual instructors to inflate grades.

Another method would be to adopt a new grading scale that involves more than five ranges. Many universities are actually using a "+/-" to each letter grade. So this system would then result in 13 actual letter grades as compared to the commonly used five grade system of "A", "B", "C", "D", and "F". This would prevent instructors from being lenient and "bumping" borderline students to the next higher letter grade.

Universities could develop and implement strict policies that prevent the “curving” of grades. In the absence of any such clearly articulate policies, individual instructors are free to devise creative ways of grade inflation by resorting to “curving”. Several methods of curving of grades exist, including, curving grades based on the highest grade in the class, awarding bonus points to students, building in bonus points in the examination itself, dropping the lowest test score, replacing the lowest test score with the final exam score, counting homework, attendance, and quiz points as bonus, or simply dropping the respective floors of the grade ranges to where even an average of 75 is an “A” in the class and a 40 is a passing grade. Others curve by giving each student at least 50 points in the course and then add more points for each correct answer. Some give students 100 points to begin with and then take away points for wrong answers. This method is commonly used and can result in severe grade inflation where subjectivity is involved.

Finally, students could be required to pass externally developed national exit examinations before being allowed to graduate. The Major Field Test in different disciplines developed by the Education Testing Service (ETS) is a good example of this method. The results from such an examination can then be used to identify possible areas of obvious grade inflation. For example, if students from a particular major with high GPAs score poorly in their own discipline area, this would clearly be evidence of grade inflation. Once these courses are identified then the department chair and dean can then take appropriate measures to prevent grade inflation in future.

#### 4. CONCLUSIONS

Grading is an important tool in the realm of academia and should be used constructively and wisely. To indulge in grade inflation is to demean the value of education and to cheat the students, the potential employers, the University, and oneself. Grade inflation does not help anyone in the long run.

Grade inflation must be fought at all levels by faculty everywhere. It is not good for one solitary faculty member to fight grade inflation in an entire University. Although it speaks to the credit of the faculty member, in all possibility all it will earn him would be the animosity of the students and possibly visits to the department chair's or dean's office for a discussion on his/her grading policies.

This paper attempts to explore the nature, purpose, and importance of grading to academia. It also thoroughly examines the grade inflation problem and suggests possible solutions for avoiding it.

#### REFERENCES

- Cohen, Henry, "Inflated Grades, Deflated Courses: How Insecurity Induced Compromise," *Change*, Volume 16, No. 4 (May/June, 1984), pp.8-10.
- Goldman, Louis, "The Betrayal of the Gatekeepers: Grade Inflation," *The Journal of General Education*, Volume 36, No. 2 (1985), pp. 97-121.
- Leo, John, "A for Effort, Or for Showing Up," *U.S. News and World Report*, October 18, 1993, p.22.
- Mansfield, Harvey C., "Grade Inflation: It's Time to Face the Facts," *The Chronicle Review*, April 6, 2001, p. B24.
- Morrow, John, "Grade Inflation: It's Not Just an Issue for the Ivy League," *The Carnegie Foundation for the Advancement of Teaching*, 2003.
- Shea, Christopher, "Grade Inflation's Consequences," *The Chronicle of Higher Education*, Volume XXXX, No. 18 (January 5, 1994), A45-A46.

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## THE ROLE OF THE FINANCIAL RATIOS IN THE ENTITY ANALYSIS

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### ABSTRACT

*This paper handles aspects referring to the role of the financial ratios in the entity analysis based on the annual reports in the circumstances of IFRS adopting. In this sense, the authors present the modalities of establishing the quick diagnosis based on the financial reports.*

**KEYWORDS:** financial reports, financial ratios, financial policy, bankruptcy

### 1. INTRODUCTION

The role of the financial analysis in the annual reportings is largely debated in the professional literature, especially together with the adoption of the IAS and IFRS.

There are voices that questioned the utility of the financial situations analysis in a world where the capital markets are said to be efficient. An efficient market looks forward, while the analysis of the financial situations represents an introspection into the past. However, the value of the financial analysis is given by the fact that it allows the analyst to gather information that might help him in accomplishing the future projections, required by an efficient market (Greuning, Koen, 2003).

An analysis report of the activities and perspectives of the company usually has to include the following:

- ▶ A review of the company's financial conditions and its operating results;
- ▶ An assessment of the significant effects of currently known trends, events, and uncertainties of the company's liquidity, capital resources, and operating results;
- ▶ The capital resources available to the firm and its liquidity;
- ▶ Extraordinary or unusual events (including discontinued operations) that have a material effect on the company;
- ▶ A review of the performance of the operating segments of the business that have a significant impact on the business or its finances.

The publication of such report is encouraged, but is currently not required by IFRS (Greuning, Koen, 2003).

In the sense of these international regulations, we believe that financial analysis refers to:

- the analysis of the financial position, based upon the balance sheet;
- the analysis of the financial performance, based upon the profit and loss account;
- the analysis of the changes in the financial position, based upon the treasury flows
- the analysis of the risk administration policy.

### 2. METHOD AND RESULTS

Within a financial analysis report there are most frequently met the indicators presented under the form of ratios.

Ratios represent useful instruments of analysis that synthesize a large amount of data in a form easier to understand, interpret and compare. At the same time, they show certain limits that have to be analysed for every case. When comparing the ratios from different periods of time, one must take into account the environment where the enterprise performs its activity, as well as the impact of certain changes on financial situations, such as: the changes in the economic environment, in the productive process, in the different production lines or in the served geographical markets.

Ratios do not represent the final point of the analysis and do not represent by themselves alone the positive elements (strong points) or negative elements (weak points, weaknesses) of the activity of an enterprise or of its management. Ratios indicate, in our opinion, only the domains that require an additional investigation.

The analysis based upon the rates built by the analyst from the financial situations has to be combined with the research of other factors before formulating pertinent conclusions and making recommendations for the measures that have to be taken by the leaders of the enterprise.

According to other authors, financial ratios ought to be grouped in four categories as follows:

- ✓ The operating ratios, such as: Return on Assets, Return on Sales, Return on Equity, Inventory Turnover Ratio and Account Receivable Ratio (Friedlob, Schliefer, 2003);
- ✓ The financing ratios, as: Current Ratio, Quick Ratio, Financial Leverage Ratio, Times Interest Earned Ratio and Market Indicators ( White, Sondhi, Fried, 1998);
- ✓ The growth rates, as: The Rhythm of Assets, The Rhythm of Sales, The Rhythm of Profit (Woelfel, 1994);
- ✓ The indicators of bankruptcy, so: „A” model, „Z” model (Helfert, 1997) etc.

According to other American analysts (Bernstein, Wild, 2000), financial ratios mean little by themselves. Their meaning can only be gleaned by using them in the context of other information and the financial standing of the company can be established based also on: analyst experience; company goals; industry norms (cross-sectional analysis); economic conditions and trend (times-series analysis).

The determination of a rapid diagnosis is based upon the combination of the ratios so that it should result the condition of bankruptcy or non-bankruptcy of the economic unit. A model of a such diagnosis is presented below:

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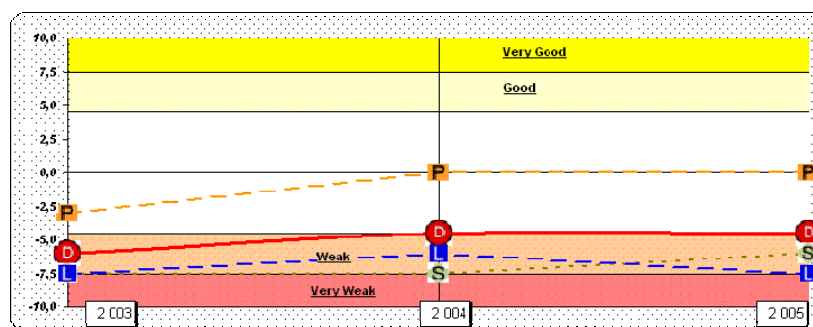
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## "Quick" Financial Diagnosis

**J12/1505/1999**

	RON		
	2 003	2 004	2 005
<b>QUICK FINANCIAL DIAGNOSIS</b>	<b>Case of almost bankruptcy</b>	<b>Case of almost bankruptcy</b>	<b>Case of almost bankruptcy</b>
<b>TOTAL SCORE</b>	<b>-6.0</b>	<b>-4.5</b>	<b>-4.5</b>
<b>T O T A L qualificative (D)</b>	<b>W e a k</b>	<b>W e a k</b>	<b>W e a k</b>
<b>- FINANCING (L)</b>	Very weak	Very weak	W e a k
<b>- SOLVABILITY (S)</b>	Very weak	W e a k	Very weak
<b>- PERFORMANCE (P)</b>	Under average	M e d i u m	M e d i u m





### SC HIPARION DISTRIBUTION SA

<b>FINANCING - Score</b>	<b>-7.5</b>	<b>-7.5</b>	<b>-6.0</b>
DEBTS OF NO LONGER THAN ONE YEAR	173,981,802	20,551,482	27,646,921
CURRENT ASSETS - TOTAL	160,410,940	20,153,853	26,288,944
<b>General Financing %</b>	<b>108.46</b>	<b>101.97</b>	<b>105.17</b>
DEBTS OF NO LONGER THAN ONE YEAR	173,981,802	20,551,482	27,646,921
RECEIVABLES +CASH AND BANK ACCOUNTS	126,053,764	15,622,156	21,566,208
<b>Quick Financiag %</b>	<b>138.02</b>	<b>131.55</b>	<b>128.20</b>

### SC HIPARION DISTRIBUTION SA

<b>SOLVENCY - Score</b>	<b>-7.5</b>	<b>-6.0</b>	<b>-7.5</b>
DEBTS OF NO LONGER THAN ONE YEAR + DEBTS OF MORE THAN ONE YEAR	176,069,971	20,551,482	27,721,981
ASSETS - TOTAL	167,722,576	20,694,118	26,891,960
<b>General Solvency %</b>	<b>104.98</b>	<b>99.31</b>	<b>103.09</b>
DEBTS OF NO LONGER THAN ONE YEAR + DEBTS OF MORE THAN ONE YEAR	176,069,971	20,551,482	27,721,981
FIXED ASSETS + ECEIVABLES + CASH AND BANK ACCOUNTS	133,365,400	16,162,421	22,169,224
<b>Rapid Solvency %</b>	<b>132.02</b>	<b>127.16</b>	<b>125.05</b>

### SC HIPARION DISTRIBUTION SA

<b>PERFORMANCE - Score</b>	<b>-3.0</b>	<b>0.0</b>	<b>0.0</b>
GROSS RESULT - Profit (+) / Loss ( - )	- 7,828,617	+ 1,423,195	0
Net business amount	459,765,438	60,156,190	78,104,225
<b>General Performance%</b>	<b>-1.70</b>	<b>2.37</b>	<b>0.00</b>
RESULTS FROM OPERATING - Profit (+) / Loss ( - )	- 6,480,456	+ 1,476,495	0
Net business amount	459,765,438	60,156,190	78,104,225
<b>Operation Performance %</b>	<b>-1.41</b>	<b>2.45</b>	<b>0.00</b>

### 3. CONCLUSIONS

During one year we tested the model on 128 Romanian companies and the results concerned to same conclusions that the model works very well.

From those presented above, we can draw several conclusions:

- the financial analysis is the discipline called so that by its methods and procedures applied to the financial situations and other financial data, it should interpret in a consistent way the correlations between different sub-conditions and the future tendencies of the entity;
- in the financial analysis reports one has to present also the connection between the cash flows and the financial policy of the entity;
- Least but not last, through the rapid financial diagnosis, we can evaluate the financial standing of the entity, so that in a real time we can adopt adequate financial decisions.

## REFERENCES

- Bernstein L.A. , Wild J.J – Analysis of Financial Statements, McGraw – Hill, New York, USA, 2000.
- Friedlob G.T., Schleifer L., L. F – Essentials of Financial Analysis, John Wiley & Sons, Inc., New Jersey, USA, 2003.
- Greuning H.v., Koen M. – International Accounting Standards, Irecson Publishing House, Bucharest, 2003.
- Hackle K.S., Livnat J - Cash Flow and Security Analysis, Irwin/ McGraw-Hill, Chicago, USA, 1996.
- Helfert E.A – Techniques of Financial Analysis, McGraw-Hill, Chicago, USA, 1997.
- White G.I. , Sondhi A.C. , Fried D – Financial Statements, John Wiley & Sons, Inc., New Jersey, USA, 1998.
- Woelfel C. J – Financial Statements Analysis, McGraw-Hill, Chicago, USA, 1994.

## THE ANALYSIS OF ACTIVITY IN ROMANIAN ENTITIES

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### ABSTRACT

*In this paper, the authors present the short term analysis modalities taking into account stocks rotation, receivables rotation and liabilities rotation. These indicators show, beside the efficiency of the activity, the treasury flows generated by the activity of the entity.*

**KEYWORDS:** stocks rotation, receivables rotation, liabilities rotation, operational risk

### 1. INTRODUCTION

One of the most important parts in the financial analysis is the company operating activity (Bernstein and Wild, 2000). Operating activities represent the “carry out” of a business plan given the necessary finance and investments. These activities involve at least five basic components: research, purchasing, production, marketing, and labor.

The operating activities of an entity eventually are materialized both in short term investments, that are stocks and receivables, and in long term investments, that are buildings, equipment, tools, etc.

The analysis indicators of the activity, in our opinion, have to build the connection between the level of the operations in the entity represented by the sales volume, and the necessary assets for accomplishing the operation activities of the entity.

The higher the value of an indicator of this category is, the more efficient the operational activities of the entity, since with a small amount of assets one can maintain the same sales level.

The evolution of these indicators, in comparison with the indicators of other entities from the same field, may provide information on the possible weak points or strong points of the respective entity. On the other hand, even if these indicators do not measure directly profitability or liquidity, the activity indicators represent important factors influencing both liquidity, and the financial performance of the entity.

The analysis indicators of the activity may be used also in predicting the capital need of an entity. Sales increase implies investment in the assets turning. The analysis indicators of the activity are important in establishing the assets need for sustaining the predicted growth.

### 2. METHOD AND RESULTS

According with other American analyst (Woelfel, 1994) the financial statements presenting the financial data for two or more periods are called comparative statements. The comparative financial statements usually offer similar reports both for current and for future periods.

Activity analysis evaluates revenue and output generated by the firm’s assets (White, Sondhi and Fried, 1998).

The system of indicators used *in analyzing the short term activity* of an entity refer to stocks, receivables, liabilities towards suppliers and other fiscal and social duties.

Each component of this system has to be analyzed from two points of view: on one hand the efficiency of the activity expressed by their rotation speed, and on the other hand the cash „generated” by the assets. *The strategy of managing stocks* implies the increasing of both the stocks and each of its component rotation speed, and the acceleration of the cash flows rotation speed.

*Stocks rotation speed*, defined as a ratio between the cost of sold goods and the average stock, as follows:

$$\text{Stocks rotation speed} = \text{Cost of the sold goods} / \text{Average stock}$$

This is an indicator that measures the stocks efficiency. A high level of this indicator shows the fact that stocks do not remain in warehouses or on the entities store shelves, but rapidly transform into sold goods. This indicator is influenced by the accounting method used for evaluating stocks, respectively FIFO, LIFO, etc.

The treasury flows generated by the method of managing stocks are determined as follows:

$$\Delta \text{ TRS} = [\Delta \text{ DCR} + \Delta \text{ DBS} + \Delta \text{ VAV}] - \Delta \text{ S}$$

Where:

DC - represents the current assets;  
DBS - represents short term bank loans;  
S - represents stocks;  
VAV - represents advance incomes.

In other words, treasury flow generated by the successive transformation of stocks depends both on the way of dynamiting business and the best use of the credits engaged in financing stocks.

*Marginal treasury (MTRS)* is another indicator determined as a ration between treasury variation ( $\Delta \text{ TRS}$ ) and sales variation ( $\Delta \text{ CAN}$ ):

$$\text{MTRS} = \frac{\Delta \text{ TRS}}{\Delta \text{ CAN}}$$

From a *dynamical point of view*, the successive transformation of purchased stocks may be analyzed for each category, as follows:

The rotation speed of raw material and material stocks:

$$\text{DMP} = \frac{\text{SMP}}{\text{CM}} \cdot \frac{\text{CM}}{\text{SPCE}} \cdot \frac{\text{SPCE}}{\text{SPF}} \cdot \frac{\text{SPF}}{\text{CR}} \cdot \frac{\text{CR}}{\text{CAN}} \cdot \text{T}$$

a                  b                  c                  d                  e

Or

$$\text{DMP} = \text{a. b. c. d. e}$$

where:

SMP - raw material stocks  
CM - raw material costs  
SPCE - work in progress (unfinished goods)  
SPF - finished goods  
CR - receivables  
CAN - turnover

a - the static rotation speed of raw materials and materials;  
b - the amount of material costs in the production in execution;  
c - the amount of the work in progress in the total amount of finished goods;  
d - the volume size of finished products sales;  
e - the level of receivables compared to sales

The main aspects of receivables management analysis are the analysis of receivables rotation speed and the analysis of the ratio between the receivables and the sales.

*Receivables rotation speed* may be determined similarly as to the case of stocks, that is:

$$\text{Receivables rotation speed} = \text{Sales/Receivables}$$

In our opinion, receivables rotation speed measures:

The efficiency of the trade policies of the entity;

The receivables need for constantly maintaining the level of the entity's sales.

Each manager has to analyze periodically (monthly, annually) the report between the receivables and the sales of the entity, in order to be able to prevent malfunctions, on the one hand in making profit, and, on the other hands, in financing the investments in receivables. That is why we believe that a useful tool for financial management is represented by the indicator "Amount of receivables in total sales" ( $G_c$ ):

$$G_c = \frac{CR}{CAN} \cdot 100$$

By comparing the indicator above in the current financial period with the previous one, we can conclude the following aspects:

- $G_{c1} > G_{c0}$ , signifies *an increase of investments in receivables, a negative aspect, from the point of view of financing activity*;
- $G_{c1} = G_{c0}$ , means *that investments in receivables are neutral*;
- $G_{c1} < G_{c0}$ , reflects *a decrease of investments in receivables, with benefic resources of supplementary financial resources thus determined*.

It can be noticed that, in the case in which receivables are constantly decreased, at the same effective level of business there is recorded an increase of cash flows of the entity.

Undoubtfully, the policy in the field of receivables is reflected in a corresponding manner in the commercial risk of the entity which refers mainly to its current activity. Generally speaking, the extension of the business portfolio generated a surplus of incomes that, if invested in new opportunities, can generate on a short, medium and long term, negative phenomena of *illiquidity* and *ungearing*.

We believe that, the commercial receivables rotation speed analysis model should be regarded in the context of *commercial risk*, so that:

$$DCR = \frac{CR}{CAN} \cdot T \begin{cases} \leq 30 \text{ days} \Rightarrow \text{small risk} \\ \leq 60 \text{ days} \Rightarrow \text{medium risk} \\ > 60 \text{ days} \Rightarrow \text{high risk} \end{cases}$$

30 days = small (reduced) risk

60 days = medium risk

60 days = high risk

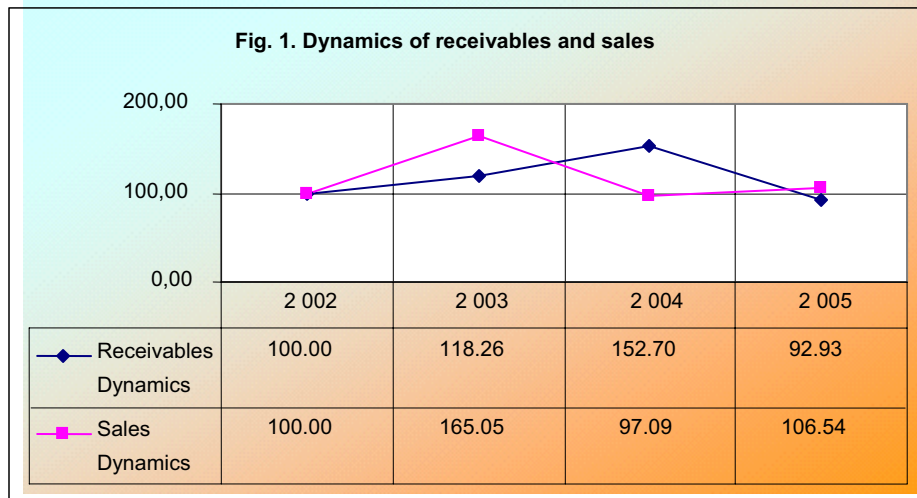
Where:

T - represents the number of days in the period;

CR - represents the receivables;

CAN - represents the turnover.

*Receivables analysis in dynamics*, as compared to *sales dynamics*, highlights the rhythms of the two indicators and reflects the strong and weak points in managing the receivables of the entity. Analyzing the evolution of these indicators at a number of 100 Romanian companies we can imply the Figure 1 aggregate evolution of these companies activity:



Besides own resources, commercial societies make often use of external financing and which, according to their economic content, are grouped in:

- √Borrowed resources;
- √Resources temporarily drawn in the financial circuit.

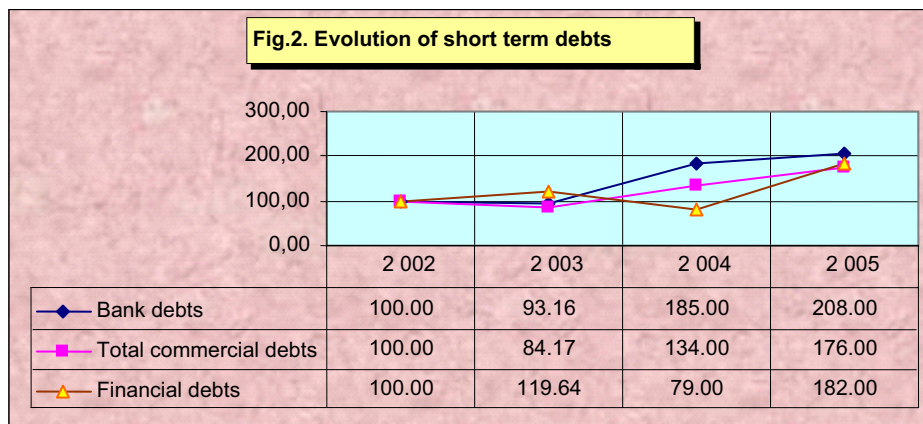
The analysis of the entity's debts service can be made with the help of a system of indicators corresponding to the degree of financial dependence (leverage).

A special attention needs to be paid to the liabilities rotation speed, calculated either as medium payment term (days DDT), or as number of rotations of the period (KDT):

$$DDT = \frac{DT}{CAN} \cdot T$$

$$KDT = \frac{CAN}{DT}$$

Generally speaking, a decrease in the liabilities rotation speed contributes to the temporary attraction into the economic circuit of the entity of supplementary financing resources. From our research at the 100 companies it can be deduced the following evolution of short term debts:



### 3. CONCLUSIONS

From the research made on a number of 100 Romanian companies we arrived at the following concluding point: among the measures to be taken for accelerating stocks rotation speed, we must take into account the following aspects:

*In the provision stage:*

- ▶ drawing up on time and currently checking the contracts with the suppliers;
- ▶ rhythmical supplying;
- ▶ optimizing the stocks circuit;
- ▶ searching the closest suppliers;
- ▶ negotiating the best prices.

*In the production stage:*

- ▶ reduction the specific consumption;
- ▶ reduction of the power consumption;
- ▶ promoting the modern methods of organization and leadership;
- ▶ introduction the performing technologies in production;
- ▶ using at maximum the installed capacities;
- ▶ rhythmicity in supplying departments;
- ▶ optimizing the level of stocks;
- ▶ improving the qualification of the staff;

*In the trade stage:*

- ▶ acceleration the distribution procedures;
- ▶ respecting the stipulations of the contracts;
- ▶ rhythmicity in distribution etc.
- ▶ best cashing procedures.

We believe that, for the goal of evaluating the operational performance of the entity, receivables rotation speed should be determined by taking into account only the receivables. Financial receivables and investment activities (for example receivables provided by selling an investment) should not be taken into account, since they do not belong to the operational activities. In the case in which the entity obtains receivables during the period, it has to adjust their historical cost.

### REFERENCES

- Brenstein A. L. & Wild J.J. – Analysis of Financial Statements, McGraw-Hill, New York, USA, 2000  
White I. G., Sondhi C.A., Fried D. – The Analysis and Use of Financial Statements, John Wiley & Sons, Inc, USA, 1998  
Woelfel J. Ch. – Financial Statement Analysis, McGraw-Hill, New York, USA, 1994

# THE INFORMATIONAL SYSTEM IN COAL-BEARING INDUSTRY

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## ABSTRACT

*In this paper, the authors highlight the components of the informational system, and, within it, the defining elements of costs informational system, which, in the authors' opinion, lies in the center of the economic informational system.*

**Keywords:** informational system, economic informational system, production costs, costs analysis system

## 1. INTRODUCTION

The central element, in the middle of which gravitates any informational system, is the information. The economic information specifically describes the image of the economic-social reality, addressing first and foremost to the function of human thinking for deciphering its meanings and transforming it, through the managerial staff, into decisions meant to regulate the entire mechanism where it appears. It is processed and used through a support of physical (paper, floppy disks, magnetic disks, etc), optical (screens), acoustic (acoustic signals) nature or a combination of these three. Information results from the informational processes of data and knowledge processing, situated between execution processes and decisional processes.

In order to ensure better and better life quality, it is necessary to increase the material production, respectively, the access to various and high quality products and services, in the best amount for the individual or community. The increase of the production is first of all based upon the *scientific research in the technical field*, respectively, by the emergence of new products, methods, technologies. A field that greatly contributes to the increase of production is *the scientific organization and production management*.

Under the circumstances of a complex economic activity, characterized by the emergence of large and very large economic units, out of practical reasons, there was *differentiated the execution process from the managerial process* of the activity. On a theoretical level, these materialized in the emergence of "management" or "the science of leadership".

If *the execution process*, using technologies specific to the object of activity of the economic unit, the goal of *the management process* is to regulate the unfolding of the economic process, to control the behaviors of the economic system, taking into account the perturbations influencing it, following the maintaining or change of a certain state.

The main component of an informational system is represented by the economic informational subsystem, which includes the *economic record, economic-financial analysis, planning methods, administration programmers*, as well as other elements determined in the formation of the informational-decisional flows.

Within the informational system there are: the information transmitted, documents bearing information, the staff, communication means, systems of processing information, etc.

A study performed by the American economist Hybe, shows that, in an economic unit, from the total amount of information, 80% are economic information, out of which 47% are accounting information (Popescu and Baluta, 2006). But, more and more, the quantity of information grows larger and larger. The economist, accounting specialist, has to know how the information are reported to the decisional factors, towards shareholders, fiscal and governmental authorities, or, more important, how control and review are made in these systems.



From a functional point of view, the informational system can be divided into three components:

- ▶ Economic record that provides information regarding economic operations and processes performed in a certain place and time;
- ▶ Economic planning and forecasting that provides information regarding the dynamics and size of the economic phenomena during a future period of time (Glautier and Underdown, 1991);
- ▶ Economic legislation on the basis of which the economic record is organized and forecasting are elaborated.

The economic record represents the most important component of the economic informational system, since it provides the greatest amount of information to be processed and transmitted within the economic informational system.

## 2. METHOD AND RESULTS

In order to accomplish the specific objectives in information providing, economic record uses record standards.

The record standard represents a quantitative and qualitative modality measuring, evaluating and expressing economic goods, processes, phenomena.

The economic record reflects and controls the entire economic-financial activity performed by the economic agents, for example, supplying raw materials, obtaining finite products through the production process, shipping products and cashing the sale price, determining the financial results (profit or loss).

The main field of application for the informational systems is represented by the economic units. For accomplishing the accounting objectives, it is necessary to know the organizational structure of the economic units.

The internal organization of each economic unit is separated in two important structures:

- **Production structure**, connected to the object of activity, made up of workshops or production, assembly, service, design departments, control and research laboratories, factories, works, other economic units without juridical character.
- **Functional structure**, made up of work compartments, offices or services, called organizational divisions.

These two structures are separated and particularized by each economic agent, according to the volume, complexity, importance and specific character of the activity performed.

Both theory and practice show that, irrespective of the economic system, which the enterprise belongs to, its management, in order to obtain good results, has to have an accurate, complete and on due time knowledge of the production cost.

*The main objective* of gathering, processing, transmitting and systematic analysis of information regarding the level of *production costs* is pursuing the economic efficiency of the production activity as a result of the way of organizing and leading this activity.

*The strict determination of different kinds of expenses* imposes as necessary the application of the most adequate *methods and techniques of costs recording and calculation*, able to provide the necessary information for following, on the way and operatively, the deviations from standard expenses. On the basis of *the analysis of causes* that lead to the respective deviations, the management of the enterprise will be able to adopt the most appropriate decisions on performing future activity. The broadening of functional autonomy is accompanied by the creation of the condition for applying on a superior level the management attributions.

**The informational system of costs**, as a part of the economic informational system, includes a group of information regarding costs, as well as the means of gathering, saving, processing and transmitting them for foundation and decision making by the decisional system.

*The informational system of costs* has to be regarded as a *link system* between *the decisional system* and *the managed system* where cost appears as a regulating measure.

The aim of administration accounting being to provide information regarding costs, there results that it has to be thus organized so that it should support, on the one hand, the quantitative and qualitative measurement of the entire production process, and, on the other hand, to represent a control, orientation and regulation means through decisions corresponding to its value side, on the basis of the information provided for each management level.

The informational system of costs belongs to the informational system of the enterprise, which includes the gathering, processing, saving and transmitting of the information referring to the calculation of the costs of products, works and services, on places generating expenses, during a determined period of time (month, trimester, year, etc.).

According to the opinion of other specialists (Baciu, 2000), the integrated informational system of costs may be defined as representing a group of complex economic information (synthetic and analytical, quantitative and qualitative, of plan and effective etc.) regarding the purchase, production and retail costs, information mainly obtained through the automatic processing of the informational data coming from all the organisms of the enterprise and which are necessary in the informational process of all these organisms, for the normal turning into account of the material, financial and human resources, according to humans life requirements.

From the two definitions presented above, there results that *the informational system of costs* includes the following elements:

- ▶ the group of economic information regarding costs, that is of plan and effective information regarding costs, quantitative and qualitative, synthetic and analytic, information of analysis and control;
- ▶ The process of processing these information, involving the gathering, transmission and actual processing, valuing and preserving information;
- ▶ The sources of economic data or information regarding costs, made available to the operators by the three types pf economic record: operative, statistics and accounting;
- ▶ the circulation and destination of the respective information, which highlights the issuers of the primary documents and their checking, the way of transmitting documents, the time of processing the data contained by these documents, elaborating final situations regarding production cost, transmitting documents and their archiving.

The objectives of the informational system of costs may be grouped into three categories:

- ▶ Organization of the system;
- ▶ Calculation of costs;
- ▶ Costs analysis and control.

The accomplishments of these objectives implies the use of certain methods, procedures and techniques for bringing the subsystems of the informational system of costs into operation, and that is the organizational subsystem, the calculation subsystem and costs analysis and control subsystem.

#### **A) The Organizational Subsystem of the Informational System of Costs**

Within this subsystem, within the methods of organizing costs, what differs from one type to another, is the level on which the departments and centers of expenses are situated. In this sense, the informational subsystem of costs may be organized according to costs calculation method, in three types:

- Costs calculating method „in phases”
- Costs calculating method „with controls”; and
- Costs calculating „global” method

In the case of the „in phase” method, we can distinguish two types: „without semi-manufactured” and the type „with semi-manufactured”.

With the type „*without semi-manufactured*”, the calculation phases, as well as the expenses sectors or centers are identified with the production section, workshops, sectors, etc. Thus, on the level of each section there are identified the expenses bearers; on their level there are identified the costs bearers, and on each costs bearer there are identified the calculation articles.

In the case of „**with controls**” **method**, the expenses sectors or centers can be of type „without semi-manufactured” production sections, and of type „with semi-manufactured”, expenses centers are production workshops. Expenses bearers are represented by controls, within which there are identified the costs bearers and the calculation items.

In the case of „**global**” **method**, we distinguish three types of applying this method: on the level of the enterprise, on the level of the sections and on the level of the workshop.

When cost calculation is organized on the level of the sections, then on this level we identify the expenses bearer, costs bearers and calculation items.

If the calculation is organized on the level of the workshops, then on this level we identify the expenses bearer, costs bearers and calculation items.

### **B) Cost Forming or Calculation Subsystem**

The cost formation or calculation process takes place during several stages, within which there can be distinguished phases, objectives to accomplish, works and operations to be executed, detailed through works and operations to execute successively, and which are performed with the help of certain adequate methods and procedures.

In the case of this model (subsystem) of costs calculation there can be identified 6 stages:

1. The primary determination and delimitation of the planned and effective production expenses, according to their nature or economic content;
2. Restructuration of the production expenses determined during the first phase and their delimitation on destinations and calculation items;
3. The calculation and discounting of costs, planned and effective of auxiliary production;
4. Distribution on expenses and costs bearers of indirect, planned and effective production expenses;
5. Determining the purchase costs;
6. Determining costs, planned and effective of basic production.

This model reunites all the elements common to all the calculation methods for costs from each stage or phase of production costs forming or calculation process.

Some of the methodological elements are common in a triple sense: first, they are common to all the models, secondly, they are common to several stages or phases (for example Simple division is common the stages 3 and 6); thirdly, they are common to the pre-calculation and postcalculation of costs.

### **C) Costs Control And Analysis Subsystem**

The control and analysis of production costs is also made in stages and successive phases, just like the process of production costs formation and calculation. Each phase includes certain objectives and works to be executed with the help of certain methods and procedures and which in their connexion form this costs subsystem.

The control and analysis of production costs is structured in three components:

1. Establishing the planned values, where takes place expenses planning on expenses elements and calculation articles, as well as the calculation of planned costs of production;
2. The updating of costs planned values on the basis of updated norms, prices and new tariffs; highlighting the changes and establishing the significance threshold for deviations;
3. Establishing the effective values of expenses and production costs on expenses elements and calculation articles; the calculation of the effective costs of production;

4. Comparing the planned values with the effective values and exerting control and costs analysis on expenses elements and calculation articles, including the analysis of costs deviation, making decisions of regulating the activity producing deviations, as well as the organization and keeping the operative and current record of the deviations from the planned expenses.

In each of the previously presented subsystems, we may identify, during the stage of costs calculation, methods such as the THM method (time – hour – machine), the effective-plan method, equivalence coefficients, simple division and other procedures.

### 3. CONCLUSIONS

The informational system of costs has a series of separate characteristics from those of the economic informational system of the entity, presented below.

First and foremost, the goal of such a system is the necessity of the operative informing of the decision makers from different levels, departments, sections, administrations, referring to the efficiency or non-efficiency of the resources consumption on places and expenses bearers.

Secondly, the area of the the informational system of costs is much broader than the area of administration accounting, since it includes, besides the methods, procedured and techniques of collecting and distributing expenses, of calculating and reporting costs, also a system of operative decisions, referring to costs collecting, processing, optimization, reporting, analysis and control.

Thirdly, the informational system of costs includes a large amount of justificative documents of operative, accounting and statistic nature.

Fourthly, the informational system of costs integrates the functions of the activities from which they come, into a whole.

Least but not last, we notice that the informational system of costs has to ensure the functioning of the entity's mechanism under efficiency circumstances, when it has to signal the places and expenses bearers where unjustified or inefficient consumption is recorded.

All these characteristics of the informational system of costs that we previously presented, have to be regarded in their interconditionality, in the sense that a characteristic may precede and influence another characteristic and, all together, are results of the functioning of the mechanism of the entity through its components.

### REFERENCES

- Baciu A. – The Costs, Dacia Publishing House, Cluj-Napoca, Romania, 2001  
Glautier M.W.E., Underdown B. – Accounting. Theory and Practice, Pitman, London, UK, 1991  
Popescu L., Baluta A.V. – Methods of Costs Calculation and Analysis, Future Romanian Publishing House, Bucharest, Romania, 2006

## BLUE OCEAN STRATEGY AND THE THEORY OF CHAOS

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### ABSTRACT

*From Chaos comes opportunity. This is well established within business acumen. Resulting from this chaos, changes in the world ranging from globalization to deregulation, the market which we operate within is constantly changing, providing new opportunities for growth, expansion and new products and services. The theory of Chaos was originally developed more than one hundred years ago, and articulated in the early 1970's with the butterfly effect. Today, a new theory proposes to challenge the long-standing notion of strategic management. A new theory called Blue Ocean Strategy, which looks to challenge the norm and take advantage of Chaos, by formulating an order to the evaluation of Chaos found in the world, searching and identifying opportunity, rather than waiting for opportunity to find you. This present paper explores the relationship between Chaos, its Theory, the Blue Ocean Strategy, and its foundations.*

### INTRODUCTION:

The theory of Chaos has been developed into a wide array of mathematical problems with implications to other real world and business related problems. Chaos theory in mathematical context refers to non-linear dynamic systems which are sensitive to the initial conditions upon which it (the system) operates within, resulting from the relationship within complex systems, of which business is definitely prone to. The theory of Chaos is often explained within the realms of the butterfly effect, a phenomenon from which it is argued that the simple flapping of the wings of a butterfly can have a dramatic effect on the weather patterns half a world away, given enough time and distance to accelerate the movement of the particles of air in between the flapping of the wings and the final destination. A small change in the atmosphere caused by the flapping of the butterfly's wings can cause a tornado to occur or to prevent a tornado from occurring depending on whether the butterfly flaps its wings or not.

Interestingly, this phenomenon, coined in 1972 by Edward Lorenz in his paper, "Predictability: Does the Flap of a Butterfly's Wings in Brazil set off a Tornado in Texas?" was discussed by the Cuban poet and leader of the Cuban independence movement, Jose Marti, born in 1853, when he wrote:

"Que mis versos vuelen como mariposas, Pequeñas e inquietas/  
¡Ay!, Quedate y veras la maravilla de una mariposa que cubre con sus alas toda la tierra".  
or  
"Let my verses fly like butterflies, small and unquiet,  
Oh! Stay and you will see the miracle of a butterfly covering the whole earth with its wings."

Thusly, it could be argued that the origins of this famous quote of Chaos theory lie in the roots of Marxism theory. Much of the implications of the theory could also be traced back to earlier scientists and philosophers, while other aspects can be related to the field of linguistics.

In Marxism, it is believed that all systems are interrelated to each other, thus the interrelated, seemingly complex systems can be evaluated to attempt to find order. The Chaos that surrounds the interrelationship of business through the relationships of micro and macroeconomic policies, combined with market foundations, demographic changes, industry and firm specific dynamics form complex relationships. Numerous examples have been found to support the butterfly effect. The fall of the Thai Baht in the early 2000's and subsequent resulting Asian Flu, caused financial markets around the world to fall. The terrorist attacks of 911 still have ramifications in every industry and firm. The fall of Enron and Worldcom, have led to dramatic changes in corporate governance around the world. Currently, the result of changes in corporate governance from the Sarbanes Oxley (SOX) act is seeing a decline in new Initial Public Offerings (IPO's) in North America, and an upswing in IPO offerings in the United Kingdom, which has less constraints than those imposed in North America, leading to new challenges and opportunities.

## **ANALYSIS:**

Blue Ocean Strategy (BOS) was developed by Kim and Mauborgne (K&M), in 2005 as a methodology to develop a growth strategy for organizations to grow and prosper. The theories developed by K&M are in direct contrast to those developed by Michael Porter of Harvard in 1995. In Porter's strategies, firm competition and firm competitors are identified on the basis of four additional fundamental dynamics, mainly the relationships of the firm with suppliers, customers, substitutes and new entrants, known as Porter 5 forces model. Within this framework firms try to outperform their rivals, those as defined by strategic groupings, within the industry through finer and finer segmentation of the market within the defined market boundaries. Strategically outperforming one's rivals is accomplished by firms identifying distinctive core competencies which they will then utilize to develop a competitive advantage with which they will attempt to culminate into abnormal earnings (those beyond the average within an industry as defined by the efficient market hypothesis). Within these strategic groupings firms should attempt to employ traditional corporate and business level strategies, mainly cost leadership, differentiation or a focused cost leadership or differentiation strategy to implement their strategies. It has been said that attempting to do both cost leadership and differentiation simultaneously is tantamount to destruction of the firm's ability to capitalize on its core competencies, and similarly the odds of success of a firm expanding beyond their current defined market boundaries is subject to increased risk and limited profitability.

However, we have seen that boundaries from time to time have changed. In large part these boundaries have changed due to the impacts of two aspects, largely linked to each other. The first is technology, and specifically disruptive technologies which have caused and created massive changes the industry boundaries. Technologies have led to the development and creation of efficiencies in production, allowing for mass production, as well as specialization, which aids firms in gaining economies of scale and fulfilling corporate goals and objectives. This coupled with changes in telecommunication have driven the ability to expand beyond a firm's geographic boundaries, creating the second impact, that of globalization, which has allowed firms to take advantage of new market opportunities to expand and utilize a firm's core competencies. To further accomplish this, governments and trading blocks have been formulated to help foster competitiveness and further trade globalization.

This is all well and good, but it is already been seen that the rate of globalization will start to decline as firms reach the maximum limits of a geocentrically focused organization. Once again, firms will need to focus on increased segmentation of the markets to beat the competition. The results of this are already evident; however we are still in the early stages of this global saturation process. Globalization has been hindered by a number of factors for firms to ultimately reach this final saturation, however, currently, these hindrances are being addressed, which will speed up the global saturation. Namely, sophistication in financial markets, harmonization of accounting principles, increases in corporate governance and transparency are all driving further foreign direct investment (FDI) into the global marketplaces. Emerging markets, are providing opportunities for firms to capitalize in the short-term, but as globalization continues to accelerate, it is evident that competition will continue to increase, leading eventually to saturation and eventual consolidation or global corporations within each industry.

If this is indeed the future for organizations, then what are firms to do? How will they continue to deliver growth and shareholder value once saturation has been achieved? Short-term measures such as cost reductions, marketing efforts and focus on efficiencies can add value, as can long-term measures focused on research and development and capital expenditures, but these measures are effectively developing customer value without innovation or innovations without customer value. To truly develop meaningful shareholder value, a firm needs to develop what K&M refer to as value innovation, providing both a leap in customer value while reducing cost simultaneously, a theory which Porter indicates is extremely difficult to accomplish simultaneously but ultimately rewarding.

As discussed earlier, the theories of BOS and the roots of Chaos theory can be traced back to earlier discussions by philosophers and scientists. When Sir Isaac Newton was sitting under the tree and the apple fell on his head, it was said that he discovered gravity at that moment. Is that to say then that gravity did not exist prior to this moment? Is it only when a person realizes something within the

conscious mind that that something comes into existence? The obvious answer is No, which is exactly the premise upon which BOS is built upon. All products and services in existence today, existed, but were waiting to be discovered and become part of our reality. It may have been that the technology or markets were not there to capitalize upon them, but they were there, waiting to be discovered, as Newton discovered gravity by having an apple fall upon his head. This single event then dramatically changes the future of science as we know it, similar in nature to a butterfly flapping its wings, which then creates a change in the current reality and cognizance and reality of man. Similarly, when a mining or oil company announces a discovery of gold or oil, it does not mean to say that the gold or oil was not there previously, but that it has just now being discovered, possibly due to geological surveys in locations that have never been explored before, or through the use of new technologies coming into the existence and toolkits of modern organizations.

Let's turn to analyzing what is this BOS. A common misconception of the BOS is in the name of Blue Ocean "Strategy". Originally under the title of the Blue Ocean Innovation Network, it was renamed as BOS Network, to go in line with the title of the book. If we consider that a strategy, defined as:

[A strategy is] an integrated and coordinated set of commitments and actions  
Designed to exploit core competencies and gain a competitive advantage.  
[Hitt et. Al., Strategic Management: Competitiveness and Globalization p.4].

Then the question becomes, is this truly a strategy. The BOS does require a set of integrated and coordinated commitments and actions within the organization. Any type of new product or service introduction requires enormous commitments, both financial and resources based in terms of human and equipment capital. However, K&M argue themselves that the very nature of attempting to exploit competencies to engage in attaining a competitive advantage exhibits what they refer to as red ocean behaviour, a metaphor relating to the bloodied waters of companies engaged in trying to outperform each other by utilizing core competencies to gain competitive advantage, while convergence of strategies and markets inevitably occur, and is thus, counterproductive and contrary to the establishment of a blue ocean, a metaphor to identify organizations who have moved away from this convergence to new, uncontested marketplaces. Then, according to this definition, the BOS is not a true strategy.

If we consider how K&M compensate for this, and they do compensate for this, K&M describe BOS in terms, not of traditional strategy, but in terms of "strategic moves" as the unit of measure, where a strategic move is the "set of managerial actions and decisions involved in making a major market-creating business offering" (Kim and Maubourgne, P.10) . Thus, the BOS is not an all encompassing strategy, but in fact a growth strategy for an established organization or a methodology for a new start-up enterprise to develop a new market.

This is an important clarification in the terminology of BOS. The authors have in fact created a methodology not to operate a business, but to enhance it, ie a growth strategy for an enterprise. The strategic management literature, as expounded over the past 20 years since Porter's ground-breaking works, are thus, not irrelevant, but are complemented by the use of BOS to work together in conjunction with each other. This is in fact highlighted in the BOS theory in the PMS (Pioneer-Migrator-Settler) map, whereby K&M indicate that a firm cannot completely alter all product offerings of a firm to blue oceans, as the strategic move to a blue ocean is a costly venture, which must be supported by the current offerings (cash cows), highlighting that a portion or segment of the portfolio should only move forward at any one time.

In understanding the process, we can revert back to the use of Chaos. Obviously, the world continues to change. To provide an example here, we can consider a map of a coastline. No matter how fine the map is drawn, there will always be a smaller unit of measure. Even if the map was drawn to the level of a grain of sand, with each wave, the landscape will change, making the map immediately out of date, as the next wave hits. Within the realm of business, these changes are related to changes identified in the evaluation of the external environment, industry and firm through traditional scanning techniques including TEST (Technological, Economic, Social and Political) analysis and SWOT (Strength, Weakness, Opportunity and Threat) analysis. These traditional methodologies can be used to identify potential market

opportunities, from which traditional strategic analysis would look to capitalize upon by utilizing the firm's core competencies to gain competitive advantages, identify a target market through market segmentation and try to gain first mover advantage and then defend that position to outperform the competition.

These opportunities are born out of the Chaos inherent in our society. Deregulation, reductions in trade barriers, advances in technology and communication has allowed firms to seek out and achieve increasing levels of globalization. What K&M have done in their BOS is to analyze more than one hundred and fifty strategic moves in thirty industries over more than one hundred and twenty years to determine if there is any pattern to developing a Blue Ocean out of the Chaos to formulate new ventures, products or services. By studying similarities in these strategic moves, they have developed a framework for companies looking to expand into new uncharted markets. But similar to the earlier discussion of gravity, did BOS exist before, or is this just a new term for something which previously existed? Is there a formula for the seeming success achieved by firms such as Chrysler and the Minivan, Cirque du Soleil, Southwest Airlines, or Curves Healthcare? Firms which have moved into uncharted waters developed out of Chaos and ventured outside of the safe confines of the established industry boundaries within which they traditionally operate, or is this just an anomaly?

Often, one hears of CEO's stating that their firm is ready to jump on any opportunity that presents itself. Too often enterprises take this reactionary approach to management. The BOS takes a contrary approach. Rather than waiting for an opportunity to present itself, the BOS helps the enterprise to search out and attack the opportunity. It is analogous to a baseball scenario. If there is a runner on 3<sup>rd</sup> base and a line drive is hit to the outfield, there are two options the outfielder has. One would be to wait for the ball to arrive to the outfield, and then hope he/she has developed their resources (Strength, throwing accuracy, etc), to be able to throw the runner out at home plate once the ball is caught and the runner tags the base and starts to run to home, or use the BOS approach. This entails having the outfielder run toward the ball, thus shortening the distance between themselves and home plate and being in a much better position to throw the runner out at home plate. Rather than being reactionary to seize the opportunity once presented, BOS attempts to help the enterprise be proactive in finding and seizing the opportunity. Can an organization happen upon a blue ocean idea by chance or luck? Yes, but these are few and far between, but the BOS approach is designed to seek the opportunity and increases the odds of success, not increase the risk.

The BOS approach utilizes a strategy canvas to determine the current state of competition within a defined industry. If the value curve of the enterprise is similar to that of their competitors showing convergence of strategies, then the firm is deemed to be operating in a red ocean, bloodied by competition. The resulting convergence of value curves, leads to increased competition, inevitable price competition and decreased profitability. To make the competition irrelevant, the BOS proceeds to use a series of steps to develop a new "market space and make the competition irrelevant" (Kim and Maubourgne, 2005), which involves analysis of the market. It is not the intent of this paper to reiterate the steps of the BOS, but to comment on the relation of the BOS with regards to previous strategic work and Chaos Theory.

Chaos Theory attempts to determine and make long-term predictions about the behaviour of a system. Determinism, thus predicts the outcome of an event or system by a series of cause-and-effect behaviours that can be determined with precision. Sir Isaac Newton's basic laws of motion are founded on these principles, and they can be used to predict such actions as the rotation of the earth and the tides amongst other numerous examples, although there will always be some differences over time. As Henry Poincare, a predecessor to the work of Edward Lorenz showed in the early 1900's, there is always some difference over time in projections. For example, if you started to roll two coins next to each other, at 1/1,000,000th of an inch apart, it would appear their trajectories would be virtually indistinguishable, and probably would be in the short run, but over a million years of rolling these coins, they might end up millions of kilometers apart, assuming no gravity or friction to slow them down.

The stock market is another example of random chaos, characterized by various trends which sometimes occur on a random basis, called anomalies. Behavioural finance theorists indicate that in the presence of an efficient market, the introduction of noise traders, randomness of announcements and events (random



walk theory), noise in the financial statements and accounting policy choices which have no cash flow effects, but which do have economic consequences related to executive stock options and debt covenant issues, make the overall stock market unpredictable.

Chaos also comes from the changing external environment, and both industry and firm dynamics. Slight or sudden changes in any of these can have dramatic impacts on the firm and the management of the firm, as well as understanding of opportunities available. A merger may change the entire dynamics of the value-chain of a firm from research and development to distribution channels. The integration of the management cultures resulting from a merger can dramatically alter the internal workings of a firm. A chance meeting between two CEO's on a flight or at a dinner can alter the dynamics of the organizations from that moment on. Each or any of these changes, arising from the Chaos inherent in the interrelation of all systems as proposed by Marx creates opportunities.

The BOS proposes the methodology to take the chaotic environment and find a sense of order. By reconstructing the market boundaries through the utilization of the six paths framework, visualizing the strategy, going beyond the existing demand, determining the value innovation and overcoming the organizational hurdles, K&M have developed a methodology whereby the Chaos from which opportunity is born can be developed, nurtured and grown into a new product or service.

## **CONCLUSIONS:**

One of the questions that still are to be answered is the longevity of the BOS theory and what form will it finally take. Is it in its final form, or is it similar to the balanced scorecard from Norton and Kaplan. The original version of the balanced scorecard is a far cry from the current use of this tool within business organizations. Originally developed as an enhanced performance measurement system to compensate for the limitations in ratio based models using balance sheet and income statement measures such as return on investment and residual income, the current use of the balanced scorecard as a strategic system is much more encompassing than the original vision by the authors. Similarly, then, what will be the final version of the BOS? Will it be universally accepted as has Chaos Theory, the Balanced Scorecard, and indeed the works of Michael Porter?

In linguistics, when one is learning a new language, it is often said that you have truly mastered a language when you can understand a comedian in that language. It can also be said that when a theory becomes so common-placed as to be the punch line of a joke, then it is truly being accepted by the mainstream culture.

A physician, a civil engineer, and a consultant were arguing about what was the oldest profession in the world.

The physician remarked, "Well, in the Bible, it says that God created Eve from a rib taken out of Adam. This clearly required surgery, and so I can rightly claim that mine is the oldest profession in the world."

The civil engineer interrupted, and said, "But even earlier in the book of Genesis, it states that God created the order of the heavens and the earth from out of the chaos. This was the first and certainly the most spectacular application of civil engineering. Therefore, fair doctor, you are wrong: mine is the oldest profession in the world."

The consultant leaned back in her chair, smiled, and then said confidently, "Ah, but who do you think created the chaos?"

Author Unknown

That BOS will become the punch line some day also has yet to be determined, but being born out of Chaos, any road is possible.

## **BIBLIOGRAPHY:**

Hitt, M.A., Ireland, R.D., and Hoskin, R.E., Strategic Management: Competitiveness and Globalization, 7<sup>th</sup> Edition, Thomson South-Western, Mason, OH, 2007.

Kim, W.C. and Mauborgne, R., Blue Ocean Strategy, Harvard Business Press, Boston Massachusetts, 2005.

Rae, G., Chaos Theory, a Brief Introduction, [available August 7, 2007], <http://www.imho.com/grae/chaos/chaos.html>

Stewart, Ian, Does God Play Dice? The Mathematics of Chaos, Penguin Books Ltd, Harmondsworth, Middlesex, 1989

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# THE SURETY INSURANCE

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## ABSTRACT

*Surety reduces large-scale uncertainties by guaranteeing that commitments will be met. A unique feature of surety is that the policyholder purchasing coverage is not its direct beneficiary. A surety bond is a contract in which the insurer provides a guarantee to the beneficiary that a third party – the principal – will meet its contractual, legal or regulatory obligations.*

**KEYWORDS:** Premium, Risk, Surety, Protection

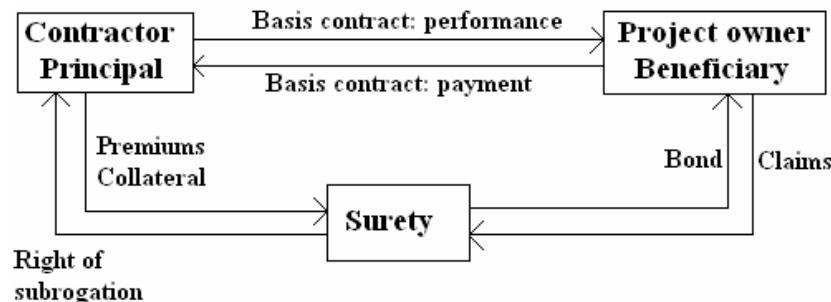
## 1. INTRODUCTION

One of the two categories of surety bonds is the contract bonds – which account for an estimated 63% of the global surety market (Swiss Re Economic Research & Consulting, 2006), assure the proper performance of contractual obligations, mainly in the areas of public and private construction project.

The other broad category, commercial (or “noncontract”) surety, involves other situations where a surety bond or guarantee secures the performance of legal or regulatory obligations.

Suretyship, though generally subject to the same regulations and laws as other lines of insurance, is in some ways distinct (Constantinescu, 2000). One difference is its tripartite structure. Others types of insurance offer protection to the policyholder. A surety bond, by contrast, is purchased by the principal but benefits the beneficiary (Figure 1).

**FIGURE 1: THREE-PARTY STRUCTURE OF SURETY CONTRACT**



Source: Swiss Re Sigma No 6/2006

Another special characteristic of surety bonds is that they are normally of indefinite duration and non-cancelable. If a project is delayed, the surety insurer remains subject to the terms of the bond until it is completed. Even the failure of a principal to pay premiums does not release the surety from its obligation to the beneficiary.

## 2. TYPES OF SURETY BONDS

There is a wide variety of surety bonds, which play different roles. Contract bonds:

- Guarantee that a contractor has submitted a bid in good faith and intends to enter the contract at the price it bid (bid bond);
- Offer protection from financial loss should a contractor fail to fulfill the terms and conditions of the contract (performance bond);
- Guarantee that the contractor will repay the project owner any funds received in advance (advance payment bond);

- Assure workers, subcontractors and suppliers that the contractor will pay them (labor and material payment bond);
- Guarantee against defective workmanship or materials (maintenance bond).

Commercial bonds likewise serve a variety of purposes. They:

- Assure customs authorities that an importer will pay the import duties required (customs bond);
- Ensure the proper declaration and timely payment of taxes (tax bonds);
- Enable governments to secure compliance with laws protecting community safety and welfare (license and permit bonds);
- Secure the performance of fiduciaries' duties and compliance with a court order (court bonds).

The annual premium for a contract bond is typically between 0,5% and 2% of the bond amount. The premium rate depends on the size and type of project, the contractors' creditworthiness, the level of collateral posted with the insurer and the project's anticipated duration.

When a principal (contractor) fails to fulfill its obligation, the beneficiary (project owner) must formally declare the contractor in breach of contract to qualify for payment under a surety bond. The surety company will then investigate and assess the merits of the claim. If the beneficiary improperly declared the principal to be in default or if its claim for compensation is excessive, the surety company will protect the interest of the principal. If a default has occurred, the surety company must satisfy its obligation to the beneficiary by doing one of the following:

- Assisting the original contractor in completing the project;
- Hiring another company to complete the work in progress;
- Paying the additional costs to the beneficiary (up to the bond amount) if the beneficiary chooses to complete the project;
- Paying a penalty, as specified in the bond, to offset the completion costs.

### **3. RATIONALE FOR SURETY**

Counterparty risk and how it is mitigated are key to deciding whether and with whom to undertake a project. The surety company's value proposition is that it writes bonds benefiting both principals (contractors) and beneficiaries (contractors) and beneficiaries (project owners) by reducing uncertainty.

- A surety bond increases the likelihood of a project being completed as initially agreed.
- The surety bond enhances the principal's creditworthiness, up to the credit rating of the surety.
- The surety company's expertise in prequalifying the principal assures the project owner that the contractor has the financial and technical capacity to complete the project.
- Purchasing a surety bond also benefits the principal because, without it, the beneficiary (especially if it is a public entity) might be unable to award the contract to the principal or might demand stricter terms.

### **4. RISK MANAGEMENT BY SURETY COMPANIES**

In recent years, surety writers have faced heightened pressure from rating agencies and the analyst community to earn a consistent return of capital. Achieving consistency requires good risk management, which in surety involves disciplined underwriting, exposure management and the use of reinsurance.

Technological progress and a decline in computing costs have enabled surety companies to improve their processes for managing risk exposures. Some surety companies use tools such as Enterprise Risk Management (ERM) and credit scoring models to manage their risk portfolios.

Because surety is usually written by general insurers engaged in many lines of business, the riskiness of a particular account depends on the insurer's overall relationship with the insured. A surety company can use ERM to calculate, evaluate and monitor aggregations of individual account risks across surety, investments and other insurance lines.

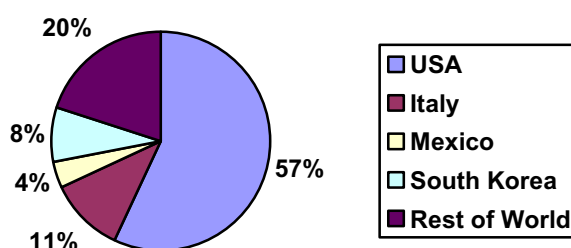
Credit scoring can also support portfolio management. Scoring models allow a surety company to: monitor trends by size and type of contractor, monitor the quality of new business, support pricing strategies and optimize reinsurance program structures.

## 5. THE SURETY MARKET

Worldwide surety insurance premiums were USD 7,6 billion in 2004(Swiss Re Sigma, 2006). In 2005, premiums were estimated at 7,9 billion. The US surety market is by far the largest, with an estimated share of 56% of global premiums.

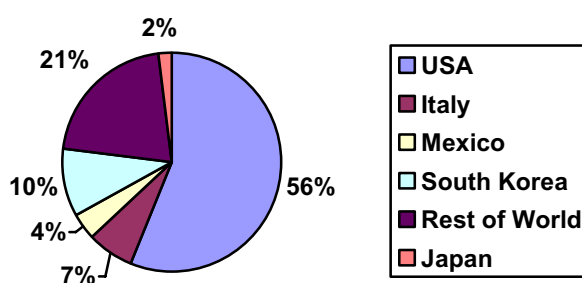
Surety products are also widely used in Latin America, some Asian markets and Europe.

**FIGURE 2: GEOGRAPHIC DISTRIBUTION OF SURETY PREMIUMS IN 1998**



Source: Swiss Re Research & Consulting

**FIGURE 3: GEOGRAPHIC DISTRIBUTION OF SURETY PREMIUMS IN 2004**



Source: Swiss Re Research & Consulting

### 5.1. United States

The USD 4,3 billion US surety market is the world's most developed. Due to specific regulations, surety is written exclusively by licensed companies or specialized departments within non-life insurance companies.

Approximately 100 companies write surety in the US, a few of which dominate the market. ST Paul Travelers Group, Which wrote USD 885 million in premiums in 2005, leads the market with a 20% of

share. The five largest players accounted for nearly half the market. Market concentration has grown over the past decade, as some writers have exited while others have merged.

Since the 1893 passage of the Heard Act, the US government has required contractors on federal public works to purchase surety bonds. The Miller Act of 1935 requires performance and payment bonds on all federal public works in excess of USD 100 000 and recommends protection for contracts over USD 25 000. Almost all states and most local jurisdictions have likewise enacted what are known as “Little Miller Acts”, which require contractors to obtain surety bonds for state and local public works projects

The US surety market is largely supported by legislative mandate. In 2004, public demand accounted for 84% of contract surety premiums (Swiss Re Sigma, 2006). Since authorities often specify the forms to be used, surety companies lack control over them. Though a surety company can request changes to a form, doing so runs the risk of having the government request further amendments.

## **5.2. Europe**

The heavily-regulated Italian surety market, where premiums totaled USD 545 million in 2004, is by far the largest in Europe. Most of the bonds are purchased for public beneficiaries, and as such have specifically –mandated policy terms. Traditional contract bonds account for about 60% of the market. Surety bonds are offered by banks as well as insurers, whose market share has fallen below 50% in recent years. The Italian Market is highly fragmented, with more than 50 companies writing surety bonds, which are distributed either directly or through brokers. Just two of these insurers are specialized surety companies, the others are subsidiaries of general insurance companies that offer a range of insurance products.

In most European markets outside of Italy, surety is a comparatively small business. Competition with banking products mainly guarantees and sometimes letters of credit, is intense. Surety bonds are underwritten on the merit of the contractual obligation being guaranteed and the financial strength of the policyholder. Banks, by contrast, may be willing to offer guarantees with attractive terms and conditions to strengthen relationships with clients potentially in need of other banking services. This cross-selling approach can give banks a competitive advantage over surety companies.

## **5.3. Latin America**

As in the US, surety is widespread in Latin America and demand is bolstered by legislative mandate. Governments generally require contractors on federal public works to obtain surety bonds. Local legislation often requires the use of customs, judicial, license and permit bonds.

Mexico is the fourth –largest surety market in the world, with USD 316 million of premiums in 2004, or 4% of the world market. The regulatory environment is strict and more extensive than in other markets. Market entry is heavily regulated and regulatory capital requirements pose a serious barrier to entry. Only 11 specialized companies write surety business; local monoline surety companies and specialized subsidiaries of international (mostly US) insurers. Premium rates are determined by regulation. Public entities account for much of the demand for surety products. Contract surety bonds, most common in the construction sector, account for more than 75% of the national market.

Other major surety markets in Latin America – Argentina, Brazil, Colombia and Venezuela – generated premiums totaling USD 261 million in 2004. Surety is provided either by monoline non-life insurers.

## **5.4. Asia**

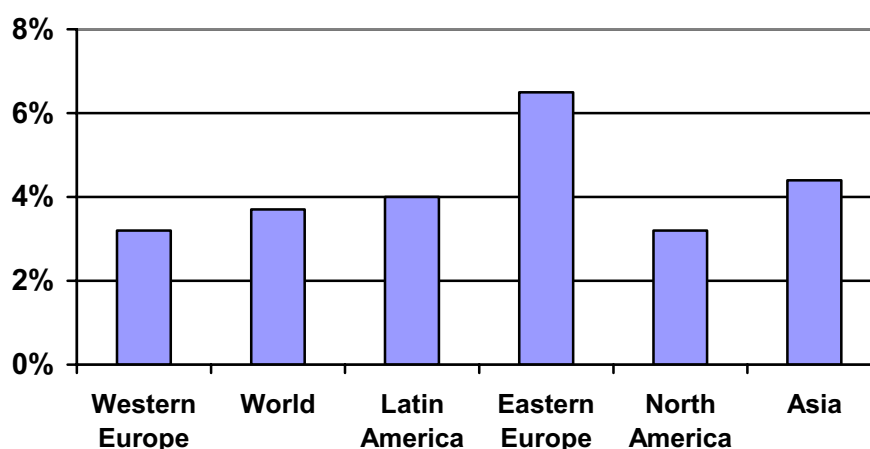
South Korea, with 2004 premiums of USD 777 million, is Asia's largest surety market and the world second largest. The market is characterized by a variety of guarantee insurance products. Seoul Guarantee Insurance Company (SGIC), a government –owned company specializing in guarantee insurance and credit insurance, accounts for nearly 30% of amounts insured in the surety and guarantee market. Much of its bonding business consists of financial guarantees and fidelity bonds (which indemnify an employer for losses caused by dishonest or fraudulent acts of employees). SGIC has the exclusive right to provide domestic credit insurance. The Financial Supervisory Service (FSS) is considering allowing private non-life insurers to compete in the market.

Japan's USD 140 million premium (Swiss Re Sigma, 2006) surety market is highly developed. Surety is written by almost all of the country's non-life insurers and major banks. Among insurers, the three largest providers have market share of more than 70%. Premium growth has been moderate in recent years due to slow economic growth and limited public construction spending.

## 6. PROSPECTS FOR SURETY COMPANIES

Surety premiums are projected to grow from USD 7,9 billion in 2005 to USD 14,6 billion in 2015, at a 3,7% annual real rate, because of the ongoing need to build, maintain and repair the public infrastructure.

**FIGURE 4: SURETY INSURANCE PROJECTED PREMIUM GROWTH, 2005-2015**



Source: Swiss Re Economic Research & Consulting estimates

Premium growth will be highest in Central and Eastern Europe, where surety is still in its infancy, provided that surety companies can successfully compete with banks. Premium growth will also be strong in the less mature markets of Asia and Middle East, where solid economic growth is expected. The establishment of legal and regulatory frameworks for surety bonds in countries such as China and India will further promote the use of surety.

## REFERENCE

Constantinescu, D., A., The insurances of surety, National Publishing, București, 2000

Swiss Re Sigma No 6/2006, "Credit insurance and surety: solidifying commitments"  
Swiss Re Economic Research & Consulting estimate

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# HOUSE COST TRACKING SYSTEM

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## ABSTRACT

*The main objective of this research is to investigate the feasibility of developing a database system to track the cost of individual house construction. This paper discusses the needs for such a system as well as a description of the development process. The results from the testing show that such a system is feasible and will be beneficial for construction companies.*

**Keywords:** Database System, Cost Tracking System

## 1. INTRODUCTION

Databases and database technology are impacting the growing use of computers in significant way (Elmasri and Navathe, 2003). A well understood set of principles for DataBase Management Systems (DBMS) has developed over the years (Ullman, 1988). These concepts are useful both for understanding how to use these systems effectively and for designing and implementing DBMS.

A DBMS consists of a collection of interrelated data and a set of programs to access that data (Silberschatz, Korth, and Sudarshan, 2002). The collection of data, usually referred to as the database, contains information about one particular enterprise. The primary goal of a DBMS is to provide an environment that is both *convenient* and *efficient* to use in retrieving and storing information.

A DBMS is a streamlined, computerized data system that greatly increases the manageability, efficiency and availability of the data resources in an organization. DBMS have become an imperative for businesses that want to stay ahead of their competition. A well-designed and executed database management system could offer a solution to the challenges faced by an organization, thus allowing them to get more business leverage out of their data to improve management and staff decision-making and overall organization efficiency.

The main purpose of this study is to investigate the feasibility of developing a database system to track the cost of each house constructed. The next section discusses a need for developing a database system to keep track of the cost of building a house. Section three describes the system development process. Section IV shows the feedback results from the testing of the system. The last section discusses the conclusion and the direction for future extension.

## 2. BACKGROUND

In the housing construction industry, homebuilders are faced with the difficulties of managing construction projects. Independent research has shown that a significant amount of homebuilders are still using handwritten forms to track and manage house projects. These homebuilders have been experiencing difficulties with their manual systems of documenting and tracking materials, labor, and customer information. The following is a numbered list describing some of the more important difficulties that homebuilders have with these outdated systems.

1. Current systems are inefficient due to manually handwritten processes that record labor, material, and customer information for house projects on formatted 8x11 sheets of paper.
2. The manually handwritten systems cause excessive amounts of redundant data and transcribing errors.
3. Project supervisors and home-offices experience difficulties keeping track of labor and material costs.



4. Unorganized historical data on current and completed houses make it difficult or impossible to compare or correctly determine entire house costs and profits.
5. Control and security of strategic information pertaining to customers, costs, and profits are non-existent with current system.

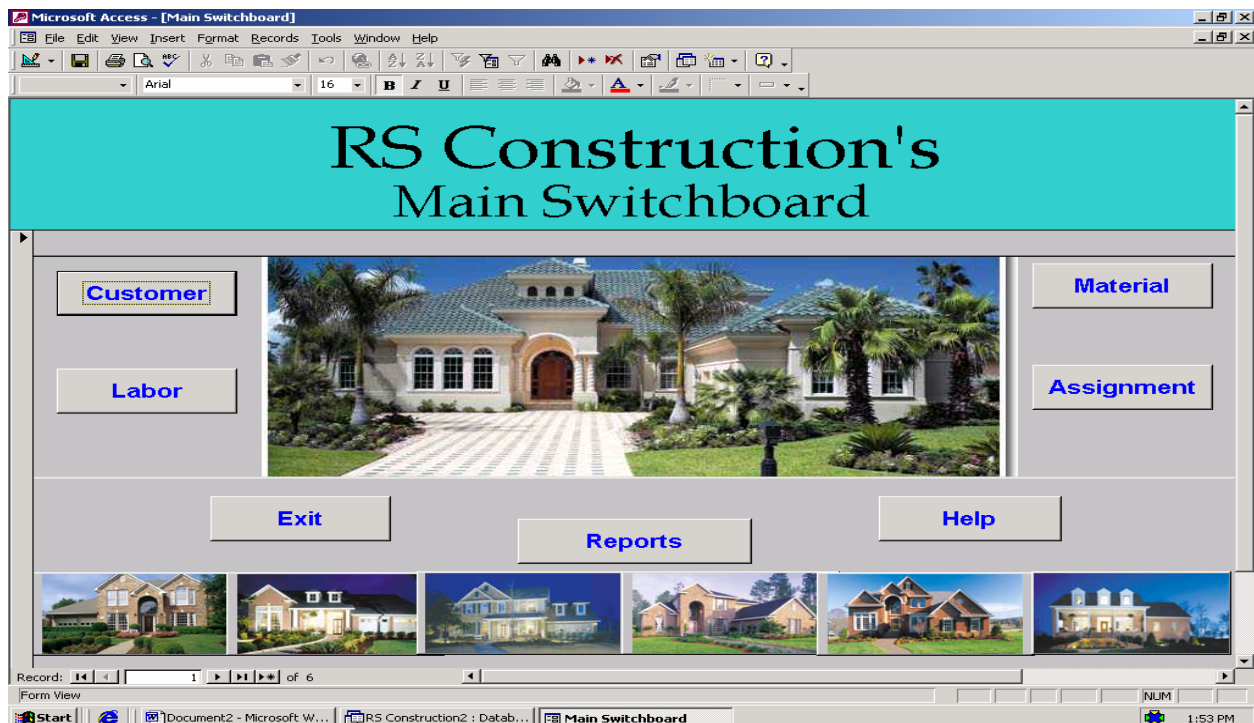
With these problems in mind, developing a database to minimize inherent management problems associated with the housing construction industry is needed; therefore, the main purpose of this study is to investigate the feasibility of developing such a system.

### 3. SYSTEM DEVELOPMENT

The knowledge incorporated into this cost tracking system formalizes the expertise of ten builders and contractors experienced in building houses for over fifteen years. It is evident that the quality of the resulting system is dependent on the quality of the knowledge originally elicited (Bolger & Wright, 1994; Moody, Blanton & Cheney, 1998). The knowledge acquisition process for this study began with the question, "What are the processes that you are using to track the cost of building a house?" The task of tracking cost of a house was then analyzed, resulting in the identification and characterization of important aspects of the task.

The knowledge acquired was integrated into the system with a step-by-step screens described in this section. The tool selected for developing the system was Microsoft Access. There are three primary functions which the user may access through the "Main Switchboard." These functions are maintaining accounts, processing transactions, and printing reports. The system starts with the "Main Switchboard" which will guide a user to other functions integrated into the system. The user simply clicks on the desired area on the screen, and then, when next screen displays, clicks on the desired area on that screen. Other links, such as "Back" buttons and "Process Record" buttons are available at certain places on the screens. Examples of screens and explanations are provided below.

**FIGURE 1: MAIN SWITCHBOARD**



The Main Switchboard consists of four buttons as follows:

- Exit Button – left click with mouse on Exit button will exit the database
- Reports Button – left click with mouse on Reports button will open the Reports Menu screen.
- Help Button – left click with mouse on Help button will open the Help screen
- Customer, Labor, Material, Assignment Buttons – left click with mouse on these buttons will open the Assignment Cycle screen.

FIGURE 2: ASSIGNMENT CYCLE

Microsoft Access - [Main Switchboard]

File Edit View Insert Format Records Tools Window Help

Arial 16

# RS's Assignment Cycle

Maintain Account

Back Transaction Reports

Record: 1 of 6

Form View

Start RS Construc... RS Construc... Main Switchb... Main Switchb... Main Switchb... Main Switchb... Main Switchb... Main Switchb... 2:03 PM

FIGURE 3: MATERIAL ASSIGNMENT SCREEN

Microsoft Access - [House Assignment]

File Edit View Insert Format Records Tools Window Help

Arial 8

## House Material Assignment

RS Construction  
5712 Lexington  
Corpus Christi, TX 78412  
(361) 991-5641

Customer Name: Robert Blake House ID: TRAD102 House Actual Cost: \$1,358.00

Billing Street Number: Cell B Site Street Number: 4586 Spring Telephone Number: 812-568-9584

Billing City: Chino Site City: Corpus Christi Fax Number: 812-568-3514

Billing State: CA Site State: TX E-Mail: convicted@msn.com

Billing Zip: 96142 Site Zip: 78416 Attention of: Sarah Jack

Material ID	House ID	Quantity Assigned	Date Assigned	Quantity on Hand	Material Description	Unit Cost	Extended Cost
Brick601	TRAD102	100	4/29/2002	700	Red 4"x4"x8"	\$1.25	\$125.00

House Type: Traditional House Square Feet: 1810 Begin Date: 8/9/2002 Total Material Assigned Cost: \$125.00

Expected End Date: 2/10/2003 House Estimated Cost: \$110,000 House Estimated Price: \$170,000

Back

Record: 1 of 6

Form View

start ZIP-100 (E:) RS Construction U... RS Construction2 ... Main Switchboard House Assignment 9:54 PM

The Assignment Cycle screen consists of four buttons as follows:

- Back Button- Left click on Back Button will open main switchboard screen
- Maintain Accounts Button- Left click on Maintain Account button will open maintain account screen
- Transaction Button-Left click on Transaction Button will open Transaction Menu
- Reports Button- Left click on Reports button with mouse will open the Reports Menu screen

The Material Assignment Screen allows a user to assign materials to each house. The system will then automatically calculate the costs of materials assigned and update the total cost of the house.

#### **4. SYSTEM TESTING**

In order to examine and test the database, ten homebuilders were asked to test the system. Of the ten homebuilders, all of them felt the database could be useful in an office and on-the-job setting. In addition, seven out of the ten stated the database would be even more valuable if it could track vendor, employee, sub-contractor, and start-to-finish information of jobs. More than half of the testers wanted to know if the pictures of the houses that are included in the GUI could be personalized to show houses that their companies had built. Additional details on the responses are provided below.

Homebuilder #1:

Activity: The homebuilder went through the system from the Switchboard to printing the List of Customers without any system complications.

Feedback: The homebuilder felt that the system was adequate to meet the beginning needs of managing and tracking house projects. He suggested expanding the capabilities of the system to include vendor information such as paint and lumber vendors. He was also interested in personalizing the graphics such as the pictures of houses that were used in most of the screens.

Homebuilder #2:

Activity: The homebuilder went directly to Assign Material screen and assigned materials, tallied those assignments, and assigned the totals to the specified house that was chosen.

Feedback: The homebuilder was impressed with the graphic user interface. For example, the picture of a lumber stack to distinguish the Assign Material button from the other buttons on the transaction screen.

Homebuilder #3:

Activity: The homebuilder proceeded through the screens completing the program without difficulty.

Feedback: The homebuilder thought the database was very useful. He felt expanding the program to include house-remodeling projects, fences, and decks would make the database even more useful. It was explained to the user that the program could be expanded to meet job descriptions other than the ones initially used to create the program.

Homebuilder #4:

Activity: The database was run through all screens and activities.

Feedback: The homebuilder felt the system was somewhat slow when changing from screen to screen. This slowness is due to the GUI that was implemented into the program to give the database a better appeal to the users of the system. It might be possible to increase the quickness of the system at a later date.

Homebuilder #5:

Activity: The homebuilder navigated between screens with ease.

Feedback: The homebuilder was impressed with the database, but was unsure of the Field-Supervisors having the computer capabilities of using the program. When asked further questions pertaining to his doubts, information was obtained suggesting employees might be resistant to change from the manual system.

Homebuilder #6:

Activity: The homebuilder followed the database program through all screens without experiencing any difficulties.

Feedback: The homebuilder thought the graphics were excellent, but was concerned about the length of time between clicking on a navigation button and the time it took to get to the next screen. In addition, it was commented that it would be nice to be able to add certain features such as changing the color schemes and graphics of the screens.

Homebuilder #7:

Activity: The homebuilder simulated data entries into Add Materials, Modify Materials, and Delete Materials.

Feedback: The homebuilder liked the option to add, modify, and delete materials. He felt that this option would definitely decrease the paperwork that is needed to perform this function with the manual system that he is currently using.

Homebuilder #8:

Activity: The homebuilder navigated through database to "Report Menu" screen and proceeded to do a "Print Preview" of the Customer, Material, and Labor lists of information.

Feedback: The Homebuilder commented that these screens would be useful in viewing and tracking this particular information; however, he concluded that the List of Customers appeared to be "bunched together with information".

Homebuilder #9:

Activity: The homebuilder followed the database to the Maintain Accounts screen and proceeded to simulate adding, modifying, and deleting information in the Customer, Material, and Labor accounts.

Feedback: The homebuilder felt the ability to find information on these accounts by clicking on the "find button" would be beneficial to all users.

Homebuilder #10:

Activity: The homebuilder navigated through program without difficulty.

Feedback: Homebuilder felt program could be useful, but was interested in a more developed program such as one that included payroll accounting abilities.

## 5. CONCLUSION AND FUTURE EXTENSION

The results of this research show that a more efficient method for the management of individual house constructions in the form of a database is possible and desirable. The homebuilders that participated in this research gave viable input in how a standard database may be adapted and utilized to help companies more effectively and efficiently update their recording systems and go about the business of constructing homes. Each company, in the development of their own specific system, would be able to adopt features that would best suit their needs.

Further implications of this research can be derived by expanding the types of companies that are integrated into the database system and expanding the database to mobile and online capabilities. Other companies that home construction businesses interact with, such as preferred architecture and design firms as well as material companies, could be included in the information network of the database. This could be accomplished by testing the database online through the Internet and adopting mobile devices, e.g., laptops or hand-held organizers, so that the information would be available for immediate update and perusal at construction sites.

## REFERENCES

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# YOUTH AND THE DIGITAL DIVIDE: EMPOWERING PUBLIC ADMINISTRATION STUDENTS THROUGH INFORMATION COMPETENCY EXERCISES

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## ABSTRACT

*Traditional discussions about the digital divide have focused on differences in social groups in the quantity of access and use of the internet. Evidence shows that youth are on the right side of this divide being major users of the internet and communications technologies. However, recent data shows that such usage is directed mostly towards social networking tasks. We argue that quality of internet use is more important than quantity of use and that youth need training in using the internet in ways that empowers them as citizens. Specifically, we discuss teaching Public Administration students how to gain the competencies needed in this regard. We offer some exercises that can be incorporated in Public Administration curricula as a place to start.*

**Keywords:** digital divide, information competency, public administration teaching.

## 1. INTRODUCTION

Studies have shown that internet usage in advanced countries has grown dramatically over the last ten years. Even though there are discrepancies within societies with regards to race, economic status, and age, the internet nevertheless plays a major role in the lives of the majority of people in these countries. Such internet usage is especially strong among young people. Even though this development (of intensive youth usage of the internet) has initially been met with excitement, recent data and reports offer some cause for concern. Broadly, this concern relates to the fear that young people these days will use the internet for social interaction and personal content creation rather than for researching issues and informed decision making as traditionally defined. In other words, young people are becoming better at networking with friends online than at critically processing electronic information and using it in their roles as informed citizens.

In this context, the purpose of this paper is to present ideas for improving the quality of internet content usage among students. Specifically, we discuss here how to tailor information competency instruction such that students in Public Administration programs can be trained to make informed, critically reasoned, decisions in the public and private spheres using the content on the internet. In the next section, we present an overview of internet usage trends among Americans in general and American youth in particular. This will be followed by a brief discussion of the digital divide issue. This discussion is important because it draws attention to the fact that differences in society in the quality of internet use are as important as differences in quantity of use. In the final section we present an overview of the information competency approach and make specific recommendations that are appropriate for Public Administration programs.

## 2. KEY INTERNET USAGE TRENDS

The rise in the use of internet and communication technologies (ICT) has been perhaps the most dramatic for any technology in the industrialized world. For example, in the US, only 15 percent of adults had access to the Internet in 1995. By 2006, that number increased to 73 percent (Madden, 2006). Similar increases occurred in other industrialized countries too. In many OECD countries, internet usage doubled between the years 2000 and 2005. For example, internet usage increased from about 19 percent to nearly 47 percent in Austria. In France, these numbers went up from 12 percent to 34 percent and from 19 to 62 percent in the U.K. (OECD, 2006).

Not only is the use of the internet increasing but also more and more people are accessing the internet through faster connections and in mobile ways. This aspect of the trends in internet usage is important because younger users, and especially college students, tend to use the internet in this way. The

purposes for which they thus use the internet has implications for the recommendations discussed later. The percentage of households that have broadband internet connections has increased from 29 in 1995 to 42 in 2006 (Madden, 2006). About a third of the users access the internet over a wireless connection. Many of these users occasionally get on the internet at a place other than their work or home (Horrigan, 2007).

However, not all users display similar patterns of usage. Nearly 90 percent of 18 to 29 year-olds are internet users compared with 32 percent that are over 65 years old (Madden, 2006). Internet usage by 12 to 18 year-olds is also estimated to be over 90 percent. For Internet users below the age of 30, over 88 percent use wireless enabled notebook computers and 40 percent also have access to internet enabled cellular telephones. In this age group, over a third frequently access the internet at a place other than their work or home (Horrigan, 2007). The notion that many young people use the internet for accessing social networking (example, MySpace), content creation and sharing (YouTube, Wikipedia), and instant communication (various IM / chat programs) is not surprising. About 55 percent of youths between 12 and 17 years of age use social networking web sites (Lenhard and Madden, 2007). Further, half of all teens use such sites pretty much every day.

There is a danger that the current generation of youth is being socialized into easily accepting the validity and authenticity of content created online by their peers and strangers. The democratic and participative nature of the ICTs has the advantage of making youth feel that their voice counts. Over-reliance on such technologies however may lull them into accepting such content as valid and authentic for purposes of operating in the educational and professional domains. A simple example dramatically illustrates this point.

Let us look at the usage of two reference websites, Encarta and Wikipedia. The former seeks to be an electronic encyclopedia that was originally conceived to compete with classic reference sources like the Encyclopedia Britannica. It presents simply written but thorough articles that are research based. Much of the Encarta website (owned by Microsoft) is available for free use on the internet. Wikipedia on the other hand relies on users to post entries about various topics. It uses server software technology (called 'wiki') to allow users to simply and easily edit web pages. Thus, an entry in Wikipedia could change several times in a day and each time due to changes made by users in different locations. As such, Wikipedia is user-centered and does not rely on a specific authority, or authorities, to manage its content or to ensure the thoroughness and validity of such content.

The single largest demographic segment that uses Wikipedia are in the 18-29 years group. To complicate the issue, 50 percent of Wikipedia users are college graduates (Rainie and Tancer, 2007). Further, 48 percent of Wikipedia's traffic comes from people in the 18-34 age group. In late 2002, Encarta's share of the online reference website market was nearly 2 percent while Wikipedia's was 3 percent. By the middle of 2005, Encarta's share had dropped to 0.7 percent while Wikipedia's share grew to 21 percent (Madden and Fox, 2006). Much of Wikipedia's growth was driven by youth users. Three significant aspects of youth internet usage are visible: most youth are online, they use it for social networking, and they are increasingly relying on non-authoritative sources of information.

### **3. A DIGITAL DIVIDE IN QUALITY OF USE**

When the spread of ICTs was on the cusp of becoming widespread, researchers in the social sciences and policy makers started worrying that society is ending up divided along the lines of technological 'haves and have-nots'. The initial concern was that widespread differences in access to and use of internet technologies are coalescing around the existing economic divides in society. Several terms are used to conceptualize this internet related social stratification: digital divide, knowledge gap, information gap, and information poverty, for example. Even though differences in definitions exist in the literature, these concepts broadly seek to capture the notions of gaps in information access through technology, information overload, and information deprivation (Yu, 2006). The National Telecommunications and Information Administration created a series of 'A Nation Online' reports documenting the differences in internet access and use along economic, racial, educational, and geographic lines (see for example, NTIA 1995, 1998). This research showed that the poor, African-Americans, the elderly, those without a

college education, and those living in rural parts of the country have relatively lower levels of access and use of the internet. The implication was that low levels of access and use could significantly impact the quality of life for these citizens as well as, potentially, diminish the quality of their participation in the political system.

Over time, researchers in this area started paying attention to more complex issues than merely quantifying differences in access and use of the internet (even though that project is still very important). Writers started exploring issues of quality of use and purposes for which the internet is used. For one, writers started questioning whether the differences exist as a gap or as different points on a continuum. Conceptualizing the digital divide one way or the other has implications for what can be done about it (Sassi, 2005). Therefore, it is not enough that people spend a lot of time online; what concerns social scientists now is the use to which online resources are being put to. The notion that we should distinguish between the quantity and quality of internet use is reinforced by recent data presented in Table 1.

**TABLE 1**  
**TYPE OF INTERNET ACTIVITY AND PROPORTION OF USERS**

Send or read email	91%
Search for a map or driving directions	86%
Research a product before buying it	78%
Check the weather	78%
Visit a government website	66%
Research for school or training	57%
Create content for the internet	19%
Take a class online for enrichment	13%
Take an online class for credit	12%

(Source: Pew Internet and American Life Project, 2006-2007 data)

Britz (2004) expanded the debate further by arguing that we should assess the digital divide by the ability and willingness of social groups to gather, interpret, and apply information via internet technologies. This point has implications for what it means to be an engaged citizen in the modern age. This is a challenge for teachers: when we train students in Public Administration, we need to be clear what competencies in this area we want them to take away. It is important to note that the emphasis in Britz's argument is not merely about quantity of use of the ICTs. In fact, anecdotally, we know that our students are very fluent in the use of ICTs and that they use them very often. The question though is, do they use the ICTs in a way that enhances the quality of their participation in the political and public policy worlds?

An important point with regard to people's choices in using ICTs was made by Gunkel (2003). He notes that many potential users of the ICTs may be voluntarily turning away from aspects of this technology. The issue then is not access but the intent with which people use ICT. A university student could be spending two hours a day on the internet but much of this time may be spent 'chatting' with friends and looking through friends' profiles on social networking sites. In the traditional definitions of the digital divide, this student would not be a 'have-not'. However, by refusing to deploy the technology for anything other than social activity, the student may be underutilizing its possibilities as well as underestimating his/her own potential as a digital citizen. Quality of use is the issue here. Thus the new digital divide is between those who use ICTs in ways that empower them in their roles as citizens and those who don't do that. A systematic approach to teaching students how to use ICTs so as to expand their role as citizens could be useful in this regard. Such instruction may lead to students learning through classroom experience that they can know more about their government and that they could possibly affect change within that government even if in small ways.



#### 4. SUGGESTIONS FOR CLASSROOM EXERCISES

The idea that universities must train the new generation of students in the critical and responsible use of electronic information has been well accepted for at least a decade. Much of the push towards implementing information competency standards in 2-year and 4-year colleges, and in assessing student performance on such competencies, is a result of this idea. However the traditional IC standards are, broadly, geared towards teaching students the skills of: describing information needs, locating electronic information, assessing its credibility, and using it responsibly in a student's own projects (ACRL, 2000). These broad competencies need to be adapted and applied to specific disciplines so that we develop well-informed and empowered students.

The following are some projects that incorporate one or more of the broad principles of information competency. These projects may be incorporated into several Public Administration courses and can also be modified easily. The projects must involve a reflective component and will require students to step back in the end and understand how and why they used ICTs in the way they did. These exercises are aimed at undergraduate students for two reasons. It is important to establish a sense of empowerment early in the lives of youth. If, on the contrary, a sense of powerlessness and apathy sets in at that age, it may be harder to change their attitudes later in life. Also, many graduate students in Public Administration programs typically have some professional experience with public or nonprofit agencies. As such, they have a better understanding of their capacities and limits as citizens in the digital age than undergraduate students.

Examine and comment on a public agency's budget: It is powerfully exciting for students to learn that they can know about how their governments spend money but also to influence how such money is spent. Even though it is true that much public spending happens through political and lobbying processes over which ordinary citizens have very little control, some agencies do post their proposed budgets online and seek public comment. Exercises that involve students exploring the budgets in detail and in using ICTs to send comments and feedback to their policy makers could help students overcome their political apathy.

Report problems to city or county agencies: Many city and country agencies, even many of the small ones, provide some opportunities for citizens to give feedback or report problems. For example, a parks and recreation department may allow citizens to report problems at the city's parks through the department's website. Similarly, citizens may be able to report problems with city streets, traffic lights, etc.

Online consensus building: In this exercise, groups of students from one or several classes in the program could be assigned to chat rooms where their goals are to discuss a current public policy issue and to reach a consensus on an action plan to address that issue. For example, the City Council may be considering two proposals to improve a blighted street in the old part of town: either to build subsidized housing or to turn it over to developers for the construction of restaurants, clubs, and stores. By requiring students to debate the issue through chat rooms and reach a consensus we can teach them, first, that electronic chat-like technologies can be used for public purposes and not just social purposes, and second, that groups of people can actually reach consensus through compromise on sticky public policy issues. Further, in order to support their arguments, students must be taught to research online for data and examples. These exercises have to be carefully planned and would require instructor presence in the background.

Write reports on the risks of ICTs for private citizens: Even though ICTs have much potential, they also pose serious risks for citizens. These risks range from identity theft, lost privacy, and various kinds of scamming (financial, impersonation, etc.), to risks for children. These risks are a public policy concern and our youth need to know the extent of the risks involved as well as what the government can or can not do in a democratic society. Exercises such as these can help students realize what steps they, and their families, can take to protect themselves in the online world as well as develop in them an understanding of the necessary tradeoffs between values that policy makers have to make in order to protect citizens while preserving freedoms.

Write position papers on controversial issues: Encouraging students to conduct online research on topics where strong, diverse positions exist will help them to think through criteria for assessing the quality and thoroughness of electronic information. For example, they could study and write a position paper on a topic such as global warming. They will be required to examine data from different sources, evaluate the quality of such data, assess and judge the ways in which such data is being used, and reach conclusions on the basis of their best judgment. Such an exercise could train students into working through the controversial, complex, biased, and aggressive nature of information on the internet (in other words, with the 'Wild West' nature of the internet).

## 5. CONCLUSION

We hope that the internet is more than just a tool for youth for socializing and posturing. We believe that it holds many opportunities for our youth to engage with and change their social and political worlds. The true digital divide today exists among those who can use the internet to empower themselves and their communities and those that will not. Public Administration students must be especially expected to be proficient at this given the nature of their academic discipline. Teaching these students how to effectively use the broad range of ICTs through exercises like the ones discussed in this paper could enhance the quality of their citizenship.

## REFERENCES

- ACRL, "Information literacy competency standards for higher education", 2000. Association of College and Research Libraries.  
<http://www.ala.org/ala/acrl/acrlstandards/informationliteracycompetency.htm>
- Britz, Johannes, "To know or not to know: A moral reflection on information poverty", Journal of Information Science, Vol. 30, 2004.
- Gunkel, David, "Second thoughts: Toward a critique of the digital divide", New Media and Society, Vol. 5, 2003.
- Horrigan, James, "Wireless internet access", February 2007. Pew Internet and American Life Project, [www.pewinternet.org](http://www.pewinternet.org).
- Lenhard, Amanda, and Madden, Mary. "Social networking websites and teens: An overview". January 2007. Pew Internet and American Life Project, [www.pewinternet.org](http://www.pewinternet.org).
- Madden, Mary. "Internet penetration and impact", April 2006. Pew Internet and American Life Project, [www.pewinternet.org](http://www.pewinternet.org).
- Madden, Mary, and Fox, Susannah. "Riding the waves of 'Web 2.0'". October, 200. Pew Internet and American Life Project, [www.pewinternet.org](http://www.pewinternet.org).
- NTIA, "Falling through the Net: A survey of the 'have-nots' in rural and urban America", 1995, National Telecommunications and Information Administration, [www.ntia.doc.gov/ntiahome/fallingthru.html](http://www.ntia.doc.gov/ntiahome/fallingthru.html).
- NTIA, "Falling through the Net - II: New data on the digital divide", 1998, National Telecommunications and Information Administration, [www.ntia.doc.gov/ntiahome/net2/](http://www.ntia.doc.gov/ntiahome/net2/).
- Rainie, Lee, and Tancer, Bill. "Wikipedia users", April 2007, Pew Internet and American Life Project, [www.pewinternet.org](http://www.pewinternet.org).
- Sassi, Sinikka, "Cultural differentiation or social segregation? Four approaches to the digital divide", New Media and Society, Vol. 7, 2005.
- OECD, "Households with access to the Internet in selected OECD countries", Organization for Economic Cooperation and Development, October, 2006.
- Yu, Liangzhi, "Understanding information inequality: Making sense of the literature of the information and digital divides", Journal of Librarianship and Information Science, Vol. 38, 2006.

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## **OPPORTUNITIES FOR ECONOMIES OF SCOPE: FOCUS ON AFRICAN AMERICAN AND HISPANIC MARKETS**

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### **ABSTRACT**

*This paper explores the economic impact of the buying power preferences of the Hispanic and African American markets and identifies the advertising segmentation strategies used by many corporations. A review of the similarities of the youth market across cultures is examined and a plausible rationale for combining the two markets for advertising purposes is offered with implications for the global youth market. The authors suggest that Hispanic and African American youth serve as opinion leaders in many markets nationally and globally. Developing a strategy to combine these segmented markets into one market may be the most efficient and effective strategy to address economies of scope opportunities.*

**Keywords:** Hispanic and African American Markets segmentation, ethnic marketing strategies, economies of scope for Hispanic and African American Markets, youth markets.

### **1. INTRODUCTION**

Lewis Nevaer wrote 'There is something called black in America to be sure, but there is something called Hispanic, and whatever Hispanic is, it describes and affects more Americans than that other something called black...' (103). Hispanics represent not only the largest minority in the United States, but a group of consumers who changed American business as we know it, by demanding to be spoken to in Spanish (Nevaer, 2004). The rapid growth and economic power this "majority minority," has triggered the expansion of ethnic marketing efforts in many organizations. Although current efforts focus toward Hispanics, African Americans continue as a strong and important marketing category. Businesses are beginning to understand that people of color are a huge source of potential business, which live and think in ways that are in some areas different from the general market. While both minority, Hispanics and African Americans have different characteristics. Still, despite all the differences between them, are there opportunities to market the same benefits to both groups, therefore obtaining economies of scope through advertising? This paper will reveal the rationale for opportunities for economies of scope when aiming at the African American and the Hispanic markets through:

1. Comparing the Hispanic and African American markets
2. Examining American business response to bilingualism
3. Examining American business response to the importance of the Hispanic and African American markets
4. Exploring commonality in the Hispanic and African American market

### **2. HISPANIC AMERICAN MARKETS**

According to the Selig Center for Economic Growth at the University of Georgia, in 2008, minority buying is projected to exceed 1.5 trillion, triple its 1990 rate of \$456 billion. This is a gain of \$1.1 trillion or 231 percent, representative of "major economic strides among blacks and Hispanics" (Miller, 2003). From 1990-2008 overall buying power will increase 148 percent, while Hispanic buying power will increase by an astounding 357 percent, and that of African Americans will increase 189 percent during that time period. Jeffrey M. Humphreys, director of the Selig Center also reports that the Hispanic population will increase 137 percent compared with 24.8 percent for the total population. He goes on to note that even if stricter immigration laws are put into practice, the Hispanic population will still grow faster than other groups because of its youth (Miller, 2003).

The Hispanic population growth rate is several times that of white Americans, blacks and other groups. The U.S. Census Bureau estimates that 43 million Americans or one in seven, are Hispanic, which makes up about 14 percent of the population (Beirne, 2005). Within the next four years the number of Hispanics

is expected to total more than 49 million, with nearly \$1 trillion in buying power. Selig Center research indicates that estimates do not account for the 4 to 6 million undocumented Hispanics or the 4 million Hispanics living in Puerto Rico (Miller, 2003). J. R. Gonzales, chairman of the US Hispanic Chamber of Commerce, credits the growth of Hispanic owned businesses to the group's increase in buying power. He notes that "a Hispanic owned business tends to employ more Hispanics, and as the workforce grows, more of the workers move into better jobs, companies employ more people, and pay better wages," thereby strengthening [the economic buying power of] the Hispanic community (Miller, 2003).

### **3. AFRICAN AMERICAN MARKETS**

African American prosperity increased rapidly, most especially during the 1990's with growth in areas such as per capita income, education levels, and home ownership. High school graduation rates among this group now equal that of whites giving them increased opportunity for entry level jobs and higher wages (Miller, 2003). The African American population equals 36.4 million people, or about 13% percent of the total population, and total buying power of black Americans is expected to reach \$956 billion by 2009, according to the Selig Center. This buying power has doubled over the past two decades, and has grown 50 percent faster than that of the U.S. population as a whole (Miller, 2003).

In spite of these accomplishments, the African-American consumer demographic is often overlooked or poorly understood. "A misconception stubbornly persists among retailers and others that black means 'poor'" (Pamplin, 2005). However, Selig Center research confirms that unlike other minority groups, African Americans frequently neglect to spend money in their own communities. James Clingman, founder of the Greater Cincinnati, Northern Kentucky Chamber of Commerce said, "It's not power when you spend your money and it doesn't bring your group any significant benefits..." There is nothing wrong with spending in your own community, "that is how you build a legacy of wealth" (Miller, 2003).

### **4. HISPANIC AND AFRICAN AMERICAN MARKETS COMPARED**

Similar to the Hispanic population, the African American population is younger than the general market's median age of about 40 years. The Hispanic population has a median age of 27 years compared to the population as a whole at 36 years. About a third of the Hispanic population was under 18 in 2006, compared with a quarter of the total population. The black population is slightly older than the Hispanic population with a median age of 30 years. About 31 percent of the black population was under 18, compared with 25 percent of the total population. Both groups are surging in terms of home ownership, business growth, college graduation rates and computer usage (Miller, 2003). However, there is dissimilarity in income level as there are more African American households with income greater than \$75,000 (Pamplin 2005).

According to the CIA World Factbook As of 2006, African American and Hispanic consumer markets are already larger than the entire economies of all but nine countries in the world. For example, Hispanic and African American buying power alone exceed the GDP of Argentina at 543.4 billion and will exceed the 2006 GDP of Argentina at 1.07 trillion. By 2010, the buying power of African Americans and Hispanics will also exceed the GDP of Canada which is 1.165 Trillion, making it the ninth largest economy in the world.

There is a lack of knowledge of how sophisticated the African-American market has become. Like most consumers, African Americans want their specific needs addressed in products and services along with culturally relatable images in advertising and print. Views conflict concerning both the African American consumer image and their role in the American market as a whole. Some African Americans consider themselves a mainstream culture with specific brand and product purchases similar to those of other consumer populations. They find income level to be a better indicator of specific brand purchases and shopping patterns, than race or culture (Pamplin, 2005).

Tim Cote, vice president of marketing at Oregon based Plaid Pantries Inc., said, "Like most demographics, neighborhood and economic influences have a large impact on this customer. My opinion is that if you took a similar income demographic of black Americans and white Americans, their buying patterns would not be very different. We've lived together for hundreds of years, and because of that, we

are from the same culture. If you take a higher-income black consumer and a higher-income white consumer, you would not see much difference," the only clear difference between African Americans and other consumer groups is the choice of hair and skin care products (Pamplin, 2005).

When comparing the African American and Hispanic minority groups, some find their minority status to be the only commonality. The multifaceted nature of the Hispanic culture does not weigh against the common culture that all African Americans share. Morris explained further, "I don't think there is much similarity between the Hispanic group and the African-American group because the Hispanic group generally, with some exception, is within three generations of immigration. Because a significant majority of the Latino population is within the first three generations, the culture permeates them much more" (Pamplin, 2005).

## **5. AMERICAN BUSINESS RESPONSE TO BILINGUALISM**

Hispanics have not only changed the business world, but historical trend of the American immigrant population. In the past, learning English was a natural part of blending in to the American culture. Nevaer tells us that "in 2003, however, fully 27 percent of Hispanics were not proficient in English, meaning they did not know enough English to order a Big Mac at McDonald's in English." Another 63% knew enough English to keep their jobs, but they spoke mostly Spanish (Nevaer, 2004). The statistics are expected to increase in 2025.

Although conservative activist Phyllis Schlafly stands by her demand that Spanish be banned from the government and that "foreign" words be "forcibly" removed from English spoken in the United States, there is a growing increase in the use of Spanish in the marketplace. As of 2003, one out of three consumers in North America was Hispanic. By 2025, one out of two consumers living in North America will speak Spanish (Nevaer, 2004).

Spanish speaking consumers contend that companies that do not accommodate their language needs are culturally insensitive (Cox and Beale, 1997). American business understands that it must rapidly adjust to the changing American population or lose profits. In today's market, the sale often depends, on speaking a different language (Nevaer, 2004). Corporate America assures that it will continue to increase the use of Spanish in an effort to improve customer service and to reach new customers. In businesses it is becoming commonplace to offer bilingual signage, websites, and communication networks that make it easier to do business with Spanish speaking customers.

## **6. AMERICAN BUSINESS RESPONSE TO THE IMPORTANCE OF HISPANIC AND AFRICAN AMERICAN MARKETS**

The current surge in the economic power of the Hispanic market has caught the attention of many organizations. However, many organizations are confused about how to truly reach its multicultural consumers. Wal-Mart understands that a diversified workforce is the key to clearly understanding its customer needs. Store material reflects the varied tastes of its diverse consumer population and different ethnic groups are well represented in the company's ads and marketing materials. Wal-Mart's plans to shift from cookie-cutter stores all with the same products to six different store models to accommodate different demographic groups such as Hispanics, empty-nesters, and rural residents. Wal-Mart's U.S Chief Executive, Eduardo Castro-Wright, is responsible for the new approach. Other companies such as Best Buy Company and Federated Department Stores Incorporated have also adopted this theory as a way to booster slow sales (Zimmerman, 2006).

The Department of Housing and Urban Development (HUD) launched what it referred to as the "bilingual" campaign, with the goal of creating 5.5 million first time minority homeowners by the end of the decade. Since its inception in 2002, 2.6 million minority families now own their own home (Mortgage Banking, 2006). Naturally, home ownership creates the need for home furnishings, and retailers are not about to be left behind. The Helsingborg, Sweden-based home furnishings merchant Ikea stays sensitive to its customers needs. In an effort to appeal to Hispanic and African American customers, select stores showcase living room displays fit for a large family. Ikea also offers a Spanish language catalogue and

advertises on popular shows that appeal to African Americans (Bryer, 2006). 7-Eleven, Inc., is adding a new basic cell phone to target Hispanic consumers. The new, low-priced phone offers instructions in Spanish as well as English. The company also advertises that calls to Mexico, for example, cost only 39 cents per minute (Larcy, 2004). California based companies with large Hispanic populations, like Hewlett-Packard mail English/Spanish language catalogs to Hispanic business owners and Office Depot includes bilingual pages on its site. In addition to exchanging English content for Spanish text, some companies even replace existing photos for culturally relevant images (Bryer, 2006). Kmart produces a weekly ad circular in Spanish and started "La Vida" an entertainment and lifestyle addition. Kmart also agreed to develop a collection of brand apparel, accessories, footwear and lingerie designed and inspired by Latin actress Thalia Sodi (Larcy, 2004). Like Kmart, Hershey Foods also chose Thalia as a spokesperson and is in the process of buying Mexican confectionery company Grupo Lorena.

Kraft took things a step further by eliminating its Hispanic division entirely. The company now includes Spanish marketing as a part of all its products. Kraft addresses its African American consumers through sensitivity to health concerns they face. Kraft offers Diabetic & Delightful ads for SnackWell's cookies and General Foods International Coffee, sugar free Jell-O, and Cool Whip Free. Shake 'n Bake create pitches that encourage the switch from fried to baked chicken dinners.

Miller Brewing Co., America's second-largest brewer, and Univision Communications Inc., the nation's leading Spanish-language media company signed a major cross-platform advertising and marketing agreement. Luis Altuve, Miller's director of multicultural marketing, called the Univision partnership "Miller's biggest commitment ever to Hispanic marketing" (Larcy, 2004).

Los Angeles houses the number one Nissan car dealer in the United States and uses Hispanic radio to reach consumers. As of 2005, Nissan supported six brands in the Hispanic market as one in every two buyers in the Southwest is Hispanic (Wentz, 2003). Viva Disney, a Spanish-language radio program targets Latino moms and their families by providing music they can enjoy together. "Backed by the extensive programming expertise of Radio Disney and ABC RadioNetworks, Viva Disney is designed to appeal to the varied musical tastes and interests of today's Latino radio audiences," said Jean-Paul Colaco, President and General Manager of Radio Disney (Kobashi, 2005). Antonio Swad, founder of the chain, Pizza Patron, targets the Hispanic market in Arizona, California, Colorado, Nevada and Texas. Swad began an innovative strategy of accepting pesos for US dollars. Wal-Mart and other retailers operating in U.S. border cities are also known to accept pesos. Kelly McDonald, president of Dallas-based McDonald Marketing, a specialist in marketing to Hispanics, called the chain's promotion, "fantastic and brilliant." "It's revolutionary and 100-percent customer-focused," She added, "It lets those customers know the program is for them, and they are a primary consumer target, not a secondary one (Ruggles, 2007). Not all Americans agree with this approach as they believe that Swad is discouraging Hispanics from learning English. Swad plans to continue with the "pizza for pesos" campaign if it proves profitable.

## **7. COMMONALITY IN HISPANIC AND AFRICAN AMERICAN MARKETS**

In the Hispanic and the African American consumer, urban culture remains a common bond. Today, the urban market is more often defined as a "mindset," which is not limited by geographic or racial boundaries. Magazines and television are colored with urban influences as the urban lifestyle is now considered mainstream (Music Business International, 2001).

Lowrider Magazine, a Hispanic consumer magazine which started in Los Angeles is currently the best-selling automotive publication on the newsstand altogether, surpassing such automotive icons as Car and Driver, Sport Truck and Hot Rod, according to the Audit Bureau of Circulations. Lowriders, which are colorful, pavement-hugging cars, have become as much a part of mainstream automotive culture in the US and Japan as Fords and Hondas. Since the early 1990s, Lowriders (and other aspects of Mexican American culture) have become a prominent feature in hip hop culture and have since become common to urban youth culture in general (Music Business International, 2001).

Lowrider Magazine Publisher, Al Lopez credits the magazine circulation growth to the adoption of "low-rider ethic" by Los Angeles hardcore rappers Dr. Dre and Eazy-E who first helped bring lowriding to a

mainstream crowd more than 13 years ago (Lannert, 1993). Currently, videos by many rappers and R&B acts sport wide body Lowriders. While, Black Entertainment Television and Vibe magazine have both run competitions with a low-rider as the prize. Thump Records president Bill Walker put the African American influence on the sport more simply, "Lowriding has always been cool, but it was the black rap artists that made lowriding more cool" (Music Business International, 2001).

## **8. OPPORTUNITIES FOR ECONOMIES OF SCOPE**

Economies of scope are most simply defined as what exists when it is less expensive to produce two products together than it would be to produce each one separately. From an advertising perspective, it would be less expensive to advertise certain products to both Hispanics and African Americans as a whole than to advertise to each group separately. Young African Americans are increasingly participating in Study Abroad programs which exposes other cultures to American youth up close and personal (Beale and Coronel, 2006). The youth culture that permeates each market segment makes this possible. The greatest opportunities for economies of scope in the African American and Hispanic markets are present in the magazine industry. In both groups 85% are avid magazine readers. According to the market research company Synovate, in conjunction with Magazine Publishers of America (MPA), and Hispanic Magazine Coalition, it was found that 43% of Hispanics trust magazine advertising, while only 38% trust television. Numbers drop to 25% when surveyed on their belief in Internet advertising. Similarly, 47% of Hispanic magazine readers trust the information reported in magazines, which is greater than that of the general market. Only 37% view the Internet as a credible source of information. Synovate also found that 54% of Hispanics believe that magazine advertising provides them with something that they can't find in other media such as TV, radio or the Internet, more so than the general market. Additionally, 73% of Hispanics say that magazine advertising gives them good ideas about what to buy (Hispanic PR Wire, 2006). Similarly, MPA found that more than eight out of ten African-American or 85%, are magazine readers, reading 11.9 issues per month, compared to 9.1 issues per month for all U.S. adults (Magazine Publishers of America, 2006).

## **9. CONCLUSION**

Despite differences, African Americans and Hispanics connect through the youthfulness of their populations. Since urban culture is more of a state of mind than a geographical location or race, African Americans and Hispanic youth are presented with the opportunity to share and grow from each others cultures. Magazines are the perfect tool to achieve this end. Though much of the current "marketing wisdom" suggests that market segmentation is a good strategy for targeting special populations, there is a very real opportunity for a more economical strategic approach. Organizations who want to make the best use of their advertising dollars should know, understand and make use of this somewhat more complex yet simple phenomena. Additionally, as one looks globally, American urban influences from Hispanics and African Americans have impacted much of the buying decisions of young white Americans as well as youth around the world. These two groups serve as opinion leaders particularly as it relates to music and clothes. This, of course, is facilitated through changes in technology globally. Access to opportunities to observe the American youth culture through different media such as television, radio, internet and magazines fosters much imitation and has been picked up by many European and Asian youth in other countries. This realization can allow an organization to get more bang for their advertising buck nationally, and we dare say globally.

## **REFERENCES**

- Apple gets back into the game, Hispanic Engineer & Information Technology, 20(1), 16, June/July, 2005.
- Beale, R.L. and Coronel, F., A Marketing Opinion Leader Approach to Increasing African American Students' Participation in Study Abroad Education, International Journal of Business Research, Vol. VI, Number 2, 2006.
- Beirne, M., Has this group been left behind? Brandweek, 46 (11), 33-36, 2005
- Breyer, M. R. One message won't fit all, Chain Store Age, 82(4), 44-45, 2006.
- CIA World Factbook. <https://www.cia.gov/cia/publications/factbook/print/sp.html>.



Cox, T. and Beale, R.L., Developing competency to manage diversity, Berrett-Koehler publishers, San Francisco, 1997.

FHA launches education effort to assist first time minority buyers, Mortgage Banking 66(8), 16-17, May, 2006.

Laracy, A., Tapping the multicultural market, Convenience Store News, 40 (14), 12, 2004.

Magazine Publishers of America-African American Market Profile,  
[http://www.magazine.org/content/files/market\\_profile\\_black.pdf](http://www.magazine.org/content/files/market_profile_black.pdf)

Magazine Publishers of America, New research reveals deep engagement among Hispanic magazine readers. Hispanic PR Wire. <http://www.hispanicprwire.com/news.php?l=in&id=6974&cha=13>

Radio Disney joins Latino programming boom, retrieved February 10, 2007 from  
<http://www.washtimes.com/national/20030824-110947-6770r.htm>, 2003

Miller, S., Minority buying power expected to rise, The Washington Times, retrieved February 20, 2007 from  
<http://www.washtimes.com/national/20030824-110947-6770r.htm>, 2003

Nevaer, L. E., The Rise of the Hispanic Market in the United States, Armonk: M.E. Sharpe, Incorporated, 2004.

Pamplin, C., Worth a strategy, Convenience Store News, 41(12), 67-70, 2005.

Radio Disney joins Latino programming boom, retrieved February 10, 2007 from  
<http://www.washtimes.com/national/20030824-110947-6770r.htm>, 2003.

Ruggless, R., Pizza Chain's Peso Promotion Fans Flames of Immigration Debate, Nations' Restaurant News, 41(4), 6-36, 2007.

U.S. Census Bureau News, <http://www.census.gov/Press-Release/www/releases/archives/population/006808.html>, May 10, 2006.

Wentz, L., Nissan boosts Hispanic efforts. Advertising Age 74(48), 26, 2006.

Zimmerman, A., To boost sales, Wal-Mart Drops One-Size-Fits-All Approach, Wall Street Journal - Eastern Edition, 248(57), A1-A17, 2006.

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## INDIVIDUAL ADOPTION OF INSTANT MESSAGING IN THE WORKPLACE: A CONCEPTUAL VIEW

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### ABSTRACT

*This research examines the drivers of Individual adoption of instant messaging (IM) in the workplace. Instant messaging once associated only with teenagers is rapidly proliferating business organizations at an alarming rate. Unlike most technologies, the adoption of IM is fueled by employees rather than pushed as an IT directive. To explain the widespread adoption of this service, findings from within the IT implementation research are reviewed and integrated into a conceptual model.*

**Keywords:** Instant Messaging, IM, IT Implementation, workplace communication, IT Adoption, Motivational Model

### 1. INTRODUCTION

Instant Messaging (IM), one of the most popular communication tools among teens, is rapidly being integrated into the professional workplace. Promises of lower communication costs, improved communication, multitasking and quick turnaround times are credited to be part of the allure (Vos, Hofte et al. 2004). The ePolicy Institute 2006 workplace survey on e-mail, instant messaging and blog estimates that 35 percent of employees use instant messaging at work. This number represents an increase from 31 percent reported in 2004 (Chavers 2006). De Vos et al (2004) also reported, in 2003 IM was used by one or more employees in 90 % of large organizations, whereas only 40% of those organizations supported IM use. This suggests that unlike most business applications, user's acceptance is not an issue. In fact, the evidence suggests that IM adoption is primarily led by employees rather than directed by IT.

There is no shortage of interest in IM among corporate clients (Marshak 2004). For many, this real time internet application has become a ubiquitous part of modern communication. While effective IM deployment promises to improve organizational effectiveness (Kadirire 2007), IM use within organizations is not without controversy. Managers fear security breaches and loss productivity (Marshak 2004; Shiu and Lenhart 2004). These worries are amplified due to the simplicity and ease with which users acquire this application. Generally, IM users simply download publicly available IM clients on company's network without authorization exposing the company to many threats. Some of the most common IM applications are AOL Instant Messenger, MSN Messenger, Yahoo Talk, Google Talk and Skype.

By all predictions, IM use in organizations is likely to increase. It is theorized IM will replace email as the dominant form of workplace communication (Hoffman 2004). Yet to date, a review of the research literature reveals limited studies on the topic. Most earlier research were conducted in single organizations with proprietary IM clients (Handel and Herbsleb 2000; Herbsleb, Atkins et al. 2002). As with most studies on emerging technology, these articles focused on features of IM (Nardi, Whittaker et al. 2000; Isaacs, Walendowski et al. 2002; Cho, Trier et al. 2005); unintended consequences of IM (Cameron and Webster 2005) and innovative uses of IM (Rennecker, Dennis et al. 2006). An in depth study on IM @ work is warranted. We posit that by understanding IM's adoption, utility and impacts, we are adding business value. Our aim is to contribute to our initial understanding of IM diffusion in the workplace by proposing and validating a conceptual model of the motivators of employees' voluntary adoption of IM. We differ from earlier studies by embarking on a large scale field study (upcoming) scanning many industries. Additionally, we ground this research within the theories of IT adoption and it is the authors' hope that this model will be used in future research.

## 2. THEORETICAL FOUNDATION

We use the theories within the technology adoption literature to explain and develop a conceptual model for individual adoption of IM in the workplace. IT adoption literature includes theories such as Technology Acceptance Model (TAM), Diffusion of Innovation (DOI), Theory of Reasoned Action (TRA), Theory of Planned Behavior (TPB) and the Motivational Model (MM). Specifically, we selected the motivational model for the basis of our research design. The motivation model (MM) has been used and supported in several studies (Davis, Bagozzi et al. 1992; Igbaria, Parasuraman et al. 1996; Teo, Lim et al. 1999; Heijden 2004; Lee, Cheung et al. 2005; Li, Chau et al. 2005) to explain users' motivation to adopt technology. MM states that an individual's behavior is a result of extrinsic and intrinsic motivation. The variables in this model have been consistently significant in predicting behavioral intention across time in both mandatory and voluntary setting (Li, Chau et al. 2005). Extrinsic motivation is defined as driven by the expectation of some reward or benefit external to the system-user interaction. Several technology acceptance research has classified perceived usefulness as an extrinsic value (Davis, Bagozzi et al. 1992; Igbaria, Parasuraman et al. 1996; Teo, Lim et al. 1999; Venkatesh, Morris et al. 2003). Intrinsic is defined as driven by benefits derived from interaction with the system per se. Perceived Enjoyment is an intrinsic motivation (Webster and Martocchio 1992; Teo, Lim et al. 1999). Basically one will be motivated to implement and use IM because it is fun and they perceive it as beneficial to their job outcomes.

Due to the nature of instant messaging, we included several factors: critical mass, prior experience, commitment to workplace relationship and perceived behavioral control to augment the motivational model. These factors were used in similar studies to explain technology adoption.

### *Critical Mass*

Any interactive communication technology requires partners in order to be effective (Rogers 1995; Herbsleb, Atkins et al. 2002; Li, Chau et al. 2005). Critical mass defined as the perception that many partners are using or these partners suggest the use of IM. Past research provided support for this construct on adoption decision (Cameron and Webster 2005; Li, Chau et al. 2005).

### *Prior experience*

Prior experience have been found to be an important determinant of behavior (Taylor and Todd 1995). Past knowledge of IM use can shape intention. Individuals with prior experience with IM will be aware of IMs benefits and thus be prompted to use it at work. The role of experience has been hypothesize as a moderating variable to TAM (Taylor and Todd 1995). The motivational variables along with perceived behavioral control can mediate Prior experience effects on behavioral intention.

### *Commitment to workplace relationship*

Working relationship share some characteristics with social relationships but the driving force is that it is task based. Gabarro cited in (Cho, Trier et al. 2005) points out that spontaneous and informal interaction are more effective in developing working relationship than scheduled and formal. IM characteristics especially presence awareness and quasi synchronous mode of communication lends itself to this kind of communication. In any organization, there is a need to build work relationships but several factors can inhibit as distributed workers. IM can facilitate near synchronous communication even with geographically dispersed workers. It supports faster turnaround time for quick collaborative projects and presence awareness. An individual may be prompted to adopt and use IM in an effort to build relationships with and belong to an organization (Cho, Trier et al. 2005; Kadirire 2007).

### *Perceived behavioral control*

If an employee perceives he has no control as to when and how to use IM, he or she may choose not to adopt or use IM. However given IM usefulness and the ability to exercise freedom over use, one can predict an individual will most likely adopt and use IM. Perceived Behavioral control can mediate an employee with prior experience intention to adopt IM. Taylor (Taylor and Todd 1995) found users with prior experience placed less weight on perceived usefulness and more emphasis on control when making adoption/use decisions regarding technology.

### 3. RESEARCH MODEL AND HYPOTHESES

Based upon the theoretical foundation, individual intention to adopt and use IM in the workplace can be viewed as a process. Like many studies in IS research, IT acceptance can be measured by intention to adopt and actual use IT within an organization. For this study we adopted continuance intention which implies that an individual has adopted and will continue to use this technology in his daily life (Rogers 1995; Bhattacharjee 2001). The overall research model is shown in figure 1. It shows that behavioral intention (BI) is a function of perceived usefulness, perceived enjoyment, perceived behavioral control, perceived critical mass, prior experience and commitment to workplace relationship. Perceived critical mass, prior experience and commitment to workplace relationship is also moderated by perceived usefulness and perceived enjoyment with prior experience moderated by perceived behavioral control. A discussion of the theories and hypotheses is below.

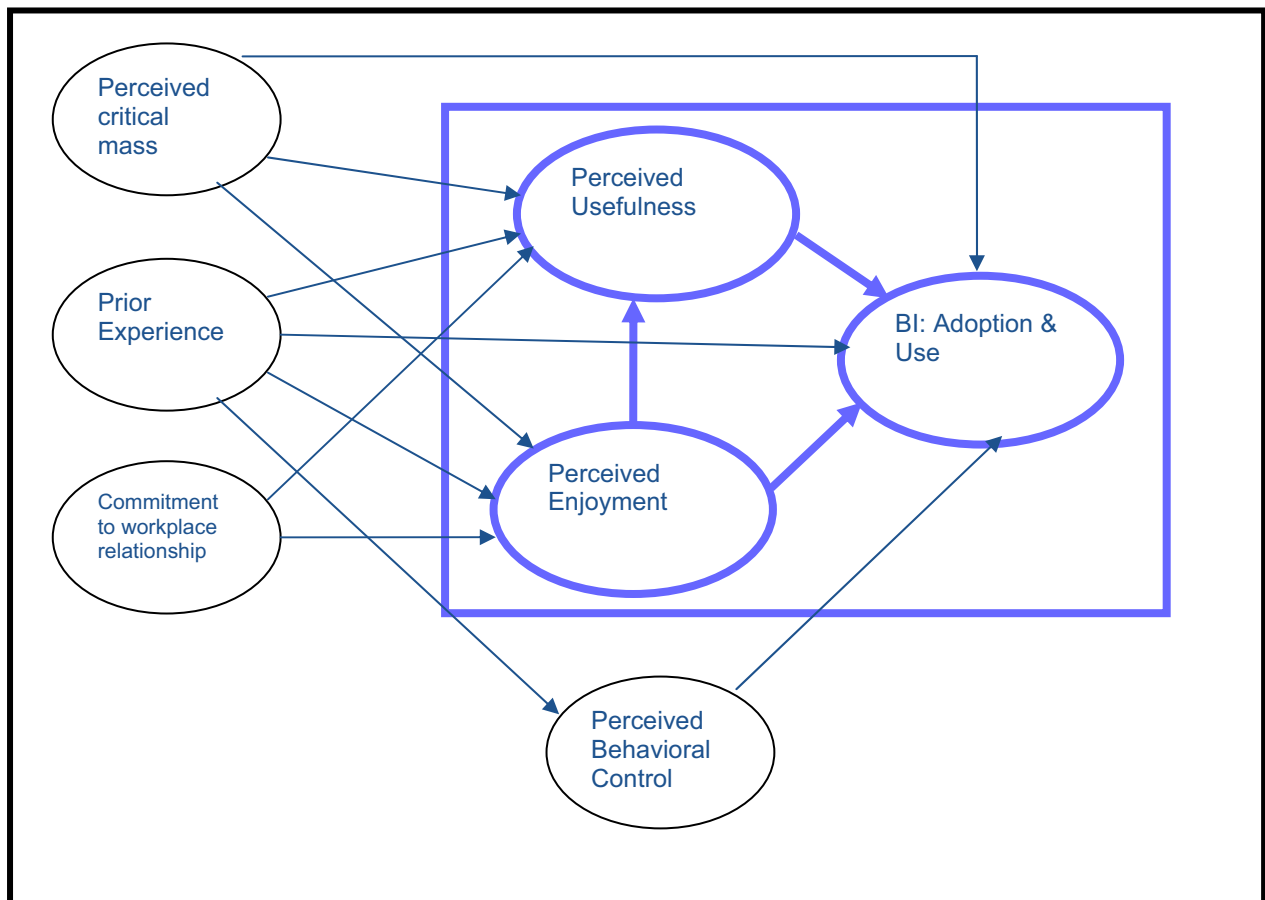


FIGURE 1 RESEARCH MODEL

**Perceived usefulness** for this study has adopted (Davis 1989) definition “the degree to which a person believes that using a particular system would enhance his or her performance.” There has been significant support for Perceived usefulness through models using TAM and augmented TAM which hypothesize that PU significantly affects an individual intention to adopt and use technology. Thus if an employee perceives that the use of IM @ work can be beneficial to his job performance, he or she will more likely adopt and use that technology.

**Perceived enjoyment** is defined as the perception of fun, enjoyment and pleasure inherent in using communication technology. Many individuals use technology for fun. One of the participants in Nardi et al’s study remarked “I use email more like the adult thing. IM is more fun” (Nardi, Whittaker et al. 2000).

Support has been found for this variable in few studies. The significance of this variable is generally not as strong as perceived use, but a poll among generation Y reveal that IM is fun. We can therefore expect some employees to adopt IM just because it is a fun tool. Therefore, we develop the following hypothesis:

H1a: *Users that perceive IM to be useful are more likely to adopt and use IM.*

H1b: *Users that perceive the use of IM is enjoyable are more likely to adopt and use of IM.*

H1c: *Users that perceive IM is enjoyable are more likely to perceive the Usefulness of IM*

**Perceived critical mass** defined as perception that many partners are using or these partners suggest the use of IM. Communication technology requires other partners in order to be effective. If many are using the technology, then one can perceive that it is useful.

H2a: *Users that perceive that critical mass of IM use are more likely to adopt and use IM.*

H2b: *Users that perceive that critical mass of IM use are more likely to perceive the usefulness of IM*

H2c: *Users that perceive that critical mass of IM use are more likely to Perceive Enjoyment of IM use*

**Prior Experience** - Assessment years of experience using IM. Individuals who used IM in the past socially or otherwise are most likely to use IM in the workplace. They understand the benefits as well as it may be one of their preferred means of communication.

H3a: *Users with Prior IM experience are more likely to Adopt and use of IM*

H3b: *Users with Prior IM experience are more likely to perceive the usefulness of IM*

H3c: *Users with Prior IM experience are more likely to perceive the Enjoyment of IM*

H3d: *Users with Prior IM experience are more likely to perceive having behavioral control of IM*

#### **Commitment to Workplace relationship**

The presence awareness feature of IM creates an online community that defies location. An employee who is interested in keeping a sense of community: i.e. knowing if their colleagues are available would most likely be one to implement IM.

H4a: *Users who are committed to building workplace relationship are likely to perceive the usefulness of IM*

H4b: *Users who are committed to building workplace relationship are likely to perceive enjoyment of IM*

#### **Perceived Behavioral Control**

Critics of IM cite privacy and intrusiveness as a major hindrance. Despite the positive benefits, if an employee feels that he does not have control of IM's use he/she will not use it. The ability to change modes from available to unavailable or invisible makes IM attractive to use.

H5a: *Users who perceive behavioral control of IM are more likely to adopt and use IM.*

## **4. DISCUSSION AND FUTURE RESEARCH**

This study should shed light on our understanding regarding individual's voluntarily adoption and use of IM in the workplace. The results indicate that multiple factors can affect an individual's intention to adopt and use IM. As generation Y enters the workforce, we can expect further widespread use of IM. IM is their dominant form of communication.

As suggested from earlier reports, IM benefits can only be realized when clear guidelines are in place. To do this, we need to gain an in depth understanding of IM's effectiveness, thereby leveraging its impact to maximize organizational goals. Even though our model does not present concrete guidelines for effective deployment of IM @ work, the model provides a framework for understanding the motivators of individual's behavioral intention to adopt IM. In so doing, as companies plan to implement IM, they should be able to identify individuals most likely to use this service. It is the authors' hope this model would be used in future research.

## **REFERENCES**

Bhattacharjee, A. (2001). "Understanding Information systems Continuance: An Expectation-Confirmation Model." *MIS Quarterly* 25(3): 351-370.

- Cameron, A. F. and J. Webster (2005). "Unintended consequences of emerging communication technologies: Instant Messaging in the workplace." Computers in Human Behavior **21**(1): 85-103.
- Chavers, M. (2006). "Chatter boxes: Instant messaging at work is growing, policies lagging." The Business Journal.
- Cho, H.-K., M. Trier, et al. (2005). "The Use of Instant Messaging in Working Relationship Development: A Case Study." Journal of Computer-Mediated Communication **10**(4).
- Davis, F. D. (1989). "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology." MIS Quarterly **13**(3): 318.
- Davis, F. D., R. P. Bagozzi, et al. (1992). "Extrinsic and Intrinsic Motivation to use computers in the workplace." Journal of Applied Social Psychology **22**(14): 1111-1132.
- Handel, M. and J. D. Herbsleb (2000). What Is Chat Doing in the Workplace? Computer Supported Cooperative Works, New Orleans, LA.
- Heijden, V. d. (2004). "Use Acceptance of Hedonic Information Systems." MIS Quarterly **23**(4): 695-704.
- Herbsleb, J. D., D. L. Atkins, et al. (2002). "Introducing Instant Messaging and Chat in the Workplace." Letters CHI **4**(1): 171-178.
- Hoffman, J. (2004). "Instant Messaging in the Workplace." Intercom.
- Igarbaria, M., S. Parasuraman, et al. (1996). "A Motivational Model of Microcomputer Usage." Journal of Management Information Systems **13**(1): 127-144.
- Isaacs, E., A. Walendowski, et al. (2002). The Character, Functions, and Styles of Instant Messaging in the Workplace. CSCW '02, New Orleans, Louisiana.
- Kadirire, J. (2007). "Instant Messaging for Creating Interactive and Collaborative m-learning Environments." International Review of Research in Open and Distance Learning **8**(2).
- Lee, M. K. O., C. M. K. Cheung, et al. (2005). "Acceptance of Internet-based learning medium: the role of extrinsic and intrinsic motivation." Information & Management **42**: 1095-1104.
- Li, D., P. Y. K. Chau, et al. (2005). "Understanding Individual Adoption of Instant Messaging: An Empirical Investigation." Journal of the Association for Information Systems **6**(4): 102-129.
- Marshak, D. S. (2004). Instant Messaging at Work, key policies and practices for Leveraging IM in business, Patricia Seybold Group.
- Nardi, B. A., S. Whittaker, et al. (2000). Interaction and Outeraction: Instant Messaging in Action. Computer Supported Cooperative Work, Philadelphia, PA.
- Rennecker, J., A. R. Dennis, et al. (2006). Reconstructing the Stage: The Use of Instant Messaging to Restructure Meeting Boundaries. Proceedings of the 39th Annual Hawaii International Conference on System Sciences (HICSS'06) Track 1, 2006, Hawaii, IEEE.
- Rogers, E. M. (1995). Diffusion of Innovations. New York, Free Press.
- Shiu, E. and A. Lenhart (2004). How Americans use instant messaging. Pew Internet & American Life Project.
- Taylor, S. and P. Todd (1995). "Assessing IT usage: The role of prior experience." MIS Quarterly **19**(4): 425-478.
- Teo, T. S. H., V. K. G. Lim, et al. (1999). "Intrinsic and Extrinsic motivation in Internet Usage." Omega: 25-35.
- Venkatesh, V., M. G. Morris, et al. (2003). "User Acceptance of Information Technology: Toward A Unified View." MIS Quarterly **27**(3): 425-478.
- Vos, H. d., H. t. Hofte, et al. (2004). IM [at Work] Adoption of Instant Messaging in a Knowledge Worker Organisation. Hawaii International Conference on Systems Sciences, Hawaii.
- Webster, J. and J. J. Martocchio (1992). "Microcomputer playfulness: Development of a measure with workplace implications." MIS Quarterly **16**(2): 201.

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## **SOCIOLOGY OF KNOWLEDGE AND LEADERSHIP DEVELOPMENT: THE CASE OF SOUTHWEST NIGERIA**

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### **ABSTRACT**

*For years, humans have been part of nature (Latour, 2004). It appears towards the mid-nineteenth century, when tremendous achievements were being made in scientific discoveries, most especially in biology, people began to further discover their environments. People persisted in the uncovering of the secrets of development to the point that the world appeared to be structured in a clearer character by which humans were part of the nature and the society in which they lived in seemed to be an extension of their ambiances. Mannheim (1936) argued that knowledge is a function of thoughts of groups of people in a society and this is also a function of the socio-cultural development of the individuals in this society. Hence, we applied these phenomena to the investigation of sociology of knowledge of the people of Southwest Nigeria and concluded that family support and social-cultural settings contribute positively to good moral mindset that could subsequently lead to impeccable leadership.*

**Keywords:** Sociology of Knowledge, Sociology, Moral Development. Leadership

### **1. INTRODUCTION TO THE STUDY**

The study of the principle of societal development have dealt into such critical subjects as evolutionary development, where nations ponder on how to accomplish improved production, low unemployment rate, and consumer stability (Berger and Huntington, 2002). Factors of economic and political developments as part of these processes have been exhaustively evaluated and the effects of these have culminated into expanded trading and cultural developments. The intricacies of societal development were furthered by the quest for advancement and perfection of human endeavors while the resultant effect was technological improvements, with soft and hard technologies. In these earlier sections according to Blumer (1990), economic development involving the establishment of new and interdependent machineries of production was examined. But this was not without the integration of empirical ways of completing tasks, which resulted in higher order achievements and led to the creation of abundant and functional materials.

However, it is the evaluation of these actions from the angle of sociology of knowledge that now forms the center point of the application. The Karl Mannheim approach to sociology of knowledge, which defined human thoughts as a process that is initiated in a society by the root group and only gradually continued by the individual, was critically evaluated in this study. According to Mannheim (1936) explicated, it is "not me in general who thinks, or even isolated individuals who do the thinking, but men in certain groups who have developed a particular style of thought in an endless series of responses to certain typical situations characterizing their common position" (p.3). Furthermore, perspectives of Peter Berger and Tom Luckmann (1967), contended that in the actual sense, the process of multiplicity of knowledge from childhood to adulthood in a generation is so slow that a deception in a magnitude so great as to define a cultural departure from the well-founded ways of perception does not always occur. The tempo of adaptation is demandingly slow in the process of thinking that changes in the way of thinking spans over many generations. Thus, since we live in a real world, the reality of everyday life becomes a major factor that shapes our knowledge and controls the direction of our intellectual intervention. It was therefore, deduced from this approach that reality of life brings us the awareness of all knowledgeable activities as a phenomenon that crystallizes all of our fields of action today.

As humans continue the quest to become the masters of their destiny, we have harmonized many of our activities, using our stock knowledge. Our knowledge base becomes a limitless expandable entity through our own subconscious minds as we continue the development of the society through our stock knowledge and one process leads to another. In all these processes, we encounter the fundamental domain of our knowledge, which is the cultural base for development. Cultural origin of our development is the actual root of our individual knowledge. As already well defined, in the process of the development of thoughts,

the society and the cultural elites become the foundation while individuals continue the process of the thoughts. Hence, our cultural differences may account for why we perceive the same thing in different ways. The origin of our knowledge is affected by the socio-cultural factors prevalent in the society where we developed. Harrison (2000) in the article, culture matters, described culture in two forms: progressive and static, with either one affecting the direction of our development. The progressive culture, being the culture that does not accept faith as a factor of life but as a function dependent on our intellectual ability for change, supports advanced education, frugality, and leadership ingenuity as the reasons for our development. On the other hand, the static culture is a culture that emphasizes the present with less investment in higher education, poor organization of the industrial base, and contains short radius of identification (Harrison, 2000). Subsequently, the type of culture under which a person developed determines the depth of his stock knowledge including the frugality of his actions when he grows up. Upon the above analysis, it is now important to examine how these situations have specifically affected the development of ingenuities among the inhabitants of Southwestern Nigeria.

## **2. THE STUDY: PREFACE**

This study was designed to explore the bases of ingenuity of organizational leadership. In any organizational settings, human interaction is the underlining factor for advancement while the retention of knowledge is a major factor in the development of personnel base of the organization. As already analyzed, knowledge is a function of thoughts of groups of people in a society and this is also a function of the socio-cultural development of the individuals in this society. Hence, what you know is who you are, either as a person or as a society.

The knowledge anyone acquired in the developmental stages of his/her life is what he is at the adolescent stage. It is based on economic, political, and social background of individuals and truly, many of the people Lagos, Ibadan, Akure, and Oyo to name just a few cities in Southwest Nigeria, are diverse in both cultural and economic settings. In this study, a person coming out of poor areas will be examined under the same criteria as the one growing up in the affluent neighborhoods. A person in a crime-infested community learns about crime first-hand, wakes and sleeps with crime and he is, therefore, mentally affected by this factor while his education is impaired and parental care is subdued. Upon attaining adulthood, his mental rationalization is affected by these events while his definition of morality is tainted by the events under which he grew up. On the other hand, a child in a middle or high-level income family may be less exposed to crime, have more parental supervision and grow up with higher moral and purposeful goals. He goes on to become ready for leadership by example when he attains the necessary age while he views social ills as practical and real, as against someone who will view this as a part of life. It is quite thinkable that anyone who grows up under any of these distinct backgrounds will show signs of his/her background; given equal personal determination by the two groups.

## **3. METHODOLOGY**

There are several research approaches that could be employed in a given study; however, the most appropriate methodology depends on the particular research being conducted. It is vital to provide a clear study path to a research study and the essence of this is used to structure the project so as to provide the coherence between samples, measures, treatments, and programs. Understanding the relationships among designs is important when you need to make design choices, which involve thinking about the strengths and weaknesses of different designs.

Several phenomena could be investigated using survey research design in management discipline and this study is one of them. Leadership positions are not by endowment since most leaders work their ways through the very tall ladders of organizational settings, which are typically pyramids, with the base level very wide while the struggle to the top is rigorous and sometimes ever continuous. Many reasons have accounted for why many people possess impeccable leadership abilities and why others do not. From the standpoint of sociology of knowledge, what makes a good leader is inherent in his history, association, upbringing, and overall socio-cultural background and this will be investigated in a group of employees in this region. A survey research design could be used with intricate questions in the survey that would investigate the origin of the employees' knowledge and that was the approached engaged here.



#### **4. STUDY GOALS**

Scientific development depends on hypothesis and theories and from the times of early researchers until now, scientists have endeavored to prove their theories using data and observations, deductively or inductively, despite all the limitations that there were. As often as possible, the existing theories of earlier scientists have been used or improved on by newer scientific discoveries, relying on the assertions of the earlier theories. While the basis of this research is the application of the earlier studies conducted on sociology of knowledge, the principal goal is to tie the effects of culture, economy, social background, and education to leadership development.

Knowledge is one of the strongest bases of societal development and the origin of our thoughts as conducted in this study, is the reasoning behind decision-making processes. Educational and economic backgrounds are also central in this scenario since the effects of this logic have a great impact on developmental trends.

#### **5. EDUCATIONAL AND ECONOMIC BACKGROUNDS**

Due to the process of continuous learning, which builds stock knowledge of people, the type of education received builds the kind of person a man/woman develops to be. Education is not only the formal learning received in schools, but also those that are acquired at home, in churches, through peer groups and in the society in general. Origin of thoughts, as previously analyzed in this study are the moral justifications that originate from the root domain of our cultural setting and these were the boundary conditions of the past events that were dominant in the upbringing of our children. Subsequently, moral justification becomes the societal dictate and most commonly a uniform conclusion is reached, individually or collectively, about what is morally conceivable or inconceivable. As a result, the level of our educational excellence influences our leadership acumen and this was addressed in questions 1 and 2 of the questionnaire below.

Social status is greatly influenced by economic status hence; a family of five with an income of just \$22,000 per annum will be categorized as being below poverty level (US Department of Homeland, 2004) and their standard of living will have to be commensurate with their economic level. Given the same standard of moral and parental attention in another home, a family with both parents living together, with incomes well above poverty level or categorized as middle-level or high-level, will have more comfort and time to be involved in their children's educational and social life therefore resulting in a more positive background than a family living in a one-bedroom apartment, with three children, while the mother and father work two or three. Direct parental support of children's education has a far-reaching effect on development and attainment of leadership goal by individuals.

#### **6. EFFECT OF EDUCATION AND SOCIO-CULTURAL BACKGROUND ON LEADERSHIP PERFORMANCE**

Harrison (2000) analyzed culture to be an important ingredient of societal development and argued that it is a long-established tradition of a society that portrays a distinctive way of life of the people of that society. Culture relates to economic and social norms of a society and it is very ironic then that any group of people will see poor education and deprivation of civility as a way of life or their culture. Laszlo (2003) added that when a nation or a group of people imbibes the static culture and fails to develop educational institutions and neglects new innovations in technology such a nation will remain backward with poor development of its citizens or remains shoddy society at best.

While leadership is an attribute, the development of individuals to this position is a process that has been a function of all the background properties enumerated above. Hence, a good corporate chief executive officer or chairman will then develop with the golden attributes needed to ensure company progress. The Financial Times (2004), characterized corporate leaders "as razor sharp and quite ready to sack non-performers, but are also rich in empathy and highly supportive" (p.8). In synchronizing leadership attributes deeper, the paper wrote:

Some of the qualities of a good chairman seem obvious: he or she will be a good listener, judge of people and facilitator; will build lasting relationships with share holders; and will be a guide, mentor and sounding board for the chief executive. Delve into these attributes and it becomes clear how much of a balancing act the chairman has to perform. (p.8)

Again, these attributes are the functions of stock knowledge, quality education, family upbringing, and endowment of progressive culture (Laszlo, 2004).

## 7. STUDY RESULT

### 7.1 Questionnaire: Form

This questionnaire is to measure the effect of family upbringing, education, culture, and economic background on leadership ability. This instrument was developed by this author.

1.	What is your highest level of education?	High School	College 1- 2 - 3- 4	Graduate 1 - 2 - 3
2.	What was the educational level of your parents?	High School	College 1- 2 - 3- 4	Graduate 1 - 2 - 3
3.	While growing up and before you got married how many people were in your family?	Four	Five	6 & above
4.	How will you describe your grades during the last three years of school/college?	Less than average GPA: below 2.0	Good GPA: 2.0-3.0	Excellent GPA: 3.0 +
5.	How will you categorize your parents' income?	Around/below Poverty level	mid-level	High
6.	How will you categorize your own income?	Around/below Poverty level	mid-level	High
7.	How will you categorize the community where you grew up?	Project or subsidized apartment	mid-level/blue collar	High-income/w hite collar
8.	How will you categorize the community you are currently residing in?	Project or subsidized apartment	mid-level/blue collar	High-income/w hite collar
9.	What is your position at your current job?	Mid-level employee	Mid-level manager	Executive/CEO
10.	What will you consider the most vital factor that influenced your positive performance on the job	educational background/ work experience	Quality family upbringing	Personal determination

### 7.2 Analysis of the Result

Questionnaires totaling 2,000 were distributed in a period of 30 days at Akure, Ibadan and Lagos to government employees in various Ministries (State and Federal Government Departments) in March and April, 2005. A total of 750 results were received and analyzed and in compiling the responses to question 1 (what is your highest level of education?), 413 participants or 55% had high school or less while 263 or

35% of the people sampled had college education or at least some years of college and 75 or 10% had graduate-level education with a year or more of graduate school. In contrary to the analysis, 450 or 60% of the people sampled said their parents had high school, 180 or 24% said their parents had college degrees while 120 or 16% of the parents had graduate level degrees in response to question 2 (what was the educational level of your parents?). On question 3, (while growing up and before you got married or began to reside in your own home/apartment, how many people were in your family?), 338 or 45% reported to have grown up in a family of more than six residents, 263 or 35% in family of five, while 150 or 20% grew up in a family of four or less.

On participants' performances in their last three years in school (question 4), the goal of the study was to measure educational and career performances and compare this with responses to questions 3,4,7 and 8 since studies have shown that positive family supports, community background and peer associations contribute to better educational performance (Lapan, et al., 2004). Subsequently, people with high responses in the listed questions may be responding high to question 4. A 3.0 grade point average (GPA) means a strong showing academically during the last three years of school could have been the result of positive backgrounds. 210 or 28% of the people polled showed that they had 3.0+ GPA, 405 or 54% had between 2.0 and 3.0 GPA, while 135 or 18% indicated below 2.0 GPA (question 5). 638 or 85% categorized their parents' incomes as mid-level while 22 or 3% called it high-level and 90 or 12% called it below poverty (question 5). On income (question 6), 585 or 78% categorized their income as mid-level, 53 or 7% as high level and 113 or 15% as below poverty level. As for parents' income, the statistics were not far from being comparable to personal income percentages. These were the analysis of question 7 and 8 of the survey.

On current positions (question 9), 443 or 59% are mid-level positions while 285 or 38% are mid-level managers and 22 or 3% chief executive officers. The analysis further showed that 398 or 53% believed that their performances on the job are influenced by educational background and work experience, 210 or 28% believed it was family background while 135 or 18% believed it was personal determination.

### **7.3 Leadership acumen and socio-cultural background**

Of the 338 or 45% that had university education or higher, 284 or 84% had 2.0 or higher GPA in their last three years in school, 325 or 96% categorized their income as mid-level or higher while 311 or 92% believed that education, work experience or family background was responsible for their positive performances in their respective positions.

On interviewing some members of this group, we were able to analyze the similarities in the effects of background on peoples' goals and performances. While many other sociological factors, such as cognitive adulthood changes, geographical relocation, and influences by external relations were not measured. The results in the area of concentration reflected a causal relationship between positive leadership performance and individual socio-cultural background. These studies further showed that over 45 of the 53 participants with high family incomes have higher education and went on to attain mid-level or CEO positions on their current jobs. 41 of 45 in this category (about 90%) credited educational background or family upbringing for their successes. The connection between educational level, parental background and positive job performances were prima facie established in reference to the sociology of knowledge from the approach of Thomas Berger which emphasized real life situations of individuals. Subsequently, if the above could occur, leadership ingenuity will be high. It has been pointed out earlier that people's thoughts are functions of the culture of the community. Hence the linkage is established that a group with wide radius of association as a result of sound socio-cultural background will produce citizens for a future with diligence and frugality.

## **8. CONCLUSIONS**

Overall, this study has been able to demonstrate that societal development is fundamentally based on environmental and socio-economic factors where old and new world orders come together. While the spiral effects of technological advancement have brought new factors such as globalization and e-trading, giant Internet markets such as Ebay and Amazon Books have emerged. The results demonstrated that our stock knowledge is shaped by our upbringing and perfected by the social origins of our culture. Our

knowledge is structured in terms of significance and when the time of its application comes, it is pulled as a resource from the stock. Berger and Luckmann (1966) in support of this assertion added that one's knowledge of everyday life is structured in terms of relevance. Some of these are determined by our immediate pragmatic interest, others by our general situation in the society. In our opinion, human knowledge will continue to elucidate on one another in order to advance societal development through leadership ingenuities. In conclusion, impeccable leadership becomes easily achievable when immaculate socio-cultural upbringing is the foundation of an individual, since leadership ability is not inherent in race but dependent on economic, political, and socio-cultural background of individuals.

Finally, the study of the principles of societal development, most especially from the perspective of sociology of knowledge, has provided us a better opportunity to investigate how our origin of knowledge has contributed to our continued development and leadership abilities. It is important to note however, that many other areas that affect purity of leadership extend beyond sociology of knowledge, education, and social upbringing. Such factors as theories of leadership focusing on contingency, charismatic and transformational leaderships could affect the study of knowledge and leadership performances. However, positive social change in Nigeria is being promoted through the conclusions of this study by emphasizing how social cultural conditions have affected people's stock of knowledge, personalities, and leadership abilities. It is imperative also in our opinion that people must prepare for a better future by improving the social conditions surrounding the upbringing of their children and by promoting family support for education through stages of life.

## REFERENCES

- Adewumi, F. (1996). The violence and Poverty of Structural Adjustment in Africa. *Cities Under Siege: Urban Violence in South, Central and West Africa*. 21-30.
- Berger, P. & Huntington, S. (Eds.). (2002). *Many Globalizations: Cultural Diversity in The Contemporary World*. New York, NY: Oxford University Press.
- Berger, P. & Luckmann, T. (1967). *The Social Construction of Reality: A Treatise in The Sociology of Knowledge*. Anchor.
- Blumer, H. (1990). *Industrialization as an agent of social change: A critical analysis*. New York: Aline De Gruyter.
- Creswell, J. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications, Inc.
- Fagunwa, D.O. (1994). Expedition to the Mount of Thought: The third saga : being a free translation of the full text of D.O. Fagunwa's Yoruba novel Irinkerindo ninu Igbo elegbeje. Nigeria: Obafemi Awolowo University Press.
- Federal Bureau of Investigation (2005). *Washington Crime Statistics and Crime Data*. Retrieved May 24, 2005, from: <http://washingtondc.areaconnect.com/crime1.htm>.
- Financial Times (2004). *Corporate Governance. To Lead and To Serve: The Habits of the best chairmen*. December 7, p.8.
- Harrison, L. (2000). Culture Matters. *The National Interests*. 55-65.
- Lapan, R., Turner, S., & Steward, J.C. (2004). Family Factors Associated With Sixth-Grade Adolescents' Math and Science Career Interests. *The Career Development Quarterly*, 53, 41-52.
- Laszlo, A. (2003). The Evolutionary Challenge For Technology. *World Futures (Taylor & Francis, Inc)*, 59, 639-645.
- Latour, B. (Eds.). (2004). *Politics of Nature: How to Bring the Sciences into Democracy*. Cambridge, MA: Harvard University Press.
- Mannheim, K. (1936). *Ideology and Utopia*. London: Routledge. *Knowledge*. London: Routledge & Kegan Paul.
- Maquet, P. (1973). *The Sociology of Knowledge: Its Structure and Its Relation to the* McIlwaine, C. (1999). Geography and Development: Violence and Crime as Development Issues. *Progress in human Geography*, 453-463.
- Okasha, S. (2000). The under determination of theory by data and the strong programme in the sociology of knowledge. *International Studies In The philosophy Of Science*, 14, 283-297.
- Omitoogun, W. (1996). Organized Street Violence: The Area Boys of Lagos. *Cities Under Siege: Urban Violence in South, Central and West Africa*. 31-39.

- Rosenberg, A. (2000). *Philosophy of Science: A Contemporary Introduction*. New York, NY: Routledge.
- Schaeffer, R.K. (1997). *Understanding globalization: The social consequences of Political, economic, and environmental change*. Lanham, MD: Rowman & Littlefield Publishers.
- Trochim, W. (1999). *The Research Methods Knowledge Base*, 2e. Cincinnati, OH: Atomic Dog Publishing.
- US Census Bureau (2000). *State and County QuickFacts*. Retrieved May 30, 2005 from: <http://quickfacts.census.gov/qfd/states/11000.html>.
- US Department of Homeland (2004). *Citizenship and Immigration Services: Poverty Guidelines Form I-864 attachment*. OMB #1115-0214.
- US Library of Congress, (2003). *The Economy-Manufacturing*. Retrieved May 29, 2005.

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# MULTI-FIBRE AGREEMENT AND KENYA'S MAJOR APPAREL EXPORTS TO THE US

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## ABSTRACT

*This paper assesses whether the expiry of the MFA (Multi-Fibre Agreement) provision had any immediate impact on Kenya's major apparel export categories between 2004 and 2005. This analysis of the impact of the expired MFA provision was also extended to other competitors (Bangladesh, China, Germany, Hong Kong, India, Indonesia, Italy, Kenya, Mexico, Pakistan, Romania, South Korea, Thailand, and Vietnam) that were involved in exporting the same categories to the US.*

**Keywords:** Multi-Fibre Agreement; Cotton Apparel; Man-made Fibre Apparel; the US market.

## 1. INTRODUCTION

From the 1960s to the 1980s, Kenya's textile and apparel industry was one of the primary manufacturing sectors that actively provided sustainable employment to the burgeoning population. During this period, it was supported by a stable internal supply of cotton and strong demand within its domestic market.

However, the industry started to lose its vigor in the early 1990s as the government undertook liberalization reforms within the economy and floated the local currency. The viability of this manufacturing industry was threatened by a surge in the influx of second hand clothes (known as 'mitumba'), and contraband textiles into the country. This situation was further aggravated by the widespread acceptance of synthetic fibres as a cheaper substitute for cotton in textile and apparel products (Coughlin, 1991; Ikiara and Ndirangu, 2002; EIU, 2004). This change in market preference had an impact on the upstream activities of the textile and apparel supply chain. Cotton growers faced a decrease in market demand for their supplies, and ginners and other input suppliers also experienced a decline in businesses. The textile and apparel industry was also troubled by a difficult operating environment marked by high production costs, poor infrastructure, and a lack of policies in support of this industry, and its own general unpreparedness for open market competition (The Nation, 2003; Roberts and Fagernäs, 2004; The EIU, 2004). Accordingly, Kenya's textile and apparel industry reached a stage of near collapse in the early 1990s. For example, the textile sector, which was once the fifth largest foreign exchange earner in the country during its growth period, lost its earning capacity and dwindled to being only a minor contributor to GDP in the mid- and late-1990s (Export Processing Zones Authority, 2005).

## 2. BACKGROUND

### 2.1 African Growth and Opportunity Act (AGOA) & MFA (Multi Fibre Agreement)

In 2000, the African Growth and Opportunity Act (AGOA) passed by the US Congress allowed qualifying sub-Saharan Africa (SSA) to export most of its products to the US on a duty- and quota-free basis between October 2000 and September 2008. This period was subsequently extended to 2015 (AGOA, 2006). However, the AGOA has a special dispensation relating to apparel, known as the 'third country fabric provision', for low-income African countries. This provision allows these African countries to source fabric from any country to produce apparel for its duty-free exports to the US until September 2007, at which point they have to source fabric made in the US or African countries if they want to retain their duty-free export access to the US. This provision was extended to 30<sup>th</sup> September 2012 (AGOA.info, 2006). The intention of this provision was to encourage investment in the African textiles and apparel sector, in order to build or revive its vertically integrated apparel industry.

Kenya was the first country to qualify for accreditation as a beneficiary country under the AGOA in January 2001. It has been claimed that this membership has rejuvenated Kenya's textile and apparel industry (Larson, 2004; The EIU, 2004). About 90% of Kenya's total exports have been destined for the US market under the AGOA preferential trade arrangement (Oyejide, 2006). In addition, the Act has

resulted in increased investment in this industry, located in the Export Processing Zones (EPZ), from countries that were subjected to the Multi Fibre Agreement's (MFA) quotas. The Multi Fiber Agreement (MFA) established a worldwide quota system for export of textile and apparel products to the US and EU since 1974. The MFA was adopted within the GATT (General Agreement on Tariffs and Trade) to provide some protection to the textiles industries of those countries facing competition from countries with lower manufacturing costs (Schilling, 2003). However, this arrangement has provisions that exempt some poor developing countries, including Kenya, from its restrictions and duties (AGOA.info, 2005). China, on the other hand, was subjected to MFA terms and it was envisaged that those once exempted developing countries would face very keen Chinese competition after the expiry of MFA (Wikipedia, 2006; Institute of Social and Ethical Accountability, 2006).

By establishing textile and apparel businesses overseas in Kenya, foreign investors were able to overcome the MFA restriction imposed on exports from their home countries. However, this MFA expired on January 1, 2005. As mentioned earlier, there had been claims that the expiry would have significant impact on Kenya's textile and apparel industry, particularly in the form of very keen competition from China (McCormick et al, 2006; Institute of Social and Ethical Accountability, 2006). It was further claimed that Kenya would find it difficult to compete with the integrated supply chains and the scale economies being enjoyed by major producers in competing countries.

## 2.2 Kenya's major apparel importer – the US

Among SSA nations, Kenya was the third largest textile and apparel exporter to the US in 2004. Although it is a small player in the global textile and apparel export industry, with 0.01% of world market share in 2004 (as per Figure 1), this industry has been one of the nation's traditional sources of livelihood. The revival of this industry would have a positive impact on employment and poverty alleviation because it could also reverberate across other industries or fields, such as farming, ginneries, textile and garment manufacturers, agro-chemical and other input suppliers, and logistics suppliers (Ikiara and Ndirangu, 2002).

**FIGURE 1: GLOBAL MARKET SHARE OF TEXTILE AND APPAREL EXPORTS IN 2004**

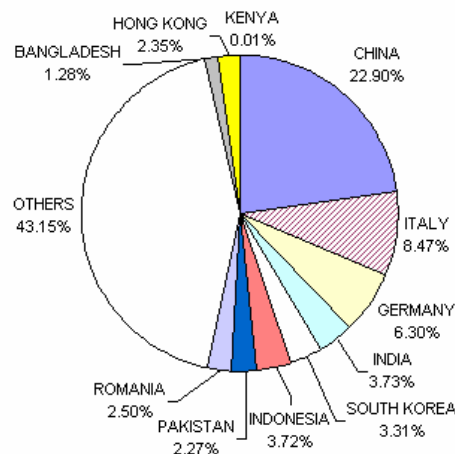


Table 1 shows Kenya's major apparel exports (in US\$) to the US in 2005, based on data extracted from the Office of Textiles and Apparel (OTEXA).

## 2.3 About this Paper

The expiry of the MFA provision in 2005, and the impending expiry of the third country fabric provision in 2012 seem to present a major challenge to Kenya's apparel exports to the US. It is imperative that Kenya's apparel industry seizes the opportunities to become globally competitive and to establish a strong market share in the US before such preferences expire. Kenya's apparel industry currently enjoys privileged access to the US market under the AGOA, and the government should take this opportunity to grow its presence in the US market. This paper investigates Kenya's apparel exports to the US with the

assumption that promotion of Kenya's apparel industry would generate chain-effect benefits for other related industries, such as the textile industry, and ultimately on employment and poverty alleviation in the nation as a whole.

**TABLE 1: KENYA'S MAJOR APPAREL EXPORTS TO THE US (IN US\$) IN 2005**

Cotton Apparel:	
<u>3-digit classification</u>	<u>Value of Export (US\$)</u>
1) 348 Women's/Girls' trousers/slacks/shorts	US\$150,710,377
2) 347 Men's/Boys' trousers/breeches/shorts	US\$ 36,485,373
3) 339 Women's/Girls' knit shirts/blouses	US\$ 13,397,996
4) 338 Men's/Boys' knit shirt	US\$ 8,311,270
Man-Made Fibre Apparel:	
<u>3-digit classification</u>	<u>Value of Export (US\$)</u>
1) 647 Men's/Boys' trousers/breeches/shorts	US\$ 16,064,870
2) 648 Women's/Girls' slacks/breeches/shorts	US\$ 7,647,910
3) 639 Women's/Girls' knit shirts/blouses	US\$ 7,331,367
4) 638 Men's/Boys' knit shirts	US\$ 5,694,781
5) 635 Women's/Girls' coats	US\$ 2,206,093
6) 640 Men's/Boys' not-knit shirts	US\$ 1,940,246
Cotton or Man-Made Fibre Apparel:	
<u>3-digit classification</u>	<u>Value of Export (US\$)</u>
1) 239 Baby garment/clothing accessories	US\$ 5,862,467

Source: OTEXA

This paper assesses whether there was any immediate impact generated by the expiry of the MFA provision on Kenya's exports in 2005. In addition, the paper investigates the relative position of countries such as Bangladesh, China, Germany, Hong Kong, India, Indonesia, Italy, Kenya, Mexico, Pakistan, Romania, South Korea, Thailand, and Vietnam, all of which export the same apparel categories to the US.

### 3. DATA AND METHODOLOGY

The Wilcoxon signed-rank test was used to determine whether the expiry of the MFA provision had any immediate impact on Kenya's major apparel export categories between 2004 and 2005. This analysis of the impact of the expired MFA provision was also extended to other competitors (Bangladesh, China, Germany, Hong Kong, India, Indonesia, Italy, Kenya, Mexico, Pakistan, Romania, South Korea, Thailand, and Vietnam) that were involved in exporting the same categories to the US.

### 4. RESULTS AND DISCUSSION

Table 2 shows the results of Wilcoxon signed-rank tests on Kenya's major apparel export quantity and price, as well as those of other countries exporting in the same apparel categories, between 2004 and 2005. The purpose of these tests is to determine the effect of the expiry of the MFA on Kenya's major export categories to the US, in terms of export quantity and unit price, as compared to other countries. In regard to the cotton (338, 339, 347, and 348) and man-made (635, 638, 639, 640, 647, and 648) apparel categories, the aggregate effect of MFA expiry on world exports to the US in 2005 was an increase of 11% in quantity at 1% level of significance. However, average world export price per dozen for these categories fell by 9.2% at the same level of significance, as the MFA's quota elimination resulted in an increase in aggregate demand and a decrease in apparel prices. In the case of China, Table 3 shows that it enjoyed the highest level of increase in export quantity amongst all countries (392.2%, at 1% level of significance) after the expiry of the MFA in 2005. Its export price per dozen, on the other hand, had fallen by 53.8% at 1% level of significance.



As shown in Table 2, the countries that enjoyed an increase in their cotton and man-made fibre apparel exports to the US at 1% level of significance were India (69.4%), Bangladesh (65.6%), Indonesia (49.5%), and Thailand (27.9%). On the other hand, a number of countries or regions experienced decreases in their exports at 1% level of significance: Romania (52.7%), South Korea (31.7%), Italy (22.4%), and SSA (14.1%). All of these except Romania experienced decreases in their export price per dozen at 1% level of significance. Although Kenya's cotton and man-made fibre apparel exports to the US in 2005 did not change significantly, the export price per dozen fell 8.9% at 10% significance level. As compared to a significant decrease of 14.1% in total exports quantity from the SSA to the US between 2004 and 2005, Kenya generally retained its US market share in export quantity even after the MFA had expired. Despite this, Kenya's average export prices fell by 8.9% at 10% level of significance while SSA's remained relatively unchanged in 2005. Whether the volume of China's exports to the US increased after the expiry of the MFA at the expense of countries that experienced quantity decreases, warrants further investigation in a separate research paper.

**TABLE 2 – IMPACT OF THE MFA ON KENYA'S AND OTHER COUNTRIES' APPAREL EXPORTS TO THE US.**

Countries	Cotton and man-made fibre exports quantity (units in dozens)			Cotton or man-made fibre exports quantity (units in kg)		
	Change in export quantity (dozen) in 2005 over 2004	Change in export price per unit (dozen) in 2005 over 2004	Data size (n)	Change in export quantity (kg) in 2005 over 2004	Change in export price per unit (kg) in 2005 over 2004	Data size (n)
World	+11.1%***	-9.2%***	99			8
Bangladesh	+65.6%***	-17.4%***	91		-11.3%*	8
China	+392.2%***	-53.8%***	99			8
Germany		+0	72			4
Hong Kong		-13.2%***	96			8
India	+69.4%***	-13.8%***	98			8
Indonesia	+49.5%***	-14.3%***	97		-17.1%**	8
Italy	-22.4%***		96			8
Kenya		-8.9%*	75			4
Mexico	-10.8%***	-1.4%***	98	-46.0%**		8
Pakistan		-8.5%**	92		-32.0%**	6
Romania	-52.7%***	+21.6%***	61			2
South Korea	-31.7%***	-8.0%***	98			8
Thailand	+27.9%***	-3.1%***	98			8
Vietnam		-1.9%*	98	-39.5%*		8
SSA	-14.1%***		97	+30		7

Note: \*\*\* indicates significance at 1%; \*\* indicates significance at 5%; and \* indicates significance at 10%. Shaded cell indicates that changes were not significant.

The sample size for export category 239 (baby garment/clothing accessories in cotton or made-made fibre materials) between 2004 and 2005 (as shown in Table 2) was considered inadequate for reasonable analysis. This must be left for future research to investigate.

#### 4. CONCLUSION

The Wilcoxon signed-rank test on Kenya's major cotton and man-made export categories indicates that the country did not experience significant changes in quantity, although price per dozen decreased by 8.9%, at 10% level of significance, when the MFA provision expired in 2005. This is despite the fact that world export quantity increased by 11% and price decreased by 9.2%, both at 1% level of significance, in 2005. The same test revealed that China enjoyed the highest increase in export quantity in these apparel categories to the US after the MFA expired in 2005. In other words, this country benefited more from the

lifting of the MFA's quotas than all other countries in this study. The countries whose apparel exports experienced significant increases in US market share in 2005 were India, Bangladesh, Indonesia and Thailand. On the other hand, Romania, South Korea, Italy and the SSA suffered significant decreases.

## REFERENCE

- AGOA, 2006; [www.agoa.gov/](http://www.agoa.gov/)
- AGOA.info, Kenya: A murky future for textile workers, May 2005; [www.agoa.info/?view=.&story=news&subtext=504](http://www.agoa.info/?view=.&story=news&subtext=504)
- AGOA.info, Kenya: A murky future for textile workers, May 2005; [www.agoa.info/?view=.&story=news&subtext=504](http://www.agoa.info/?view=.&story=news&subtext=504)
- Coughlin, P., *Gradual maturation of an import-substitution industry: The textile industry*. In Peter Coughlin and Gerrishon K. Ikiara (eds), *Kenya's Industrialization Dilemma* (pp. 127-152), Nairobi: Heinemann Kenya, 1991.
- Export Processing Zones Authority, Kenya's apparel and textile industry 2005, 2005; [www.epzakenya.com/UserFiles/File/ApparelTextile.pdf](http://www.epzakenya.com/UserFiles/File/ApparelTextile.pdf)
- Ikiara, M. M. and Ndirangu, L. K., Developing a revival strategy for the Kenyan cotton-textile industry: A value chain approach, August 2002; [www.tradeandindustry.go.ke/documents/di\\_report\\_cotton\\_textile.pdf](http://www.tradeandindustry.go.ke/documents/di_report_cotton_textile.pdf)
- Institute of Social and Ethical Accountability, Mapping the end of the MFA: A report by AccountAbility for the MFA Forum, 2006; [www.accountability21.net/uploadstore/cms/docs/New%20Mapping%20the%20EndCRX.pdf](http://www.accountability21.net/uploadstore/cms/docs/New%20Mapping%20the%20EndCRX.pdf)
- Larson, A. P., AGOA III: The United States Africa Partnership Act of 2003, Testimony before the Senate Foreign Relations Committee, March 2004; [www.state.gov/e/rls/rm/2004/30777.htm](http://www.state.gov/e/rls/rm/2004/30777.htm)
- McCormick, D., Kamau, P. and Ligulu, P., Post-Multifibre arrangement analysis of the of the textile and garment sectors in Kenya, *Institute of Development Studies Bulletin*, 37(1), 2006, 80-88.
- Office of Textiles and Apparel, 2007; [otexa.ita.doc.gov/](http://otexa.ita.doc.gov/).
- Oyejide, T. A., Africa imperatives in the new world trade order: Results and lessons, September 2004; [trtp.org/index.php?option=com\\_content&task=view&id=26&Itemid=89](http://trtp.org/index.php?option=com_content&task=view&id=26&Itemid=89)
- Roberts, J. and Fagernäs, S., Why is Bangladesh outperforming Kenya? A comparative study of growth and its causes since the 1960, Economic and Statistics Analysis Unit Working Paper 5, London: Overseas Development Institute, September 2004; [http://www.odi.org.uk/esau/publications/working\\_papers/Esau\\_5\\_Bangladesh\\_kenya.pdf](http://www.odi.org.uk/esau/publications/working_papers/Esau_5_Bangladesh_kenya.pdf)
- Schilling, D., Fact Sheet: Phase-out of the Multi Fibre Arrangement (MFA) and its implications for workers, September 2003; [www.iccr.org/issues/css/mfa\\_factsheet.htm](http://www.iccr.org/issues/css/mfa_factsheet.htm)
- The Economist Intelligence Unit. (2004). *Country Profile*, 2004: 38-46.
- The Nation, D-goods-clothing and textiles, November 2003; [www.tralac.org/scripts/content.php?id=2231&print=1](http://www.tralac.org/scripts/content.php?id=2231&print=1)
- Wikipedia, Multi Fibre Agreement, 2006; [en.wikipedia.org/wiki/Brawars](http://en.wikipedia.org/wiki/Brawars).

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## RISK TRANSFER SOLUTIONS FOR NATURAL CATASTROPHES IN ROMANIA

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### ABSTRACT

*Most countries in the world are suffering from natural disasters caused by floods, earthquake, tornado and even tsunamis. The developed countries have efficient techniques of covering such tragic events, but also the damages and losses are huge. A delicate problem appears when the catastrophes occur in a less developed country – where the risk transfer mechanisms aren't known or applied by local governments. One reason of missing such a protection plan is the lack of financial resources from the people. In this paper we will both a theoretical and practical analysis of the situation that exist in Romania, and the steps that Romanian Govern intend to take, in order to decrease the exceptional expenses from the national budget – cause by natural disasters.*

**Keywords:** Floods, Insurance, Risk Management, Compulsory, Crisis

### 1. INTRODUCTION

Generally speaking we appreciate that the risk is a part of a phenomenon that towards people generate a negative effect. The percentage and the volume of that part depend on the sensibility, magnitude and the specificity of these two parts report. So if we are talking about a flood into a region where are no inhabitants we appreciate a geographically evolution phenomenon. But in case of flood in urban/rural are we talk about catastrophes.

The risk influences the expected results of different events. So it is very important to use an adequate risk management program. It is the same problem to deal with in the case of floods. In order to manage the future situations we must clarify the former events and to quantify them, then to extrapolate in the future. The extrapolation use the probability technique, related to the loss frequency and loss severity.

### 2. THEORETICAL ASPECTS

In the last years, the flood risk grew exponentially. So it became very necessary to make ecological impact studies in order to evaluate the impact of risk on the environment. These studies aim to offer answers and solutions for the impact of the risk factors. They generate possible impacts of the floods, and find modalities to reduce the impacts.

The intervention of human on environment is reflected by the water flow deviation, the irrational forests' destruction. The effects are local, regional and in the end global.

The risk bearing may be rationally projected in order to obtain risk acceptance. That mean the ignorance of hazard manifestation' effects. We present in the following table the human response to flood risk and hazard.

Floods risks analysis is orientated toward the loss prevention: so it can be used two categories of flood risk identification: qualitative analyses and quantity analyses.

Swiss Re, the second largest world reinsurance company, mentioned that the economical cost level generated by global warming could double in next ten years, up to 150 US billion yearly. This may generate for insurance companies loss claims of 30-40 US billion – equivalent of a terrorist attack as at World Trade Center every year. There is a danger: human intervention on environment may accelerate natural climacteric changes to a dramatic point, from which the adaptation of our economical and social existence may be impossible. The Swiss Re study mention that humanity may reach a climacteric catastrophe that may be prevented. Also, at this moment environment problems overlap the terrorism,

and became the main threat of the new millennium. The science people expect an intensification of global warming, and predict powerful storms, heat waves, floods, tornadoes, cyclones. Meanwhile there will be a powerful contrast: some area will be confronted with freezing or dry weather, and other area with floods. Also in other area the water level will grow because of melting of glacial calottes. In the last 30 years the losses of insurance companies because of natural disasters grew exponentially, and the predictions estimate a more accelerated evolution.

Higher Probability of Floods	No action	<ul style="list-style-type: none"> <li>- fatalist vision on negative events</li> <li>- the false belief that the flood will not occur</li> <li>- the wrong mentality that the local/national authorities will remediate the problems</li> <li>- financial or social reasons</li> </ul>
	Personal Actions	<ul style="list-style-type: none"> <li>- structural protection</li> <li>- the temporary evacuation</li> <li>- insurance for property and health</li> </ul>
	Social Actions	<ul style="list-style-type: none"> <li>- active participation in the alarming system</li> <li>- helping the community in case of floods</li> </ul>
	Political Actions	<ul style="list-style-type: none"> <li>- lobby and pressing for hazard' protection</li> <li>- implementation of prevention measures against floods hazard</li> </ul>

As a global effect, Romania has been confronted with numerous floods in the last 5 years, in all areas. A very important problem became for Romania the strategy toward the floods. Flood risk management means appliance of different strategies, policies that must identify, analyze and evaluate this risk in order to reduce it.

The main problem in flood risk management is the fact that this risk is accepted by peoples, and there is no total protection against it. In order to decrease the effects of floods there must be done prevention measures, good management during the events, and post measures:

1. Prevention actions: the avoidance of new building in flood exposed area, controlling rivers' areas, transferring the risk to an insurance company, communication and education of the population toward this risk
2. Crisis Management: the prognosis of potential flooded area, the communication with peoples in case of imminent floods, the activation of operational entities and resources mobilization
3. Post floods measures: helping the people to satisfy their primary needs and to come to their normal lives, buildings' rehabilitation and the revision of all the ended process in order to improve flood crisis management in the future

### 3. ROMANIAN STRATEGY TOWARDS FLOODS RISKS

The actions and the measures for reducing the human and materials losses in Romania are taken for more than 200 years. There is numerous protections:

- dics of more than 9920 km
- 217 artificially lakes situated in different floodable areas with volumes of 893 mil. cube meters
- 1322 permanents lakes that beside the volume necessary for water usage, accept volume of 2017 mil. cube meters to decrease flood potential effects

With all these measures every year there are flooded thousands of hectares and the medium losses are more than 100 millions Euro every year. The causes that lead to these situations are obvious:

- intensification of lands usage and economic value increasing of affected areas
- the increasing of building vulnerability
- lacks in buildings' projects and infrastructure
- low level of protection
- negligence in exploitation of the rehabilitation protection measures
- climacteric accentuated changes that generate extremely phenomenon

The floods in 2005 and 2006 in Romania demonstrated the weakness of the available techniques but also the wrong management of the crisis management. The people that were exposed to flood risk had a low capacity of rebuild or restore their homes. This demonstrate that the action was a passive one, and there must be introduced the active measures. These active measures involve a change of mentality:

- people must realize that the flood risk may affect them and they must take into consideration schemes of risk management in their business/acting planning
- the people/businesses and the potential affected resources must be relocated in area where the flood risk is low
- the most important protection measures must be taken to prevent human life
- the flood phenomenon must be thought for every hydrographic region
- there must be done risk maps
- in the moment of floods occurrence the people must be responsible and not to generate the aggravation of this risk

The flood risk strategy enhances two stages: for short term and for medium-long term. Because in Romania the flood became a real and very actual problem in this paper we will debate only the short term strategy.

The short term strategy aims to reduce the impact of floods on population and property. There should be used a long term planning and a policy that should correspond to peoples' expectations. This strategy includes:

- flood risks identification
- flood risks supervising
- information of the peoples
- preventing measures
- preparing people for emergency situations

Also the strategy defines the specific responsibilities in operational plans for local and central administration, economic agents and individuals in order to cooperate for a better management of flood risks.

Flood risk management is a part of risk management program so we may solve this problem by using risk control and risk financing techniques.

In the first stage – flood risk control, the common policy must follow the decrease of losses in case of occurrence (passive measures) and policy to decrease the exposures or probability of occurrence (active measures). So, Romanian Govern established some national plans:

- Floods Management Plan that is elaborated for each river and hydrographic area
- National Plan for Prevention, Protection and Loss Effects' Decrease – is establish for national hydrologic area and use the first plan

The floods in the last two year made national authorities to rethink crisis management. Until 2009 the Govern must invest 1.7 billion Euro for different measures against this calamities. This amount is correlated to new projects that have already been approved. Last year the state invested more than 900 millions euro for rehabilitation of 630 hydro-technique projects, from the entire 878 objectives affected by massive floods. At this moment, other 205 objectives are in execution and for the rest of 43 there will be done feasibility studies. The specialists appreciate that the action plans for flood protection between years 2007 - 2009 refer to rehabilitation of small rivers and small hydrographic area, and also Danube's one. Also this strategy will adopt building of 7000 km of dgs and 87 dams.

Also, a very important part of this strategy refers to maintaining and exploitation of defending infrastructure against floods.

In order to realize this, The Sectorial Operational Plan (POS) for Environment will invest in the next 6 years more than 300 million euro for floods protection and for decrease of coast erosions. Beside this European Union financing, the Romanian Govern will allocate 47 millions euro to supplement them.

All these investments are focused on three principal domains. First of them is used to create the infrastructure for floods prevention and the decrease of theirs consequences. The second follows to elaborate risk maps and the third one propose technical assistance for projects' preparation, supervising and management.

The second stage – risk financing represent finding the entire solutions to cover floods losses that appeared despite the risk control measures. The most common technique is insurance. The insurance offer two fundamental benefits: insurance companies pay for insured losses and prevent financial difficulties for people or bankruptcy for companies.

Because there are situation where insurance companies don't offer protection against floods (area frequently affected) using their statistics make permanent public studies that are very useful for all interested kind of persons and also for national/local authorities. These studies can be used in order to elaborate new and more accurate control techniques.

The Romanian authorities intend to introduce the compulsory home insurance. The problem is not so simple because beside flood risks, there another huge risk that may affect Romania – earthquake. Even so this problem may not solve the problem – risk exposure. For example in Turkey after the disastrous earthquake the Govern adopt a law which mentioned that homeowners insurance is compulsory. The effect was not so good because only 20% of the houses were insured.

The prices of such insurance are very hard to be determined. This is happening because:

- the houses have different structures (wood, stone, concrete)
- risks exposure are different in different areas
- the value of houses are different
- the categories of homeowners are different
- the rural / urban locations

There must be authorized insurance companies that have enough resources and reinsurance programs that will pay for losses caused by flood (and not only) catastrophic events. Even with a compulsory homeowners' insurance, the lack of information may generate huge problems. In rural areas must be done serious work in mentality and information fields, to make people understand the benefits of such insurance. The information must be disseminated also by the Govern and by the insurance companies. Most of Romanian insurance companies have no subsidiaries/insurance agents in rural area.

In case of majority insurance companies there are split of risks for different situation: a basic level of risks, extension of standard risks, and catastrophic risks. The next table offers a medium quotation for homeowners insurance taking into account different risk exposures, for different area:

## I. Permanent Living Houses.

Permanent Living Houses:									
Nr. Crt.	Type of building	STANDARD covering				STANDARD EXTENSION covering			
		The age of building				The age of building			
		< 1945	1945 - 1977	1978 - 1990	>1990	< 1945	1945 - 1977	1978 - 1990	>1990
For houses in all areas of Romania									
		Quota percentage (%)							
1	Block of Flats – concrete structure	0,12	0,10	0,08	0,07	0,21	0,20	0,18	0,16
2	Houses – concrete structure/bricks	0,15	0,13	0,11	0,09	0,22	0,2	0,19	0,17
3	Houses – wood/ fire burning materials	0,53	0,47	0,42	0,41	0,67	0,61	0,56	0,55

## II. EXTENSION TO CATASTROPHIC RISKS

11. EXTENSION TO CATASTROPHIC RISKS						
Nr. Crt.	Type of building		”CATASTROPHIC RISKS“			
			The age of building			
			< 1945	1945-1977	1978-1990	>1990
For houses in A area (district: Alba, Bihor, Bistrița Năsăud, Brașov, Cluj, Covasna, , Harghita, Maramureș, Mureș, Satu Mare, Sălaj, Sibiu)						
		Deductible	Quota percentage (%)			
1	Block of Flats – concrete structure	Zero	0,10	0,08	0,07	0,06
		EUR 50	0,09	0,07	0,06	0,05
		EUR 100	0,08	0,06	0,05	0,04
		EUR 200	0,07	0,05	0,04	0,03
2	Houses – concrete structure/bricks	Zero	0,12	0,10	0,09	0,08
		EUR 50	0,11	0,09	0,08	0,07
		EUR 100	0,10	0,08	0,07	0,06
		EUR 200	0,08	0,07	0,06	0,05
		EUR 50	0,16	0,14	0,13	0,09
		EUR 100	0,15	0,13	0,12	0,08
		EUR 200	0,14	0,12	0,11	0,07
3	Houses – wood/ fire burning materials	Zero	0,06	0,05	0,04	0,03

Nr. Crt.	Type of building	”CATASTROPHIC RISKS“				
		The age of building				
		< 1945	1945-1977	1978-1990	>1990	
For houses in B area (district: Arad, Botoșani, Caraș Severin, Hunedoara, Neamț, Suceava, Timiș)						
		Deductible	Quota percentage (%)			
1	Block of Flats – concrete structure	Zero	0,11	0,09	0,08	0,07
		EUR 50	0,10	0,08	0,07	0,06
		EUR 100	0,09	0,07	0,06	0,05
		EUR 200	0,08	0,06	0,05	0,04
2	Houses – concrete structure/bricks	Zero	0,13	0,11	0,10	0,09
		EUR 50	0,12	0,10	0,09	0,08
		EUR 100	0,11	0,09	0,08	0,07
		EUR 200	0,09	0,08	0,07	0,06
		EUR 50	0,16	0,14	0,13	0,09
		EUR 100	0,15	0,13	0,12	0,08
		EUR 200	0,14	0,12	0,11	0,07
3	Houses – wood/ fire burning materials	Zero	0,06	0,05	0,04	0,03

Nr. Crt.	Type of building	”CATASTROPHIC RISKS“				
		The age of building				
		< 1945	1945-1977	1978-1990	>1990	
For houses in C area (district:București, Argeș, Bacău, Brăila, Buzău, Călărași, Constanța, Dâmbovița, Dolj, Galați, Giurgiu, Gorj, Ialomița, Iași, Ilfov, Mehedinți, Olt, Prahova, Teleorman, Tulcea, Vaslui, Vâlcea, Vrancea)						
		Deductible	Quota percentage (%)			
1	Block of Flats – concrete structure	Zero	0,13	0,11	0,10	0,07
		EUR 50	0,12	0,10	0,09	0,06
		EUR 100	0,11	0,09	0,08	0,05
		EUR 200	0,09	0,08	0,07	0,04
2	Houses – concrete structure/bricks	Zero	0,15	0,13	0,12	0,09
		EUR 50	0,14	0,12	0,11	0,08
		EUR 100	0,13	0,11	0,10	0,07
		EUR 200	0,11	0,10	0,09	0,06
		EUR 50	0,16	0,14	0,13	0,09
		EUR 100	0,15	0,13	0,12	0,08
		EUR 200	0,14	0,12	0,11	0,07
3	Houses – wood/ fire burning materials	Zero	0,06	0,05	0,04	0,03

**A. STANDARD coverings:** - fire, lightening, explosion, flying objects falling.

**B. STANDARD EXTENSION covering:** the risk from Standard covering plus: storm, hurricane, tornado, powerful rain, theft, snow weight, snow avalanches, shock waves, attack of animals, strikes, civil manifestations, vandalism

**C. CATASTROPHIC RISKS:** earthquake, floods, snow melting



As we can notice, the majority of insurance companies structured their offer for different risks categories. But the Govern intend to make the compulsory insurance only for catastrophic risks. Anyway is very important to establish an adequate insured sum, and related to this and quota percentage the insurance premium will be determined.

#### 4. CONCLUSION

Flood insurance is a delicate part of insurance industry, especially for homeowners. In many developed countries this kind of insurance is developing and evolving permanently, and in other countries – Eastern Europe ones this experience is at its' beginning and must learn from others' countries experience. Because of the specific of each country flood insurance is managed by insurance companies managed by state or by private insurers. The flood quotations are different from a state to another depending the risk sharing, promotional periods, eventually discounts.

The flood insurance' elasticity depend on the way that the mentality of actual and potential insured people. For example in most developed countries the insurance specialists from Govern or from the insurance companies teach different courses about insurance, protection, earthquake or flood insurance.

The situation in Romania is quite critical at this moment, because there is no adequate protection for flood risks. People that had bought homeowners' insurance are the rich one, and people that obtained credit from banks (in order to protect the credit in case of catastrophic events – but 90% of them are apartments in block of flats, that are not too much exposed to floods).

As we presented in the paper the real solution may come from flood risk management with full implication of Govern and private insurance companies. The success of the potential program will be seen only when flood occur, and the result will be less financial problems for people and for insurance companies. Anyway the major measures must be taken at the protection level and for the risk transfer optional or compulsory.

#### REFERENCES

- Bălteanu, D., Rădița, A., Hazarde naturale și antropogene, Editura Corint, 2001, București.
- Bessis, J., La probabilité et l'évolution des risques, Masson, 1984, Paris.
- Bruzzi, L., Casali, F., L'uomo e l'ambiente : rischi limiti di accettabilità, Pitagora Editrice, 1994, Bologna.
- Cutter, Susan, Living with risk, The geography of technological hazards. Edward Arnold. Adivision of Hodder & Stoughton, 1993, London.
- European Council Directive on the majo accident of certain industria; activities, 1982, European Community, Brussel, Belugium.
- Ferrel, A., Obiectivi di sicurezza e limitazione del rischio nelle esposizioni potenziali. Sicurezza e protezione, Notiziario ENEA, nr.27, 1991.
- Gâșteșcu, P., Managementul mediului, Editura SFINX, 2000, Târgoviște.
- Gavriletea, M., D., Managementul centralizat al riscului, Tribuna Economică, 19/ 2000.
- Gavriletea, M., D., Asigurări și reasigurări, Presa Universitară Clujeană, 2002, Cluj-Napoca.
- Gisotti, G., Benedini, M., Il dissesto idrogeologico, Previsione, prevenzione e mitigazione del rischio, Carocci Editore, 2000, Roma.
- Glickman, T., S., Reading in risk, Gough Editors, 1990.
- Gout, J. P., Prevention et gestion des risques majeurs, Les risques d'origine naturelle, Les Edition de l'Environnement, 1997, Paris.
- Heins, R., Williams, A., Risk Management and Insurance. Mc. Graw Hill, 1985, New York.
- Interim Activity Report of the EUR-OPA Major Hazards Agreement, Strasbourg.
- Kates, R., Hohenemser, W., Kasperson, X., Periculous progress: Managing the hazards of technology, Westview, 1985, Boulder.
- Knowles, D., J., Risk perception leading to risk taking behaviour amongst farmers in England and Wales, HSE, 2002, Norwich.

La prévention des risques naturels, Raport de l'instance d'évaluation présidée par Paul Henri Bourrelie, La documentation française, 1997, Paris, p. 702.

Rejda, G., Principles of risk management and insurance, Pearson Education, 2002, New York.

Risk Analysis III, Editor C.A.brebbia, WITpress, Southampton, 2002, Boston, p767.

Rosa, G., Rischio idrogeologico e difesa del territorio, Dario Flaccovio Editore, 2000, Palermo.

Roșu, Corina, Crețu, Gh., Inundații accidentale, Editura HGA, 1998, București.

Șelărescu, M., Prodani, M., Apărarea împotriva inundațiilor, Editura Tehnică, 1993, București.

Smith, K., Environmental hazards. Assessing risk and reducing disasters, Routledge, 2001, London and New York, p. 392.

Sorocovschi, V., Pándi, G., Hydrological risk phenomena caused by rainfalls in the northwestern part of Romania, Risk Analysis III, WITpress, 2002, Southampton.

Sorocovschi, V., Riscuri și catastrofe, (vol.I și II), Editura Casa Cărții de Știință, 2002, Cluj-Napoca.

Stănescu, V., Corbuș, C., Simota, M., Modelarea impactului schimbărilor climatice asupra resurselor de apă, Editura \*H\*G\*A, 1999, București.

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# CAPITAL BUDGETING IN PUBLIC AGENCIES

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## ABSTRACT

*Capital budgeting is the allocation of limited resources to investment alternatives in such a way to maximize return on the resources. Usually, there are many investment alternatives that can be undertaken with the available resources. The literature of capital budgeting has presented many different formulae, which range from the simplest financial tabulations to complicated patterns. All these formulae attempt to combine the financial factors related to an investment opportunity into a single expression; this single expression is used as the prime criterion for accepting or rejecting an investment proposal or it is used for ranking several proposals in some form of preference scale. In the private sector (firms), all methods of ranking the investment are based on dollar cost measurements. In the public agencies the decision might be taken on the criterion of maximizing the benefits to members of the society by undertaking a project. The decision maker has to take into account the effects of a project on members of the society. The goal is improving the economic and social well being of the community in which these investments take place. A project is to be undertaken if its social and economic benefits exceed its social and economic costs that if its net benefits are positive.*

**Keywords:** Capital Budgeting, Public Agency, and Discount rate

## 1. INTRODUCTION

Capital budgeting is a process for evaluating proposed long-term projects or courses of future activity for the purpose of allocating limited resources. Capital budgeting decisions are made using variety of methods including payback period, net present value, internal rate of return, profitability index, and accounting rate of return. Most of these methods focus on the amounts and timing of cash flows.

If a public agency could borrow and lend freely at a given interest rate, then the cost of capital approach is appropriate to use. However, usually a public agency gets funds to finance its investment projects in two ways: (1) As grants or subsidy from public funds, which taxpayers support them. An agency that receives all of its financing in this way and that has no contact with the borrowing and lending markets cannot take its discount rate from any cost of capital, there is none. (2) As loans from government, at interest, but such loans usually are not available freely on request, central government rations them. In public agencies, taxpayers are in the same position as stockholders in the firms. Their dividend incomes from public agencies are the services that they received, and their shares in these agencies are the taxes, which they pay.

Discounted cash-flow analysis applies to both private and public organizations. Most organizations must decide which fixed assets will accomplish various tasks at the least cost. If a public agency used the rate of return as the only criterion to select among investments, many useful public projects will be lost.

## 2. PURPOSE OF THIS STUDY

This study is an attempt to discuss a reasonable criterion to be used for capital budgeting in a public agency. Since a public agency has no contact with either the borrowing or lending markets, using discounted cash flow in a public agency raises the question of which discount rate to be used for capital budgeting in public agencies. This study suggests a discount rate to be used for capital budgeting in public agencies. This discount rate is the social discount rate that takes into consideration the problem of consistency between the criteria used to appraise projects in the public sector and those used in the private sector. If the criteria used for decision making by different agencies are consistent with each other, it will usually be possible to reallocate resources between these agencies. Consistency requires that decision makers to treat projects with the same time streams of social cost and benefits and in the same way whether the projects are proposed in the public or private sector. Public and private decision

making will be consistent if the social discount rate used in the public sector is equal to the implicit social discount rate used in the private sector.

### **3. SOCIAL DISCOUNT RATE**

This study suggests a social discount rate that to be used for capital budgeting decision in public agencies. The implicit social discount rate is computed as follows: let us assume that the market interest rate is 6% while profits of the firm are subject to a 50% tax rate (ignoring the way that they treat depreciation for tax purposes), then stockholders of the firm want the firm to undertake a project if, and only if, its net of tax outlays and receipts have a positive present value when discounted at 6% (taking into consideration the risk). This example can be restated by using gross outlays and receipts before taxes. Then the project should be undertaken if its gross outlays and receipts that are its social costs and benefits have a positive present value, when discounted at 12% since this is the implicit social discount rate for the private sector and the social discount rate that will be used in the public sector.

### **4. COST AND BENEFITS IN THE PUBLIC AGENCIES**

Since project appraisal concerns choices between alternatives courses of action, one can decide the value of one course only compared with that of some alternative courses. Thus the costs of a project that are relevant for a project appraisal are those that would be incurred if he undertook the project but that would not be incurred if he did not, that is, the opportunity cost of the project. Opportunity cost, the cost being what a project appraisal does not choose in favor of what he did choose. Similarly, the benefit of a project is the extra social benefit that members of the society will get if the project was undertaken rather than was not undertaken. A project should be undertaken if, and only if, the gainers from the project (people who use the service) could fully compensate the losers from the project (taxpayers) without themselves becoming net losers.

For example, labor-training programs: A public agency may run programs under which workers are trained at the expense-partly or wholly of taxpayers. The workers will receive money allowance during their training. The money received by trainees is transfer payment to them from taxpayers. These payments are a cost to society as a whole. Setting up and running such a training program is an investment by society. Society will benefit from increasing skills of the workers. Increasing skills of the workers will increase the gross national product, will improve the quality of services, and will reduce the number of people going on welfare for government support.

### **5. NON-DOLLAR MEASUREMENT**

This study suggests a non-dollar measurement to rank the projects in the public agencies. The decision maker will take into consideration the cost and the benefits, which cannot be measured in dollars. For example, in health service, what is the social value of a health service project? What is the benefit from a medical care project? What is the non-dollar cost and non-dollar revenue of such projects?

To answer these questions, the decision maker should determine first the output of the project. The output of a health service project is improvements in people's states of health or reducing people's pain and suffering. This output cannot be measured by dollar amounts but by using non-dollar amounts such as the number of patients cured and the number of patients who received help. The objective of health service is to maximize the social benefits of medical care.

For example, to allocate the resources between two conditions that may be called 1 and 2, if every case of a given condition cured as having the same social benefit as every other case cured. Then the objective is to maximize the following:

$$V = a_1 Q_1 + a_2 Q_2 \quad (1)$$

V is the value of the health care project

a<sub>1</sub> is the social benefit of each condition 1 that is cured

a<sub>2</sub> is the social benefit of each condition 2 that is cured.

Q1 is the number of cases of condition 1 that were cured  
Q2 is the number of cases of condition 2 that were cured

Equation (1) can be rewritten as  
 $V = a_1 [Q_1 + (a_2/a_1) Q_2]$

The expression within the brackets is a measure of the social benefits of the output of the health service, measured in units of condition 1 that were cured. It is an index of output that is based on judgment about the relative social benefits of the two outputs Q1 and Q2. A decision maker has to take into consideration in making his decision the benefits of the project such as saving people's lives and its effect on people's feeling. This benefit can not be evaluated in terms of dollars.

## **6. SUMMARY AND CONCLUSION**

A decision maker in public agencies need a criterion to be used in ranking investment proposals. This criterion will be different from the criterion used in corporations. Public agencies do not aim to make profit. Most of them offer services, which are almost free. The objective will be to maximize the benefits for members of the society. The decision makers will use cost benefit analysis in making their decisions. A project is to be undertaken if its net social benefit is positive. The decision makers will use non-dollar measurement such as expected time of service, expected time of waiting for service, probability of shortage in service, quality of service (number of people cured, number of times a patient has to visit the health service to receive treatment, and number of people who died in the health service). Although these non-dollar costs and benefits are difficult to measure objectively, they are very important to take into consideration in making the decision; they might lead to a different conclusion.

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## THE CHALLENGES TO HUMAN RESOURCE PROFESSIONALS

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### ABSTRACT

*Over the next 15 years the shortage of executive level talent will reach critical levels. The ability to compete for and retain talented individuals continues to be of concern to human resource professionals. However, the challenge is more difficult for human resource professionals in small businesses. In a fast-paced global marketplace where competitive advantage is often determined by the human capital in the organization, the level of talent becomes critical. Small businesses face unique challenges in providing opportunities for advancement. However, Herzberg's two-factor theory and expectancy theory both support the need for career path development for job satisfaction. Therefore, a key to attracting and retaining talent is in developing comprehensive, interactive, transparent, dynamic succession management systems that offer career path development within the small business structure.*

**KEYWORDS:** Human Resource Management, Small Business Management, Succession Management, Succession Planning, Talent Pipeline, Career Path Development, Motivation, Competitive Advantage

### 1. THE CHALLENGE

Human resource professionals face a challenge in the coming decade as they struggle to develop strong talent management systems (Minton-Euersole, 2006, May; Frank & Taylor, 2004; Ulrich & Eichinger, 1999; Kesler, 2002; Fegley, 2006) that incorporate multiple methods of developing in-house talent in order to fill a shallow talent pool, creating depth. Not only must the system focus on developing in-house talent, but must also influence and motivate talent to come on board and/or stay on board. Demographic information shows that the decline of 35-45 year olds over the next 15 years will leave many organizations struggling to find qualified leaders at all levels within the organization.

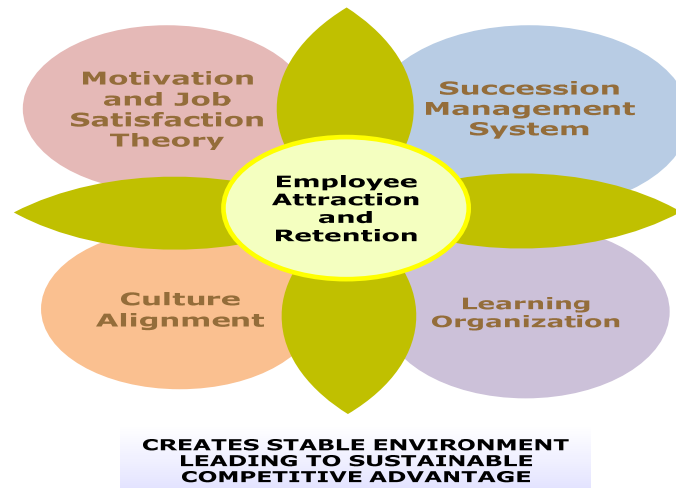
As the war for talent increases (Vigilante, 2004; Chambers, Foulton, Handfield-Jones, Hankin, & Michaels, 1998) many small businesses will need to incorporate a dynamic, interactive, transparent succession management system. In fact, most large corporations have already adapted or developed talent management systems that incorporate this type of succession management. Attracting and retaining high-level talent will only become more difficult over the next decade, and it is the responsibility of the human resource professionals to meet the talent challenge through the creation of a full-bodied succession management system that will increase organizational attractiveness.

Succession management, traditionally termed succession planning, urgently needs to develop into a full-bodied, multi-faceted system that involves all levels of the organization. Traditional succession planning systems have been static, often focused on charting replacements for 'key' positions within the firm. The charting function, more often than not, gave the firm a false sense of accomplishment leading to little, if any, leadership development activity. Granted, in the marketplace of the past, the traditional system was effective.

However, in today's fast-paced, highly dynamic, global marketplace where sustained competitive advantage is gained, not through products or services, but through human capital, it is critical that human resource professionals understand the need for succession planning and leadership development at all levels. In fact, talent should be viewed as inventory (Agrawal, Berryman, & Richards, 2003), the human resource professional as an inventory manager, and the succession management system as an inventory control system.

It is difficult to create a succession management system that addresses inventory needs when there are no best practices outlined for the development and implementation of a system specifically for the

challenging small business environment. In fact, small businesses face unique challenges in the marketplace, including but not limited to restricted financial, social, and human capital resources; fewer stretch opportunities supporting career development; and fewer chances for vertical advancement. Therefore, the succession management system not only has to address the 'standard' needs of organizations, but must also address the unique challenges associated with small business ventures.



### 1.1 The Importance of Small Business

Small businesses fuel the economic engine of the United States. As of 2003 approximately 5.7 million companies had fewer than 100 employees. According to recent data, small business (under 500 employees) created three-quarters of the new jobs within the United States and small business employs more than half of the private sector workforce (Small Business, 2005). The increasingly important role that small businesses play within the United States economy makes it critical that as a group these organizations begin to understand the need for talent management systems.

In order to compete with medium and large organizations for the talent, it becomes imperative that these smaller businesses understand the need to offer a variety of opportunities within the organization. The career options are highlighted through a comprehensive, interactive, transparent, dynamic succession management system that creates the perception of opportunities throughout the organization. Sometimes in smaller organizations the ability to offer a wide range of vertical movement opportunities will be limited, but if the human resource professional can show new talent that they will be given opportunities to grow and learn stretching the individual's current skills, then the organization will be able to compete.

## 2. HUMAN RESOURCE PROFESSIONALS AND THE TALENT PIPELINE

As the Baby Boomer generational cohort has started to retire, it has left a talent gap within many organizations. Executive level positions are being left empty as it becomes more difficult to fill the position. Three primary things have occurred to preface this talent gap: 1) Generation X is much smaller than the Baby Boomer generation leaving a gap based on sheer numbers, 2) the large number of Baby Boomers has filled the executive level positions leaving little opportunity for Generation Xer's to stretch and develop the decision making skills necessary at this level, and 3) Generation Xer's tend to prefer temporary jobs (Doverspike, P.F.; Shultz, & Taylor, 2000) offering a more relaxed work environment and providing the opportunity for more selective job choices.

The erosion of the external talent pool has created a sense of urgency for the development of depth in the internal talent pool, as well as a substantial talent pipeline. In fact, developing a substantial talent pipeline (Kesler, 2002) should be a primary priority of the human resource department. The need for quick and competent action in attracting and retaining talent has highlighted the inadequacy of current tools, which has lead to frustration with traditional tools that inhibit talent management (Boudreau, 2005) and therefore, negatively impact organization success.

As the cry for human resource professionals to take a seat at the strategy table (Lawler III, Mar/Apr 2005; Lawler III & Mohrman, 2003a; Lawler III & Mohrman, 2003b) has increased to a roar and poor measurement systems (Jamrog & Overholt, 2004) has made it difficult to prove that the human resource department adds value, it has become increasingly important that HR professionals step forward and show value through talent management systems that include dynamic, interactive, comprehensive, transparent succession management systems. The question now becomes how can the human resource professional develop a talent pool with a continued stream of talent moving throughout the organization that supports retention and therefore long-term business sustainability?

One of the first steps a HR professional must take in order to develop successful talent management systems is the creation of a clear understanding of what motivates career choices. The second is in providing answers to the following how will the development of a strong, interactive, dynamic, transparent, comprehensive succession management system attract and retain talent? What needs to be included in the succession management system in order to attract and retain talented individuals? Answering the second question is perhaps one of the biggest stumbling blocks to the entire process.

Little research has been done on the 'best practices' of succession management, especially in relation to the challenges faced by small businesses. This gap in the research could provide a partial explanation for the slow implementation of succession management systems in small businesses. Without research to guide the formation and implementation of a new and dynamic system many cling to the old, ineffective succession planning tools, if they choose to address the area at all. Perhaps the key to forming a list of 'best practices' hinges on understanding career motivators, which in turn supports the entire creation and implementation of an effective succession management system.

### **3. CAREER DEVELOPMENT AS MOTIVATOR**

Driving individual behavior is critical to retaining talent within an organization. Human resource professionals must understand and integrate the motivational process, the interaction process, the visioning process, and the learning process (Kaliprasad, 2006, June) to create an environment that will support individual growth. HR professionals that can grasp the importance of intrinsic motivation to the underlying development of a control system for behavior will be able to develop succession management systems that positively impact retention levels.

In a survey of 8,000 people in 35 industries, the top motivators were exciting work that is challenging, supports career growth, and learning/development programs (Kay & Jordan-Evans, 2002, January). The importance of these two intrinsic factors exhibit why succession management systems can impact the overall motivation of an employee. Establishing challenging work is part of the process in building cross-function capability through stretch assignments, and this in turn helps the individual grow a career, develop new and useful skills, and continually learn.

However, many theories are used to explain what triggers motivation. "Motivation is a resource-allocation process" (Latham & Pinder, 2005) and is more oriented on future activities and the need results of actions. However, two-factor theory (Herzberg, Mausner, Peterson, & Capwell, 1957/1987) and expectancy theory (Claire, Kickul, & Lester, 2001) offer insight into the importance of a transparent succession management process that involves the employee in career path development.

Herzberg's two-factor theory was one of the first theoretical studies to address the growing need for insight into work motivation (Herzberg, Mausner, & Bloch-Snyderman, 1959/1964) and job attitudes (Herzberg et al., 1957/1987) that transcended the theoretical foundation of traditional correlations between motivation and economic incentive. The theory connects hygiene versus motivation in the organization context. Hygiene factors are factors that when present at acceptable levels support the possibility of job satisfaction. In other words, if hygiene factors fall below acceptable levels, job dissatisfaction ensues. However, motivation factors support self-actualization and therefore, lead to job satisfaction.



Ultimately, human resource management professionals must clearly understand the complex nature of motivation and seek to establish motivational triggers within the human resource system. However, the challenge does not stop at understanding motivational triggers and the difference between maintaining a satisfactory level of hygiene factors and creating motivational triggers. It also is important that the HR professional understand the way in which inherent psychological contracts are developed based on intrinsic and extrinsic motivational factors.

Expectancy theory is primarily based on three fundamental points 1) expenditure of effort will result in acceptable performance levels, 2) the performance level achieved results in specific and defined outcomes, and 3) the individual places a high level of value on the defined outcomes (Isaac, Pitt, & Zerbe, 2001). The complicated nature of expectancy theory is wrapped in the need for clear communication at each level of the three point theoretical model.

The model underlines the need for the human resource professional to clearly understand what they are communicating and the inherent psychological contracts that are being developed through the communication (Claire, Kickul, & Lester, 2001). The succession management system is part of the communication process and will also create levels of expectancy about the individual's career development. Human resource professionals must clearly define the communication process and how psychological contracts are developed and established in order to understand if they are being fulfilled. However, career development and advancement are often a perceived outcome of working within an organization and meeting performance requirements. When an organization fails to create a systematic way that this perceived outcome can be met, then the intent to leave will increase. Herzberg's two-factor theory and expectancy theory support the need for the development of full-bodied, interactive, dynamic, transparent, comprehensive succession management systems as a motivational tool.

#### **4. CONCLUSION**

The importance of small businesses to the United States economy underlines the need for strong talent management tools to be used to attract and retain talent. However, as important as it is for small businesses to develop and implement strong succession management systems in order to compete in the talent war, it is almost impossible without more research to support development and offer a road map for implementation.

The unique challenges that small businesses face within the marketplace carry over and impact the ability to attract and retain highly talented individuals in a job market that supports constant movement for career advancement. Therefore, human resource professionals that work within small businesses need to adapt to these challenges providing opportunities through growth and horizontal movement within the organization. However, to meet the expectations of the talent and provide the perception of opportunities, it is critical that the succession management system be transparent and offers a wide range of opportunities and interaction.

Developing this type of succession management system and then implementing the necessary changes will be challenging. Just as human resource professionals should focus on providing a succession management system to attract and retain talent, researchers should focus on creating an understanding of the 'best practices' for development and implementation within small business.

#### **REFERENCES**

- Agrawal, V., Berryman, K., & Richards, J. E. (2003). Matching people and jobs. *Mckinsey Quarterly, Special Edition*(2), 71-79.
- Boudreau, J. W. (2005). Talentship and the new paradigm for human resource management: From professional practices to strategic talent decision science. *Human Resource Planning, 28*(2), 17+.
- Chambers, E., Foulton, M., Handfield-Jones, H., Hankin, S., & Michaels, E., III. (1998). The war for talent. *Mckinsey Quarterly, 3*, 44-58.

- Claire, E., Kickul, J., & Lester, S. W. (2001). Psychological contracts in the 21st century: What employee's value most and how well organizations are responding to these expectations. *Human Resource Planning*, 24(1), 10+.
- Doverspike, D., McKay, P. F., Shultz, K. S., & Taylor, M. A. (2000). Responding to the challenge of a changing workforce: Recruiting nontraditional demographic groups. *Public Personnel Management*, 29(4), 445+. Retrieved August 28, 2006, from Questia Web site: <http://www.questia.com/PM.qst?a=o&d=5001200975>
- Fegley, S. (2006). *2006 Talent Management Survey Report* (Society for Human Resource Management, pp. 1-36). Alexandria, VA: SHRM Research Department.
- Frank, F. D., & Taylor, C. R. (2004). Talent management: Trends that will shape the future. *Human Resource Planning*, 27, 33-41.
- Herzberg, F., Mausner, B., & Bloch-Snyderman, B. (1964). *The Motivation to Work* (2nd Ed.). New York: John Wiley & Sons, Inc. (Original work published 1959)
- Herzberg, F., Mausner, B., Peterson, R. O., & Capwell, D. F. (1987). *Job Attitudes: Review of Research and Opinion*. New York: Garland Publishing, Inc. (Original work published 1957)
- Isaac, R. G., Pitt, D. C., & Zerbe, W. J. (2001). Leadership and motivation: The effective application of expectancy theory. *Journal of Managerial Issues*, 13(2), 212+.
- Jamrog, J. J., & Overholt, M. H. (2004). Building a strategic HR function: Continuing the evolution. *Human Resource Planning*, 27(1), 51+.
- Kaliprasad, M. (2006, June). The human factor I: Attracting, retaining, and motivating capable people. *Cost Engineering*, 48(6), 20-26.
- Kay, B., & Jordan-Evans, S. (2002, January). Retention in tough times. *Training & Development*, 32+.
- Kesler, G. (2002). Why the leadership bench never gets deeper: Ten insights about executive talent development. *Human Resource Planning*, 25(1), 32-44.
- Latham, G. P., & Pinder, C. C. (2005). Work motivation theory and research at the dawn of the twenty-first century. *Annual Review of Psychology*, 56, 485-516.
- Lawler III, E. E. (Mar/Apr 2005). Making strategic partnership a reality. *Strategic Hr Review*, 4(3), 3.
- Lawler III, E. E., & Mohrman, S. A. (2003a). *Creating a strategic human resources organization: An assessment of trends and new directions*. Stanford: Stanford University Press.
- Lawler III, E. E., & Mohrman, S. A. (2003b). HR as a strategic partner: What does it take to make it happen? *Human Resource Planning*, 26(3), 15-29.
- Minton-Euersole, T. (2006, May). Many companies fumbling to address talent management issues. *Hr Measurements Library-Performance Management*. Retrieved October 31, 2006, from Society for Human Resource Management Web site: [http://www.shrm.org/?metrics/?library\\_published/?nonIC/?CMS\\_01696](http://www.shrm.org/?metrics/?library_published/?nonIC/?CMS_01696)
- Small Business Administration. (2005). *Small Business by the Numbers*. Retrieved June 2005, from Small Business Administration Web site: [www.sba.gov/?advol/](http://www.sba.gov/?advol/)
- Ulrich, D., & Eichinger, R. W. (1999). Delivering HR with an attitude. *Hr Magazine*, 43(7), 154+.
- Vigilante, B. (2004). Staffing woes: the 404 talent war. *Journal of Accountancy*, 198(6), 62+.

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# ANALYSIS OF INTER-PROCESSOR OVERHEAD AND ITS IMPORTANCE IN USING DISTRIBUTED PROCESSING TO SOLVE COMPUTATIONALLY INTENSIVE APPLICATIONS

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## ABSTRACT

*The main goal of a distributed system is to make it easier for users to access remote hosts and to share them with other users in a controlled way. Using an effective communication method can make a difference in the deployment of applications across a LAN or a WAN. The importance of this inter-processor communication cannot be underestimated. In fact, if inadequate, the time to solve a parallel problem will exceed the time it takes to solve in serial. This paper looks at a parallel algorithm that requires more communication bandwidth than is available on the test bed used. The results describe performance decay as additional processors were added to the problem, and it is clear that the solving the problem in parallel with this methodology is counter productive.*

**Keywords:** LAN, WAN, TCP, tcpstat, tcpdump.

## 1. INTRODUCTION

There are still many applications that are so computationally intensive that they require long time periods to be solved. In today's computing world, users expect an almost immediate response. One way to accommodate this need is through parallel processing. At first parallel processing required expensive hardware such as a "supercomputer;" however, in the last ten years, the ability to use "clusters" of standard PCs has proved effective in a number of cases.

The low cost and availability of workstation based LANs, as a parallel processing environment, has been recognized for many years (Villa-Sallent, Sole-Parenta, Jove and Torres, 1997). At first there was a concern that the LAN environment had inadequate bandwidth to support inter-process communication (Fatoohi and Weeratunga, 1994). A number of studies have shown that workstation clusters, if interconnected via a high speed LAN, can be an effective parallel processing environment (Lukenback, Ruppelt, and Schultz, 1994; Fahringer and Prodan, 2002; Mengiou, Hsienn and Du, 1994). Although the hardware available to support workstation based LANs continues to improve, many feel that relying on hardware alone may not ensure adequate performance for the demanding applications of the future Popescu, 1994; Courson, Mink, Marcais and Traverse, 2000.

Inter-processor communication is a queuing theory problem and the relationship between how quickly the server can process the information and how long information must wait in queue are critical to a successful implementation. Often it is difficult to get people (especially students) to understand the importance of this relationship. On the other hand, it is easy to find successful research studies in which this inter-processor communication is adequate and the time to solve drops as processors are added to the mix. However, in the teaching of distributed parallel processing, it may be just as worthwhile to look at an occurrence in which the process inter-communication went bad and the time to solve increased as processors were added to the problem. Some of the efficiency can be traced to the software used to distribute the information between/among the processors. The two most common software options are MPI and PVM.

Over the years, many applications were written using MPI (Message Passing Interface) and PVM (Private Virtual Machine), but many programmers working on distributed application were unaware of the potential performance difference between the two. PVM was the first standard for distributed computing and MPI, which was introduced later and became the dominant message passing standard (Geist, Kohl and Papadopoulos, 1996). This came about in part because, from a security perspective, its use of TCP on the transport layer made it more practical to implement across WANs and offered a higher degree of reliability. However, using to TCP (transmission control protocol) to build inter-processor communication

methods does provide reliability but increases overhead as well. This choice, based on a defacto standard, often drastically reduces the efficiency of the communication flow Guster, Al-Hamamah, Safonov and Bachman, 2003).

## 2. MOTIVATION

There has been research undertaken in both PVM and MPI performance levels, but this research concentrates more on network overhead and processing time performance and is focused toward illustrating what happens if the supporting network infrastructure cannot process the communications overhead in a timely manner. For students and professionals trying to understanding network overhead and its relationship to processor efficiency, analysis of an ineffective system can be a very important learning aide. Whenever applications are shared in a distributed environment, it is very important to use an effective communication algorithm. If the algorithm is not effective, the time to solve will increase rather than decrease. The goal of this research was to provide baseline metrics while describing the overhead encountered. The research was done for a select parallel matrix multiplication program, which was run in a distributed environment in order to illustrate an inadequate communications channel.

Specifically in this research, a parallel matrix multiplication program was used to develop random values in order to calculate time ratios between two processors using MPI (Message Passing Interface). This program was run on a three node cluster and a 20 processor cluster and the performance characteristics were compared.

## 3. RESEARCH IMPLEMENTATION

The research area mainly focused on the analysis of the MPI overhead and the projection of the performance decay within a system with an inadequate communications channel. A matrix algorithm was used in this research project. The matrix algorithm created random values in two initial matrices and performed a series of multiplications of those matrices. The matrix sizes were designed to have the same dimensions. The following example illustrates the first iteration of a 3\*3 matrix. The actual experiments involved 100 iterations and two place numbers.

$$\begin{array}{ccc} 1 & 0 & 0 \\ 1 & 0 & -1 \\ 0 & 1 & -1 \end{array} * \begin{array}{ccc} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 2 & 4 & 6 \end{array} = \begin{array}{ccc} 1 & 2 & 3 \\ -1 & -2 & -3 \\ 0 & -1 & -2 \end{array}$$

To add to the structure of this paper several research questions were devised:

1. What happens to the time needed to solve the matrix multiplication problem as additional processors are added?
2. What happens to the efficiency of the data transfer methodology as additional processors are added?
3. What happens to the accuracy of the data flow when additional processing nodes are added?

These questions can be can be modified to provide three-null hypotheses, which can be tested through experimentation.

**Hypotheses #1:** There will be no difference in session's elapsed time in solving MPI matrix multiplication as nodes are added.

**Hypotheses #2:** There will be no significant differences in payload size as nodes are added.

**Hypotheses #3:** There will be no considerable difference in lost packets as nodes are added.

Each computer node was connected to an Ethernet 100BASETX switched network. Each computer node contained two 500 MHZ Intel Pentium 3 processors with 256 memory on board and a100 Mbs Ethernet card. The matrix sizes and run parameters are as follows:

On the first run, the number of nodes was set to three because analysis, with a previous study using MPI and matrix multiplication, was possible (Giest, Kohl and Papadopoulos, 1994). To check the performance, a TCPSTAT log was recorded for each array multiplication. This TCPSTAT program recorded the session's total time, number of packets, number of bytes, number of TCP packets, standard deviation of

**TABLE 1  
MATRIX SIZE**

<b>Matrix Size</b>	<b># of Nods on the 1st run</b>	<b># of Nods on the 2nd run</b>	<b># Of Processors</b>
57*57	3	20	2
75*75	3	20	2
99*99	3	20	2
165*165	3	20	2
255*255	3	20	2
510*510	3	20	2

each packet, average packet size, and number of bytes per second. The following tables contain the data collected from TCPDUMP and were filtered using the TCPSTAT command. In Table 2, three nodes were used, and in Table 3, twenty nodes were used for the matrix multiplication problem.

**TABLE 2  
TCPSTAT RESULTS WITH 3 NODES**

<b>Matrix Size # of Processors</b>	<b>Total time</b>	<b>Number of packets</b>	<b>Number of bytes</b>	<b># Of lost packets</b>	<b>Standard Dev of each packet</b>	<b>Avg packet size</b>	<b>Number of bytes per second</b>
57*57_3	3.987283	37571	3646600	1047	200.75	97.06	457278.8
75*75_3	5.987283	59367	5281039	279	171.59	88.96	480701.27
99*99_3	8.302889	109389	8767766	130	132.23	80.15	527994.89
165*165_3	16.83475	214701	16282393	370	106.82	75.84	483594.65
255*255_3	36.25695	503771	36210137	430	75.65	71.88	499354.39
510*510_3	126.0732	1754900	122328596	1418	53.93	69.71	485149.06

**TABLE 3  
TCPSTAT RESULTS WITH 20 NODES**

<b>Matrix Size # of Processors</b>	<b>Total time</b>	<b>Number of packets</b>	<b>Number of bytes</b>	<b># Of lost packets</b>	<b>Standard Dev of each packet</b>	<b>Avg packet size</b>	<b>Number of bytes per second</b>
57*57_20	11.06032	57466	5419310	668	177.47	94.3	244988.79
75*75_20	15.67815	83591	7329933	959	148.79	87.69	233762.66
99*99_20	22.79558	121016	10118065	179	125.8	83.61	221930.43
165*165_20	49.6	270716	20936469	192	87.97	77.34	211053.1
255*255_20	101.611	519015	39800275	271	78.52	76.68	195846.27
510*510_20	377.1593	1974996	143413368	1778	48.99	72.61	190123.07

In analyzing the two tables above, the data that stands out most is the second column, total time (elapsed time). As expected, the elapsed times increased significantly as the size of the matrices were increased. However, adding additional processors to the mix did not decrease the time to solve but rather increased it. Specifically above, increasing the number of nodes from 3 to 20 increased the elapsed time by a factor

of about three times. The number of packets and bytes scale are about what would be expected as the size of the matrices increased. Also, as expected, the number of packets/bytes increased as the number of nodes increased from three to twenty. The magnitude of this increase, roughly a by factor of one and a half, is perhaps less than might be expected based on the elapsed times observed herein. In both tables, the average packet size followed a similar pattern in which the size continued to drop. This is an indication that the efficiency of the inter-processor communication decayed as the complexity of the matrix increased. In other words, it took more packets and each packet contained less data as the matrix complexity increased. This relationship is further illustrated by the last column bytes per second transferred. The transfer rate dropped as the matrix complexity increases and the transfer efficiency was better with just three nodes than with twenty nodes.

#### 4. CONCLUSIONS AND RECOMMENDATIONS

Hypothesis one can be rejected and Hypotheses two and three can be accepted.

**Hypotheses #1:** There is no difference in session's elapsed time in solving MPI matrix multiplication as nodes are added. Elapsed time is definitely greater across all matrix categories for the twenty node experiment when compared to the three node data; however, this is not true in the desired directions.

**Hypotheses #2:** There is no significant difference in payload size as nodes are added. For both the three and twenty node experiments, the packet size will remain relatively close within matrix size categories.

**Hypotheses #3:** There is no considerable difference in lost packets as nodes are added. There is not a consistent pattern of packet loss when the three and twenty node data are compared.

From the data reported above, it is clear that the inter-processor communication channel must be adequate or it may very well take more time to solve a given problem in parallel than in serial. As would be expected, the complexity of the matrix multiplication influences the intensity of the packet exchange as does the number of nodes the problem is distributed across. In this case, the additional overhead prevented the problem from being solved more quickly on twenty versus three nodes. There are several factors that might be reviewed and modified to improve performance within the experimental computer test bed utilized herein. *Faster bus size machine:* The cluster of machines used for this study had about 100 MHz bus speed. During the data transmission, the 100 MHz bus speed was oversubscribed and the kernel of the machine dropped packets due to the lack of resources. If the bus speed could be increased to 1 GHz or more, the dropped packet ratio could be reduced as well as the total time. *An algorithm better suited to the computer environment:* The amount of data transmitted over the cluster also depends on the algorithm used. If a more effective message passing algorithm was used in this study, there is a good possibility the number of packets transferred over the network could be reduced. *Faster network connection:* Instead of using 100 Mbs Ethernet on the cluster, 1 Gbs Ethernet (1000BASE-T) could be used, thereby increasing the data transmitting flow by a factor of ten. Bus size of the machine should match the connection speed or else the data transmission will take place for the slowest speed. *Computer memory:* Since this study calculated complex multiplication, it is critical to have enough memory on the machine. Otherwise, due to hardware delay, the total time will increase. In these experiments, this value should at the very least be doubled.

#### REFERENCES

- M. Courson, A. Mink, M. Marcais and B. Traverse, "An Automated Benchmarking Toolset" *HPCN Europe*, 2000, 497–506.
- T. Fahringer and R. Prodan, "ZENTURIO: An experiment Management System for Cluster and Grid Computing", *The Fourth International APART Workshop*, 2002.
- R. Fatoohi and S. Weeratunga, "Performance Evaluation of Three Distributed Computing Environments for Scientific Applications", *Proceedings of Supercomputing*, 1994, 400-409.
- G. Geist, J. Kohl and P. Papadopoulos, "PVM and MPI: A Comparison of Features", *Calculator Paralleles*, Vol. VIII(2), 1996.

- D. Guster, A. Al-Hamamah, P. Safonov and E. Bachman, "Computing and network performance of a distributed parallel processing environment using the MPI and PVM communication methods", *The Journal of Computing Sciences in Colleges*, Vol. XVIII(4), 2003, 248-253.
- T. Luckenbach, R. Ruppelt, and F. Schulz, "Performance Experiments Within Local ATM Networks", *GMD-FOKUS*, 1994.
- L. Mengjou, J. Hsiehn, H. Du, J. Thomas and J. MacDonald, "Distributed Network Computing Over Local ATM Networks", *Computer Science Department Technical Report*, TF-94-17, 1994.
- A. Popescu, *A Parallel Approach to Integrated Multi-Gbit/s Communication Over Multi-Wavelength Optical Networks*, Stockholm: Royal Institute of Technology, 1994.
- J. Villa-Sallent, J. Sole-Pareta, T. Jove and J. Torres, "Potential Performance of Distributed Computing Systems Over ATM Networks", *INFORCOM*, 1997.

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## MANAGING A COMPUTER CLUSTER: TRADEOFFS AND SCALABILITY

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### ABSTRACT

*Packet inter-arrival data was collected and analyzed for a physical chemistry problem that simulated particle movement as a result of particle collisions. The parallelization method used broke the space into  $N$  subparts based in the number of processors used. Inter-processor communication was required when ever a particle collision occurred and a particle moved from the space associated with one processor to the space area of another processor. That movement was relayed via the MPI protocol using TCP packets every millisecond. Experimental trials were run on from 2 to 12 two processor units. Although the CPU time continued to drop as additional units were added the elapsed time only dropped to the 4 unit level and then increased thereafter. It was found that CPU time continued to drop as additional nodes were added, but elapsed time increased. Therefore, addition research is suggested using Open MP or PVM to address the problem of communication overhead which is negating the effectiveness of this algorithm beyond the 4 processor level.*

**Keywords:** cluster computing, distributed processing, parallel processing.

### 1. INTRODUCTION

Predicting packet inter-arrival patterns and the effect on network performance has been a challenging problem for many years (Partridge, 1993). This can be explained in part by the failure of the packet distribution to mimic the theoretically expected Poisson distribution. A number of studies confirm that the actual inter-arrival distribution of packets is not exponential as would be expected in the classical model (Krzenski, 1998; Partridge, 1993; Vandolore, Babic & Jain, 1999; Guster, Robinson & Richardson 1999).

However, the data analyzed in these studies was taken from a general purpose network that served a wide variety of applications and hence required a large number of different protocols, each with their own workload dynamics. The variation of protocols has been studied by (Guster, Safonov and Sundheim, 2005) and they found the service used and its interaction with the protocol used tend to vary significantly. For example http and ssh both use TCP on the transport layer, but http does a better job of maximizing payloads so it tends to generate fewer packets with larger payloads.

The low cost and availability of workstation based LANs as a parallel processing environment has been recognized for many years (Vila-Sallent, Sole-Pareta, Jove, and Torres, 1997). At first there was a concern that the LAN environment had inadequate bandwidth to support inter-process communication (Fatoohi and Weeratunga, 1994). A number of studies have shown that workstation clusters if interconnected via a high speed LAN can be an effective parallel processing environment (Luckenbach, Ruppelt and Schulz, 1994; Fahringer and Prodan, 2002; Mengjou, Hsiehn, Du, Thomas and MacDonald, 1994). Although the hardware available to support workstation based LANs continues to improve many feel that relying on hardware alone may not ensure adequate performance for the demanding applications of the future (Popescu, 1994; Courson, Mink, Marcais, and Traverse, 2000).

One method to address performance optimization on the network software level is to look at the overhead related to the data transfer logic (Riley, 1997). This approach has merit in studying the efficiency of the network connectivity in a distributed computer grid. There are several approaches that can be applied to optimizing performance on the network protocol level such as optimizing the buffers, minimizing management traffic and scheduling applications. In most cases the planning and implementation of such methods can be improved by studying historical network traffic data obtained on the system in question. (Truong and Fahringer, 2003) are proponents of such methodology and suggest that more research is



needed that starts with the analysis of experimental data. They further state that such research will require better planning in regard to how to capture, store and analyze such data.

Therefore, this paper collected workload performance data from a live network in which parallel molecular modeling software was used to generate the network workload. The MOLDY program (Refson, 2000) will be used to generate the MPI requests. This example was selected because the source code was readily available and the output dealt with three dimensional graphics an area that the authors are investigating to determine the possibility of using such parallel techniques in financial forecasting. In this program the number of server machines can be programmed and thereby the offered intensity can be varied. TCP-dump will be used to collect the performance data. The number of servers will be varied so that performance scaling can be evaluated. The following data will be reported for each test run: CPU time in seconds, elapsed time in seconds, number of packets in sample, mean inter-arrival time, mean throughput in bytes and packet intensity in packets per second.

## **2. CHARACTERISTICS OF THE PROBLEM SOLVED**

In this work we used a computer simulation methodology to determine the characteristics of water using the first physical principals. In the parallel algorithm each processor stores a complete set of dynamic variable arrays for all molecules. The problem was selected to illustrate practical issues in parallel computing, and involves molecular dynamic simulations used to study the statistical mechanics of condensed phase matter composed of small molecules.

The simulations were carried out for water molecules using the 4-site model of Jorgensen. Only the oxygen site interacts via the Lennard-Jones potential, and the charge site is displaced 0.15 °A from the oxygen molecule. Of particular interest in these simulations is the fact that the applied algorithm generates intensive communication between all parallel processors included in the system. It is a challenging problem and would be useful if subsequent research replicated such investigations and compared speed-up values for such types of calculations. The MOLDY code provides quite intensive interaction between computers during the simulations. It is expected that investigation of this type of problem will add to the understanding of how different types of algorithms impact the performance of parallel applications. Specifically, the area in which the particles will collide is defined through a three dimensional matrix. For parallelization that space is broken into N subparts based in the number of processors used. The inter-processor communication is required when ever a particle collision occurs and a particle moves from the space associated with one processor to the space area of another processor. That movement is relayed via the MPI protocol using TCP packets. The status of the movement of particles is updated with in the simulation every millisecond which contributes to the intensity of the packet exchange between/among processors.

## **3. NETWORK CONFIGURATION**

The basic configuration of network follows. Two to twelve Intel based hosts were used to run the experiment. Each host was configured with two 550 MHz CPUs that utilized symmetric multi-processing as supported by the Linux operating system. Each unit ran its part of the MOLDY program as required and housed the TCP-dump program which collected packet traffic. Each unit was connected to a Force 10, E300 switch (a high end Enterprise level switch) at 100Mbs.

## **4. DATA COLLECTION STRATEGY**

The parallel test-bed was programmed using the MOLDY software. TCP-dump was run on each unit and therefore traffic for each unit was collected locally. These files were later linked together by combining the files from each unit and then sorting by time stamp. The time on each unit were synchronized via a time server. Once combined the file could be analyzed and the inter-arrival times and throughput statistics were available from two to twelve units. Two different trials were run; one defined the number of steps to reach convergence in the problem at 10,000 and the other at 25,000. Both trials are designed to solve the problem but with different levels of accuracy/reliability. Obviously the 25,000 step trial offers the greatest degree of reliability.

The first step was to obtain performance data on the live network for a range of different number of processors. Therefore each problem was solved by varying the number of units from 2 to 12. The results are listed below in Tables 1 and 2.

**TABLE 1**  
**TIMINGS AND MEANS FOR PACKET ARRIVAL, THROUGHPUT AND INTENSITY**  
**10,000 ITERATIONS**

	2 concurrent hosts	4 concurrent hosts	6 concurrent hosts	8 concurrent hosts	10 concurrent hosts	12 concurrent hosts
CPU Time	141.84	91.06	67.06	59.58	50.70	50.22
Elapsed Time	245.99	200.4	227.58	263.91	259.14	264.85
Packets in Sample	201361	191377	470706	469598	602578	603034
Inter-arrival time	.00122	.00104	.000483	.000562	.000430	.000439
Throughput	575668	707134	1265710	1090568	1396049	1337841
Packet Intensity	817.64	960.42	2069.78	1771.63	2327.71	2231.22

**TABLE 2**  
**TIMINGS AND MEANS FOR PACKET ARRIVAL, THROUGHPUT AND INTENSITY**  
**25,000 ITERATIONS**

	2 concurrent hosts	4 concurrent hosts	6 concurrent hosts	8 concurrent hosts	10 concurrent hosts	12 concurrent hosts
CPU Time	352.61	215.65	168.26	150.46	132.27	127.48
Elapsed Time	626.61	506.33	572.38	663.32	649.29	660.37
Packets in Sample	503107	474212	1174226	1175415	1505483	1505182
Inter-arrival time	.00124	.00106	.000487	.000564	.000431	.000438
Throughput	568566	702434	1243781	1089826	1390656	1340808
Packet Intensity	805.17	952.73	2022.08	1774.37	2312.51	2228.84

## 5. ANALYSIS

The two tables provide strikingly similar results, except the number of packets in the sample and CPU/elapsed times in Table 2 are about twice the values observed in Table 1. This makes sense because the number of iterations was increased from 10,000 to 25,000. The CPU time required to solve the problems decreases as additional units are added. However, there is not a linear decrease. In fact, the decrease from 2 units to 12 units is only about three times. Elapsed time also exhibited similar traits within the two samples. In both cases it was reduced when four units were used, but increased steadily as additional units were added. Interestingly, packets in the sample provide a clue as to why the elapsed time increases when more than four units are utilized. When the number of units is increased from 4 to 6 the number of required packets about doubles in both samples which results in significant communication overhead. Mean packet inter-arrival times in both samples are similar, with the values observed in Table 2 being generally slightly higher. Throughput and packet intensity were also similar in the two samples which indicates both runs had similar profiles, but the 25,000 iteration sample simply took longer to run.

## 6. DISCUSSION

In terms of providing an advantage in solving the problems in less time the method used fails when more than four units are utilized. While the reduction in the CPU time is encouraging as more units are added, the increase in network traffic offsets this advantage. Therefore, for the algorithm to be effective it needs to be reevaluated in terms of the massive amount of inter-processor communication utilized. However, if

the problem was run on a cluster that was not dedicated only to solving this problem, but had several parallel problems running at the same time the saving observed in CPU time herein would be attractive.

It appears that there are several other things to consider besides a redesign of the distribution algorithm. A network speedup to 1Gbs would have limited effect because the average throughput observed did not exceed 1.4 MBs. Also of note is the loss in packet payload efficiency as units are added. The packet average is about 700 bytes in the two and four unit tests, but drops off to about 600 bytes in the 12 unit experiments. This may in part be explained by the overhead of setting up and maintaining the additional TCP connections used by MPI. There may be some promise in adapting the software to use PVM which is based on UDP which is connectionless. (Guster, Al-Hammah, Safonov and Bachman, 2003) found that PVM could greatly reduce the communications overhead when compared to MPI. Also, perhaps a supercomputer would help in this regard because the processors would all be in the same box and connected via a high speed bus. However, an analysis of the number of management packets (such as TCP syn) in the data revealed that they typically accounted for only .05% of the total packets which may negate the potential of PVM. A further analysis of the packet sizes revealed that there were often a large number of small packets. In fact the number of packets less than 100 bytes averaged (payload less than 40 bytes) around 35% across the data and in some cases exceeded 45% within a single trial. These values help explain why the transfer rates observed were well below ethernet's maximum of 1514 bytes.

Although a reduction in elapsed time was obtained up to the four unit level the scaling beyond that point was counter productive. Even though the decrease in CPU time is encouraging it is the elapsed time that counts on the end-user level. For this particular problem the effectiveness of using CPU distributed across a LAN is negated by the communication overhead. It appears this problem is quite complex and is a function of the time any CPU has to wait for a piece of the "puzzle" from another CPU. Speeding up the network may have some slight effect, but the transfer rates never exceed 1.5MBs (12Mbps) on a 100Mbps network. Therefore more research is needed that addresses alternates to MPI (such as PVM and Open MP) and reevaluates the algorithm used to distribute the workload among the CPUs. In terms of trying to transfer this basic parallel logic to other three dimensional graphics applications there would be little advantage given the configuration used herein. However, if the inter-processor communication problem can be overcome and the scaling potential based on the CPU times observed can be obtained then it is worth attempting to transfer the basic parallel logic.

## REFERENCES

- Courson, M., Mink, A., Marcais, M. and Traverse, B., "An Automated Benchmarking Toolset", *In HPCN Europe*, 2000, 497-506.
- Fahringer, T. and Prodan, R., "ZENTURIO: An Experiment Management System for Cluster and Grid Computing", *4th Intl. APART Workshop, Euro-Par*, 2002.
- Fatoohi, R. and Weeratunga, S., "Performance Evaluation of Three Distributed Computing Environments for Scientific Applications", *In Proceedings of Supercomputing'94*, 1994, 400-409.
- Guster, D., Al-Hammah, A., Safonov, P. and Bachman, E., "Computing and Network Performance of A Distributed Parallel Processing Environment Using the MPI and PVM Communication Methods", *The Journal of Computing Sciences in Colleges*, Vol. XVIII(4), 2003, 248-253.
- Guster, D., Robinson, D. and Richardson, M., "The Application of the Power Law Process in Modeling the Inter-Arrival Times of Packets in a Computer Network", *Proceedings of the Midwest Decision Sciences Institute*, Springfield, IL, April 22-24, 1999.
- Guster, D., Safonov, P. and Sundheim, R., "Analysis of End-user Services and Their Potential Load on the Network", *Journal of the Academy of Business and Economics*. Vol. V, (3), 2005.
- Krzenski, K. "The Effect of Varying the Packet Interarrival Distribution in the Simulation of Ethernet Computer Networks", Unpublished graduate research project, St. Cloud State University, 1998.
- Luckenbach, T., Ruppelt, R. and Schulz, F., "Performance Experiments within Local ATM Networks", *GMD-FOKUS*, Berlin, Germany, 1994.
- Mengjou, L., Hsieh J., Du, H., C., Thomas, J., P. and MacDonald, J., "Distributed Network Computing over Local ATM Networks", *Computer Science Department University of Minnesota, Computer Science Department Technical Report*, TR-94-17, 1994.

- Partridge, C. "The End of Simple Traffic Models", (Editor's Note), *IEEE Network*, Vol. VII(5), 1993.
- Popescu, A. "A Parallel Approach to Integrated Multi-Gbit/s Communication over Multiwavelength Optical Networks," *Ph.D. dissertation, Royal Institute of Technology*, Stockholm, 1994.
- Refson, K., "Moldy: a portable molecular dynamics simulation program for serial and parallel computers", *Computer Physics Communications*, Vol. CXXVI(310), 2000.
- Riley, G. et al., "Performance Improvement Through Overhead Analysis: a case study in molecular dynamics", *Proc. 11th ACM Intl. Conf. Supercomputing*, 1997, 36-43.
- Truong, H. and Fahringer, T., "On Utilizing Experiment Data Repository for Performance Analysis of Parallel Applications". *In 9th International Europar Conference (EuroPar 03)*, LNCS, Klagenfurt, Austria, Springer-Verlag, 2003.
- Vandolore, B., Babic, G. and Jain, R., "Analysis and Modeling of Traffic in Modern Data Communications Networks". A paper submitted to the Applied Telecommunication Symposium, 1999.
- Vila-Sallent, J., Sole-Pareta, J., Jove, T. and Torres, J., "Potential Performance of Distributed Computing Systems over ATM Networks". *INFOCOM'97*, 1996.

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## **BOTTOM-LINE VALUE FOR LEADERSHIP MASTERING COOPERATION: TRANSFORMATIVELY CHANGING GLOBAL ENTERPRISES**

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### **ABSTRACT**

*In this paper, the authors attempt to answer the WHY question: Why cooperation is important, if not critical, to the successful management of large-scale transformational change of organizational systems. The short answer is cooperation defines compatibility of both the ends and the means in reaching a new state – in this case, accomplishing transformative change is a holistic iteration for redesigning the future and inventing ways to bring it about – gaining both economic and human success. Transformative change is revolutionizing the basic characteristics of the situation in such a way that the actors may not return to the old ways, but by successfully respecting the purpose of organization members and the environment in the context – there is compatibility with both the ends and the means. Here, cooperation in transformative efforts is the prime means of moving from the old to the new. For consultants to succeed in the context a new social calculus is described; a new framework for creating vertical, horizontal, and temporal compatibility among the members of the organization to cooperate more fully*

**Keywords:** local/global challenge, mastering, cooperation, transformative change, ends and means.

### **1. INTRODUCTION**

Essentially, this paper focuses first on developing *cooperation* in and among management consulting professionals, then on building *cooperation* in the relationship between consultants and clients effecting successful consultations co-creating unique value (Pralhad and Ramaswamy, 2004) for the 21<sup>st</sup> century client. This paper attempts to rationalize the value of mastering the local/global challenge to "cooperate" which is fundamental to consultants successfully managing the complexity of large system transformational change as it plays out on multiple levels in organizations (Scharmer, 2000).

Scharmer posits five different levels of change: reacting, restructuring, redesigning, reframing, and regenerating as organizational response to change (p. 8). Further, deep change or transformational change, is accomplished by moving through to the fifth level: regenerating, which is not an easy change process in most organizations. The change Scharmer discusses is mapped along the lines of the classical Lewinian (1951) insight that change is *unfreezing – change – refreezing*, or in Scharmer's less static terminology *uncovering - redefining – enacting*. Pursuing deep change in this manner makes transformational change possible

### **2. COOPERATION ADDRESSES THE GLOBAL CHALLENGE**

In order for management consultants (MCs) to choose to cooperate in managing transformative change a deeper understanding of the meaning of the term: *cooperation* may be necessary. Specifically, an understanding is needed that demonstrates a variance from the term, *collaboration*. There is much confusion in the use of collaboration and cooperation; both theoretically and practically. The confusion may be recognized first in attempts to define the terms.

#### **2.1 Defining Cooperation**

Webster's Ninth New Collegiate Dictionary (1987) describes cooperation as acting or working together with others for a common purpose; whereas the same dictionary defines collaboration simply as: working together. Clearly, the dictionary is not helpful in identifying relevant difference in the context of the 21<sup>st</sup> century, for the tendency is to base definitions on past experience. Digging deeper in current experience and presencing – learning from the future as it emerges (Scharmer, 2000) to find a significant difference in the meaning of the terms (collaboration and cooperation) is necessary. The works of Senge (1997), Vaill (1996) and Gharajedaghi (1985; 2006) and others contribute to the new understanding and clarity in terms of cooperation and collaboration.

## 2.2 Use of the Terms Collaboration and Cooperation

Gharajedaghi (2006) describes the current time of organizations as multiminded systems that have a socio-cultural view, quite different from the uniminded systems with a biological view of the 20<sup>th</sup> century. He states: "A sociocultural view considers the organization a voluntary association of purposeful members, who themselves manifest a choice of both ends and means" (p. 12). This approach calls for a "whole new ball game" where social systems are understood on their own terms by "aligning the interest of the purposeful parts with each other and that of the whole is the main challenge of the system" (p. 12) focusing on the importance of *compatibility* in the choice of both ends and means.

In Gharajedaghi's (1985) *Toward a Systems Theory of Organizations* he first explained compatibility of means and ends, or both, in the following four types of relationships:

- 1) Cooperation: Compatibility of both ENDS and MEANS
- 2) Competition: Compatibility of ENDS and incompatibility of MEANS
- 3) Collaboration: Incompatibility of ENDS and compatibility of MEANS
- 4) Conflict: Incompatibility of both ENDS and MEANS (p. 42)

In this description Gharajedaghi points out the real value in cooperation is in the compatibility of both ends and means in context. The ends have to do with the outcomes and related profitability; while the means have to do with the processes engaged in to produce outcomes. In retrospect, it is quite obvious to note that many contemporary organizations place their emphasis on competition where compatibility is on the ENDS only, and they do not see or foresee the value of changing as a way to gain compatibility of both the means and ends in cooperation. When applied in the business context the value of compatibility of both ends and means in cooperation may be assessed economically and in human terms, which resonates with both clients and consultants. If there is compatibility in the ends and means, then monetary costs and expenditures of time will be reduced. Conflicting ends and means and their ensuing problems consume resources and often have no long-term beneficial outcome, except stalling completion of the subject project. Saving of resources (both human and economic) minimizes incompatibility that can detract from a purposeful client consultant relationship. In this sense developing the knowledge and skill to deal with both the ends and the means simultaneously, within close proximity, defines cooperation as capacity building for Management Consultants (Anderson, Plotnikoff, Raine & Barrett, 2005).

## 2.3 Cooperation makes multi-tasking profitable

In many cases, professionals in business around the world have come quite naturally to the multi tasking in popular use – simply by trying to get the job done the best and fastest way possible. Multi-tasking is defined as execution by a single central processing unit or person of two or more programs at once, either by simultaneous operation or by rapid alternation between the programs (Shakeri & Logendran, 2007). The increased pressures to manage chaos and complexity have forced increased multi-tasking in every walk of life and profession. Multi-tasking is now a common, if not a required capability for existence regardless of one's position in the world. In reconsidering the values of cooperation users continue to support multi-tasking and to underscore the profitability that is achieved as a result of multi-tasking. It could be said that the physical, emotional, mental and spiritual energies are all positively affected with the successful use of multi tasking. Physically, less energy is generally expended as when two or more tasks are accomplished in the same time. Emotionally, one feels positive about the accomplishment of two or more tasks completed simultaneously. Mentally, there can be new development of strategies which add still more value and capability. And spiritually, there is a new positive experience of the whole, making it easier to progress on the specific tasks as well as the multi tasking events. Thus, the value as Senge (1997) notes is both individual and universal defining profitability and action in real terms that can be capitalized on in a number of ways.

## 3. MASTERING AS PREREQUISITE FOR SUCCESS

Mastering is to become skilled or proficient (Harris, 2004), it is to be successful in performance of a specific set of knowledge and skills. Mastering is an emergent property, not a quick fix or a one time effort or phenomenon that lasts indefinitely. Emergent properties must be reproduced continuously

online and in real time. If the processes that reproduce them come to an end, the phenomena cease to exist as well. Emergent properties cannot be stored or saved for future use. Nor can they be taken for granted by anyone involved. Gharajedaghi (2006) points out that life, love, and happiness can be there for a moment and gone in the next moment (p.46). The same is true of success, it is just as vulnerable as love and happiness and other emergent properties. Success is an emergent property which is ongoing and evolves in real time as part of processes and relationships (Gharajedaghi, 2006). Mastering requires continual work and renewal and is adaptive by nature. Consultants and leaders cooperatively need to purposefully approach the future (Scharmer, 2000) by creating an environment where opportunity and success are reproduced in such a way that new potential emerges.

#### 4. TRANSFORMATIVE CHANGE

The need for the results from transformative change efforts is now the norm; although, the capability to produce transformative change is not yet easily available. This need is easily identified in every corner of the globe, despite its not being well-articulated. Individuals, organizations and society at large freely use terminology relating to transformative change without really understanding the meaning of the term. Knowing the meaning and being able to apply it is what makes the difference. Transformative change is defined as changing by design the basic characteristics in such a way, that members of the organization and society cannot return the system to the way it was before change was undertaken (Harris, 2004). Understanding this basic tenet of transformative change is important, although the authors believe being able to design and implement transformative change is equally important; requiring incredible capability in understanding and mastering the management of complexity in large system change.

Deutschman (2005) in his study of change reported three major factors involved in making a positive difference in increasing people's mastery and the ability to change: reframing change, radical change, and multifaceted support of change. He found that the way change is framed is important. The reframed message must be positive and inspiring. According to Howard Gardner, simplicity of the reframed message, embraced with emotion, results in a positive outcome (Deutschman). How a proposition is framed can either scare people off (Hammond, Keeney, & Raiffa, 1998) or inspire and sustain them. Essentially mastering transformative change is necessary because time and resources are too limited to keep revising transformational change processes without success. Innovation comes about when people are enabled to use their full brains and intelligence instead of being put in boxes and controlled. People feel valued and intrinsically motivated when they are fully engaged in their work.

#### 5. A SOCIO-ECONOMIC EQUATION TO MANAGE TRANSFORMATIVE CHANGE

It is critical that consultants and clients alike both *understand* and *master* purposefulness while working on transformatively changing today's global workplace. Transformative change in a dynamic system requires new skills that may evolve in the internal and external environments. The socio-economic equation considers what is necessary in the developmental application process of new leadership where there is accelerating change, increasing uncertainty, and growing complexity while little is understood about the transformative change environment. The interrelationship of purposefulness in the management of transformative change is noted by the relationship in the socio equation developed here for systemic success:

$$S^{\text{success}} = (\xi C) P \ T\Delta \ \frac{L(\text{hp}) \times NI^3 \times S^i \times C^{uv}}{M^{cx}}$$

Where: Systemic Success ( $S^{\text{success}}$ ) requires these components in relationship:

- P = Purposefulness
- ( $\xi C$ ) = Simultaneously Cooperating (compatibility of both ENDS & MEANS)
- T $\Delta$  = Transformative Change (21st Century)
- L(hp) = New Leadership *unleashing* human potential
- NI<sup>3</sup> = New Learning cubed (including presencing)
- S<sup>i</sup> = Sustainability institutionalized
- C<sup>uv</sup> = Co-creating Unique Value (4 building blocks)
- M<sup>cx</sup> = Management of Complexity

In the service of time and space this paper does not deal with all of these factors in detail, however the authors would be remiss not to identify current empirical work in terms mastering transformative change that call for further consideration.

## 5. CONCLUSION

In this paper, the authors have attempted to provide the conceptual framework for management consultants to directly address the challenge to **cooperate** while managing the complexity of transformational change in systems where they are currently operative. This agenda requires significant change in thinking and action for its successful adaptation into practice. The challenge focuses on the leadership that consultants may provide in modeling **cooperation** – achieving compatibility in both ends and means while designing and implementing transformative change projects with clients in the real world on a real time basis.

This is an exciting time in the early years of the 21<sup>st</sup> century, as the local/global establishments around the globe are consistently challenged to respond to the **purpose of organizations serving the purposes of its members while also serving the purposes of the environment** (emphasis added). Clearly, purpose is the critical variable, and it will take much new learning about cooperation to actively manage transformational change purposefully in our world. This paper strongly suggests a two-step process in understanding and mastering cooperation. The first step is for management consultants learning how to cooperate among themselves, in order to model and teach cooperation with the client to achieve success in transformative change and operational contracts. Success is achieved by cooperating to increase compatibility addressing both ENDS and MEANS simultaneously. Cooperation has high value for both the consultant and the client:

- defining cooperation as compatibility of both ENDS and MEANS identifies a new measurement tool for success in project contracts
- facilitating and shortening transformative change timeline by successfully addressing compatibility of both ENDS and MEANS simultaneously
- increasing multi-tasking supplants a simple linear approach to transformative change and highlights profitability outcomes
- increasing capacity building of both consultant and client utilizes new learning and application of the same – as the basis of innovation in the workplace.

The transformative change conceptual framework described provides the vehicle for the application of cooperative frameworks with both consultants and clients. Transformative change is both exciting and hard work. It is obvious in reviewing the brief writing here on transformative change that there is still much to be learned and incorporated in the cooperative practice making both ends and means compatible while transformatively changing. This paper focuses the many levels of change that organizations must progress through to actively transform successfully (Scharmer, 2000) using the Lewinian change process **"uncovering-redefining-enacting,"** less statically stated (p.13).

## REFERENCES

- Ackoff, R.L. (1984). Mechanisms, organisms and social systems. *Strategic Management Journal*, 5: 1-15.
- Ackoff, R.L. (1997). *Transformational consulting: Changing thought patterns, not just processes*. Paper presented at the Institute of Management Consultants Meeting, (May), Chicago, IL.
- Anderson, D., Plotnikoff, R.C., Raine, K. & Barrett, L. (2005). Development of measures of individual leadership for health promotion. *International Journal of Health Care Quality Assurance*, 18(2/3), R1-R12.
- Amabile, T.M. (1997). Motivating creativity in organizations: On doing what you love and loving what you do. *California Management Review*, 40(1), 39-59.
- Bolman, L.G., & Deal, T. E. (1991). *Reframing organizations: Artistry, choice, and leadership*. San Francisco: Jossey-Bass.
- De Vries, K. (2005). Leadership group coaching in action: The Zen of creating high performance teams, *Academy of Management Executive*, 19(1), 61-76.
- Deutschman, A. (2005). Make Change or die. *Fast Company*, 94, 52-60.



- Gharajedaghi, J. (1985). *Toward a Systems Theory of Organizations*. Seaside, CA Intersystems Publications.
- Gharajedaghi, J. (2006). *Systems thinking: Managing chaos and complexity* (2<sup>nd</sup> ed.). Burlington, MA: Butterworth-Heinemann.
- Hammond, J.S., Keeney, R.L. & Raiffa, H. (1998). The Perfect decision. *Inc.*, 20 (14) 74-78.
- Harris, M. E. (2004). *Mastering a new paradigm in management consulting*. Acton, MA: Copley Publishing Group.
- Kohlberg, L. (1981). *Essays on Moral Development Volume one: The Philosophy of Moral Development*. San Francisco, CA: Harper and Row.
- Lewin, K. (1951). *Field theory in social science*. New York: Harper and Brothers.
- Mish, F.C. (Ed.). (1987). *Webster's Ninth New Collegiate Dictionary*. Springfield, MA: Merriam-Webster Inc.
- Prahalad, C.K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18(3), 5-14.
- Scharmer, C. O. (2000, May). *Presencing: Learning from the future as it emerges*. Presented at the Conference on Knowledge and Innovation. Helsinki School of Economics, Helsinki, Finland.
- Shakeri, S., & Logendran, R. (2007). A mathematical programming-based scheduling framework for multitasking environments. *European Journal of Operational Research*, 176 (1), 193.
- Senge, P. (1997). Communities of leaders and learners. *Harvard Business Review*, 75(5), 30-31.
- Trevino, L. K. & Brown, M. E. (2004). Managing to be ethical: Debunking five business ethics myths. *Academy of Management Executive*, 18, 2, 69-81.
- Trevino, L. K. & Nelson, K. A. (2005). *Corporate social responsibility and managerial ethics*. Hoboken, NJ: John Wiley & Sons.
- Vaill, P.B. (1996). *Learning as a way of being*. San Francisco: Jossey-Bass.
- Wilcox, M., & Rush, S. (2003). Riding the rapids: A conversation with Peter Vaill. *Leadership in Action*, 22(6), 7-11.

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## CURRICULAR CHANGES IN RESPONSE TO ASSURANCE OF LEARNING RESULTS IN INFORMATION TECHNOLOGY

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### ABSTRACT

*The goal of program assessment is to improve student learning. Assessment is not limited to measuring outcomes; the assessment process is the progression of collecting data on student retention, analyzing results to provide feedback, and using feedback to make improvements to the curriculum. This research paper discusses how results from retention assessment exams in Information Technology (IT) administered as part of an assurance of learning (AoL) program in an undergraduate program at an AACSB International-accredited business school have been used in the redesign of content and pedagogy in an undergraduate computer literacy course. This work is of value to those who desire to better understand and implement AoL in their programs.*

**Keywords:** Assessment, Assurance of Learning, Technology, Pedagogy, AACSB

### 1. INTRODUCTION

Assessment and assurance of learning (AoL) are not new concepts. Accrediting bodies, such as the Association to Advance Collegiate Schools of Business (AACSB) International have required student assessment as part of the accreditation/re-accreditation process for some time (AACSB, 2007). What has changed is the emphasis that accrediting bodies are placing on the assessment process (Pringle and Mitri, 2007). Business schools are now required to develop learning goals for each program, assess students' achievement of goals, and use assessment results for continual improvement in programs (Martell and Calderon, 2005). Programs are required to provide evidence not merely intent. The new assessment standard has led faculty and administrators to search for ways to collect evidence that university students are, in fact, learning what they are taught.

In the past, schools focused on traditional grading which evaluates student's classroom activities, effort, and performance. Now, schools must focus on producing tangible evidence of knowledge acquisition or skill development (Mackenzie, 2004). With this increased emphasis on assessment and AoL standards, more attention is being placed on the development and content of the curriculum through requiring specific knowledge and skills. AACSB International requires that student performance must be assessed using direct measures (i.e., student opinion surveys should not be used as primary assessment measures). There must be a direct link between program learning goals and concrete observable behaviors and actions that can be measured (Nellen and Turner, 2006).

Schools are faced with a number of issues when developing their AoL program: (1) what learning needs to be assessed and to what degree, (2) how to measure and demonstrate achievement of learning goals (Zhu and McFarland, 2005), and (3) how to use AoL results to improve student learning (AACSB, 2007). The authors address the first two questions in Hollister and Koppel (2007); this paper discusses a framework for developing an AoL program at an AACSB International accredited institution. The framework is presented and discussed in detail along with a review of the motivation for AoL programs, how the programs are developed, and at what point in the undergraduate program AoL assessment is incorporated.

This paper is directed towards the third question, "how to use AoL results to improve student learning." Specifically, we discuss how results from a retention assessment exam in information technology administered as part of an assurance of learning (AoL) program in an undergraduate program at an AACSB International-accredited business school have been used in the redesign of course content and pedagogy in an undergraduate course. We briefly discuss the motivation for assessment programs and provide a glimpse into current practices and issues in implementing assessment programs at AACSB International-accredited business schools. We then describe the assessment program at our institution,

including a brief discussion of our assessment results. We describe how the results from the information technology assessment exam have been used to drive a redesign of content and pedagogical approach in an introductory computer literacy course. We conclude with our initial findings and our agenda for next steps in the process.

## **2. MOTIVATION AND ISSUES IN AOL PROGRAMS**

As the AACSB International's revised standards on AoL were adopted in 2003, the body of literature discussing overall program assessment and discipline specific concentration assessment is limited. Most of the literature documents methodologies that institutions are piloting to move towards meeting this new goal. Drinka et al (2005) discuss an online assessment system they develop to assist in data collection and analysis. Bycio and Allen (2004) delve into assessment through a student survey; AACSB International has stated that student outcome surveys are not sufficient to demonstrate assurance of learning. Black and Duhon (2003) explore the controversial issue of using standardized assessment tests at the undergraduate level. Buzzetto-More and Alade (2006) discuss the role of technology and e-learning in the assessment process.

AACSB International requires AoL in at least eight topical areas; some of the literature focuses on assessment within these areas. As with the literature on overall program assessment, this literature is still in its infancy. Fraser et al. (2005) discuss assessment in the writing aspect of communication. Hindi and Miller (2000) report results of a survey of assessment techniques in the area of accounting, Boldt (2001) presents a structural approach towards assessing accounting knowledge, and Reffell and Whitworth (2002) examine the information technology skills of students.

Developing and implementing a comprehensive AoL program requires significant time and business schools are varied in how they have responded to the revised standards. Martell and Calderon (2005) were the first researchers to survey AACSB International accredited business schools on their assessment practices. In their 2004 survey of 179 deans, they reported that most schools were still relying on indirect assessment measures (Martell and Calderon, 2005). In 2006 Martell repeated her survey of AoL practices in business schools (Martell, 2007). Martell's results indicate that in the period of 2004 to late 2006, there were marked changes to the level of effort schools were devoting to their AoL programs. Changes were noted in the number of schools with articulated learning goals (68% to 88%) and the number of schools indicating the translation of learning goals into observable behaviors (31% to 64%). Martell's (2007) survey indicates that schools are moving past learning goals and making progress on doing learning goal assessment. 46% indicated that 3 or more learning goals had been assessed and 16% reported that all learning goals had been assessed at the undergraduate level. In related work, Pringle and Michel (2007) conducted a web-based survey in 2006 to investigate changes in how schools are addressing AoL standards. Among other findings, their survey revealed a transition away from indirect measures toward direct measures of assessing student knowledge retention.

As noted above, most AACSB International accredited business schools have made significant strides in terms of articulating goals, assessing student learning, and communicating assessment results to their faculty; all of which are necessary in complying with meeting AoL requirements (Martell, 2007; Pringle and Michel, 2007). The next critical step is using AoL results to improve student learning. AACSB International standards refer to closing the loop: "Schools should show how (AoL) results impact the life of the school (AACSB, 2007)." Pringle and Michel (2007) indicate that 69.6% of respondents reported using assessment results to make minor modifications to the curriculum. Martell (2007) reports that one of the greatest concerns for business school deans with regard to AoL is closing the loop.

There is no "right" way to close the loop. The process can happen in many ways, through modifying course content, changes in the pedagogical approach in courses, or revamping program curriculum. The remainder of this paper discusses changes in course content and pedagogy in a computer literacy course in response to AoL assessment results.

### 3. MEASURING LEARNING GOALS: ASSESSMENT AND ANALYSIS

The School of Business (SBUS) at Montclair State University (MSU), like many other business schools, is faced with a challenge where some students are successfully completing all the requirements for graduation but still lack some fundamental skills needed to be successful in the workplace. The issue is not whether the students have taken all of the required courses for the major (all students must complete all of the required courses in order to qualify for graduation) nor is this a question of whether the students were taught the material and skills in those particular courses (faculty are required to teach the course content based on a common outline prepared and approved by the SBUS). It is not even a question of the students successfully completing these courses (successful completion is another requirement for graduation). The issue here is that many students learn the material sufficiently to pass a course, but do not retain the material so it can be used in future courses and in the workplace.

As part of our AoL program, retention assessment exams in several topical areas, including Information Technology (IT), were developed to collect data on the level of knowledge students are retaining. Retention assessment exams were developed in each area following a process analogous to the framework for assessment developed by Hollister and Koppel (2007). Overall learning objectives in each topical area were established. Topical assessment instruments were then developed to assess student retention based upon each of the identified topical learning objectives.

During the Fall 2005 semester, two sections of MGMT439 – Strategic Management were running with approximately 24 students in each class. During the second or third week of classes, one 1.25 hour class meeting was devoted to an assessment test in IT. During the first class meeting, students were informed about the exam and were provided with a list of topics covered on the assessment exam to be administered. Although the exam will not impact the enrollment status of the students in the course, to ensure motivation, students were informed that the assessment score will comprise 5% of the students' course grade.

Overall, our pilot AoL assessment results indicated that students have significant gaps in their retention of learning objectives in each of the areas tested. A summary of the broad learning objectives in IT and the results of the assessment exam are provided in the Table 1.

**TABLE 1: SUMMARY RESULTS FROM IT ASSESSMENT EXAM**

Learning Outcome	Results
1. Students will be able to use appropriate technology to search for and gather business information.	96.1%
2. Students will be able to use appropriate technology to communicate business information.	75.74%
3. Students will be able to use appropriate technology to analyze business information.	51.35%
4. Students will be able to use appropriate technology to collect, organize, store, and retrieve data for business purposes	59.95%

### 4. BEGINNING TO CLOSE THE LOOP: COURSE CHANGES IN RESPONSE TO IT ASSESSMENT EXAM RESULTS

The results of our IT assessment exam did not really surprise us but it did wave a large red flag in front of the faculty. Results provided evidence that students are not retaining core knowledge needed to be successful in future courses and/or the workplace. The next step is tackling the difficult task of examining the results of the IT AoL exam and making required adjustments to our curriculum. The remainder of this section provides a brief description of the computer literacy course and discusses changes in course content and pedagogy stemming from our IT AoL exam results.

INFO273 is the required computer literacy course for the undergraduate program in the SBUS at MSU. The course is divided into three modules as follows: Module 1 – Word and PowerPoint; Module 2 – Excel;

and Module 3 – Access. The INFO273 course is taught using a hybrid course model (Killmer Hollister and Koppel, 2003), in which the primary method of instruction is through the use of online course tutorials. Assessment in the course has three main components – homework, case studies, and examinations. The focus in course assessments is twofold to assess students' competency with basic computer literacy as well as their ability to apply computer skills to solve “real-world” problems in business environments. With the exception of a few mandatory lectures, all course meetings are optional for students. The instructor is present during each class and acts as an instructional resource for all questions relating to course material or requirements.

Our course changes focused on gaps identified through the information technology retention assessment exam. While we are aware that changes in one course alone may not be sufficient to raise AoL results to an acceptable level, we may need to make changes in many courses throughout the curriculum in order to reinforce these learning objectives. Based upon our AoL assessment results, we focused the revision of our INFO273 course content and pedagogy on targeting all of the IT program learning objectives.

Changes were made in both content and the pedagogical approach used in the INFO273 course. Overall, our changes focused on a shift in emphasis from teaching the tool or skill in software applications to applying software tools to solve a business problem. Pedagogically, the main change was increasing the number of required lectures on more advanced course topics. The majority of changes occurred in the case projects required in each module of the course. Changes to case projects fall into two categories: (1) addition of new information technology tools and (2) shift in focus from skills assessment to the application of skills in the solution of business problems. Table 2 maps course changes to the learning goals targeted by the changes:

## **5. RESULTS/FUTURE STEPS**

To meet AACSB International's AoL requirements, schools must move past establishing learning goals and collecting data on student retention of those learning goals. They must engage in a process to “close the loop” between student retention and program learning objectives. In this paper, we discuss our first steps in “closing the loop” in our AoL program. We are in no way done nor will we ever be; the process, by its nature, is one of continual improvement.

The impetus behind this paper is to demonstrate that although “closing the loop” is an enormous undertaking; small changes can begin to move business programs in the right direction. We discuss how results from a retention assessment exam can be used to encourage changes in course content and pedagogy in a computer literacy course.

One frustrating factor in “closing the loop” is the lag between making changes and measuring the impact of those changes. Students typically take the computer literacy course during their freshman and sophomore years and currently, our retention assessment exams are administered in the late junior or senior years. To further complicate matters, each round of retention exams may spur additional course changes.

The work we describe in this paper is only a small step in our overall process to close the loop. A next step is to broaden the scope and incorporate further changes to INFO273 based on results from other AoL retention exams including writing, statistics, and finance. In addition, a similar process needs to occur throughout all of the core courses in the undergraduate business curriculum. We need to ensure that all of the core learning goals are not only taught but reinforced throughout our program. To this end, faculty in the SBUS will be examining the core curriculum to identify other courses where learning goals can be reinforced and implementing changes to the curriculum in those courses. Another part of this process will involve the creation of online resources for remediation where students who do not satisfy the requirements for passing the retention assessment exam can go to “re-learn” skills in order to apply them in upper-level courses.

**TABLE 2 – COURSE CHANGES IN RESPONSE TO IT AOL RESULTS**

<b>Learning Objective</b>	<b>Course Change</b>
1. Students will be able to use appropriate technology to search for and gather business information.	<p><b>Word/PPT Case</b></p> <ul style="list-style-type: none"> <li>• addition of research through internet and library databases</li> </ul> <p><b>Excel Case</b></p> <ul style="list-style-type: none"> <li>• addition of research using a government database (SEC filings) to retrieve income statements</li> </ul> <p><b>Access Case</b></p> <ul style="list-style-type: none"> <li>• addition of information retrieval element</li> </ul>
2. Students will be able to use appropriate technology to communicate business information.	<p><b>Word/PPT Case</b></p> <ul style="list-style-type: none"> <li>• rework to include the creation of a 1 page brochure on an emerging technology – focused on concise writing style</li> <li>• rework to include a short PowerPoint presentation to educate an audience on the emerging technology</li> </ul> <p><b>Excel Case</b></p> <ul style="list-style-type: none"> <li>• addition of writing a formal business memo with their company financial analysis</li> <li>• provide students with a resource guide on how to compose a business memo</li> <li>• addition of the integration of word and excel – embedding charts/graphs in memo</li> </ul> <p><b>Access Case</b></p> <ul style="list-style-type: none"> <li>• addition of writing requirement – writing a formal business letter</li> <li>• addition of the integration of word and access – students required to include output from access objects into letter</li> </ul>
3. Students will be able to use appropriate technology to analyze business information	<p><b>Excel Case</b></p> <ul style="list-style-type: none"> <li>• addition of analysis to the project – in the past students built a contrived excel model this was extended to re-creating an income statement and comparing performance of two real companies – including the analysis of graphs</li> </ul>
4. Students will be able to use appropriate technology to collect, organize, store, and retrieve data for business purposes	<p><b>Access Case</b></p> <ul style="list-style-type: none"> <li>• shift in focus to problem solving – students must figure out how to use the tool to discover answers to a business questions</li> </ul>

Bottom line – the assessment process is one of accountability which is not typically enjoyable. Faculty need to focus on the overall goal – the improvement of student learning – and get committed to “closing the loop” and making changes in courses and programs to improve student learning outcomes.

## REFERENCES

- AACSB. (2007) Overview of Assessment. Assessment Resource Center.  
[http://www.aacsb.edu/resource\\_centers/assessment/overview-expectations.asp](http://www.aacsb.edu/resource_centers/assessment/overview-expectations.asp). Last Accessed April 2007.
- Ali, Shameem and Ho, Henry W.L. (2007). Using Assessment Tasks to Shift Focus to Learning Rather than Evaluating Students, *Journal of American Academy of Business*, 10(2) 269.
- Black, H. Tyrone and Duhon, David L. (2003). Evaluating and Improving Student Achievement in Business Programs: The Effective Use of Standardized Assessment Tests, *Journal of Education for Business*, 79(2) 90.
- Boldt, Margaret (2001). Assessing students' accounting knowledge: A structural approach, *Journal of Education for Business* 76(5) 262
- Buzzetto-More, Nicole and Alade, Ayodele Julius (2006). Best Practices in e-Assessment, *Journal of Information Technology Education*, 5, 251-269.
- Bycio, Peter and Allen, Joyce, S. (2004). A Critical Incidents Approach to Outcomes Assessment, *Journal of Education for Business*, 80(2) 86.
- Drinka, Dennis, Voge, Kathleen, and YiMiin Yen, Minnie (2005). From Principles to Practice: Analyzing Student Learning Outcomes Assessment System, *Journal of Cases on Information Technology*, 7(3) 37.
- Fraser, Linda, Harish, Katrin, Norby, Joni, Brozvoic, et. al (2005). Diagnostic and Value-added Assessment of Business Writing, *Business Communications Quarterly*, 68(3) 290.
- Hindi, Nitham and Miller, Don (2000). A survey of assessment practices in accounting departments of colleges and universities, *Journal of Education for Business*, 75(5) 286.
- Hollister, KK and Koppel, NB (2007) Framework for Meeting AACSB International's Assurance of Learning Requirements: Application to Information Technology, *Journal of Informatics Education Research*, 8(3).
- Killmer Hollister, Kimberly, and Koppel, Nicole B., (2003). A Hybrid Approach to Teaching Business Computer Applications, *Proceedings of the Northeast Business & Economics Association 30<sup>th</sup> Annual Conference*, Parsippany, NJ.
- Koppel, NB and Killmer Hollister, K (2005) Are Students Learning and Retaining What We are Teaching? Assessing The Use Of Information Technology, *International Conference on Informatics Education & Research*, Las Vegas.
- Mackenzie, Maureen L., (2004) Business Education: Learning Outcomes, Embedded Assessments and Student Feedback, *Proceedings of the Northeast Business & Economics Association 31<sup>st</sup> Annual Conference*, New York, NY.
- Martell, Kathryn (2007). Assessing Student Learning: Are Business Schools Making the Grade? *Journal of Education for Business*, 82 (4) 189.
- Martell, Kathryn and Calderon, Thomas G., (2005) Chapter 1: Assessment In Business Schools: What It Is, Where We Are, And Where We Need To Go Now, *Assessment of Student Learning in Business Schools: Best Practices Each Step of the Way*.
- Miles, Morgan P , Hazeldine, Mary F, Munilla, Linda S., (2004) The 2003 AACSB Accreditation Standards and Implications for Business Faculty: A Short Note, *Journal of Education for Business*, Washington: Sep/Oct, Vol.80, Issue 1, pgs. 29-35.
- Nellen, Annette and Turner, Marlene t. (2006) Rising Expectations in Business Education, *The Tax Adviser*, 37(2) 116.
- Pokharel, Anjoo (2007). "Assurance of Learning (AoL) Methods Just Have to Be Good Enough, *Journal of Education for Business*, 82 (4) 241.
- Pringle, Charles and Michel, Mitri (2007). Assesment Practices in AACSB-Accredited Business Schools, *Journal of Education for Business*, 82 (4) 202.
- Reffell, Pete and Whitworth, Andrew (2002). Information Fluency: Critically examining IT education, *New Library World*, 103(11/12) 427

White, Bonnie (2007). Perspectives on Program Assessment: An Introduction, Journal of Education for Business, 82 (4) 187.

Zhu, Faye, X. and McFarland, Daniel (2005). Towards Assurance of Learning in Business Programs: Components and Measurements, Journal of American Academy of Business, 7(2).

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## APPLYING TARGET COSTING TO PRODUCT DEVELOPMENT

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### ABSTRACT

*To win competition in the increasingly competitive business world, companies have to develop better products more frequently and quickly. Product development has thus become an important but expensive business activity for many companies. To effectively control the cost of developing new products, target costing have been recognized as a powerful tool. With its unique approach of pricing, target costing ensures that new products will be price competitive while maintaining adequate quality for the consumers but and reasonable profit for the manufacturers. The main objective of this research is to explore the implementation of target costing in a global supply chain setting. We suspect that the complexity of varying operating conditions of supply chain partners may require a unique approach to successfully implement target costing. Our research has shown that target costing implementation can be divided into three distinctive phases: market-driven target costing, component-level target costing, and product-level target costing. This three-stage process can facilitate establishing collaborative relationship between a brand company and its suppliers. Once the relationship is established, extensive communication between the brand company and its suppliers will enhance the chance of successfully implementing target costing in their factories.*

**Keywords:** target costing; product development; supply chain;

### 1. INTRODUCTION

Facing intense global competition, firms can no longer rely on mass production with lower costs as a competitive strategy. More companies are using superior product design to gain long term competitive advantage, because when a company can develop new products effectively, it enhances its capability of directly addressing customers' requirements in terms of quality, functionality, and costs. To enable companies gaining such capability, target costing has been frequently recognized as an effective tool. First developed and implemented in Japan, target costing takes a unique approach in determining the price of a new product. Unlike the traditional pricing practice of adding profit to production costs and overhead, target costing starts from market research. It sets the price of the new product based on what can motivate consumers to buy. Target cost, subsequently determined by subtracting proper profit from the set price, will become the "budget" for various resources required in developing new product including materials, labor, machine time, overhead, and others.

The literature of target costing have focused primarily on its application as a product development tool in technology oriented industries, such as automobile and consumer electronics (Dekker & Smidt, 2003; Ibusuki & Kaminski, 2007; Monden, 1995; Tani et al., 1994). Very few studies have paid attention to traditional industries, such as sporting goods. It is therefore the objective of this research to bridge the gap and explore the implementation of target costing in the development of sporting goods, especially the athletic footwear. In the following sections, we will review the athletic shoe industry and the literature of target cost management (TCM). Section 4 explains the target costing method with a focus on the three-phase procedure adopted in managing the supply chain of a sporting goods company (Cooper & Slagmulder, 1997, 1999). A case study, included in section 5, illustrates the brand companies' role in leading the development of athletic shoes. This study has shown that contract manufacturers' active participation in developing prototypes, providing solutions, and continuously improving processes is critical to the success of new product development. In section 6, we discuss the importance of collaboration among supply chain partners. Finally, we conclude that successful TCM implementation depends heavily on the collaborative partner relationship.

## **2. LEAN PRODUCT DEVELOPMENT AND LEAN PRODUCTION**

### **2.1 Lean Product Development**

As the product life cycle shortened drastically in many industries, the development of new products has become a major concern of many companies. More specifically, these companies have considered it essential to timely and frequently introduce new products with good profit potential into the market. To accomplish this, it is crucial to incorporate various concerns, such as cost, profit, and quality, in the product development plan. Product development has understandably become one of the focal points of a company's competitive strategy.

Product development starts with concept initiation, followed by the development and execution of product plans. However, to manage the lead time, proper utilization of project management, information systems, employee autonomy, and early involvement of specialists to reveal problems have been identified as crucial (Warnecke & Hüser, 1995). An addition, lean product development (LPD) using team structure has been recommended for removing wastes in various product development stages (Karlsson & Åhlström, 1996). LPD concept comprises numerous interrelated techniques including supplier involvement, cross-functional teams, and concurrent engineering (Dyer & Hatch, 2004; Schonberger, 2005). It also requires integration of various business functions such as sales, marketing, design, engineering, manufacturing, purchasing, and even suppliers.

In traditional product development, once a new product line is determined, the project is immediately assigned to a high-level planning group, possibly with a marketing background, to develop the product concept. Industrial designers are then assigned to develop sketches, followed by engineers, who create the drawing and work out the technical details (Morgan & Liker, 2006). LPD, however, executes this process in different ways. Once the top management decide to develop a new product, LPD immediately selects a chief engineer to become the project manager, responsible for overseeing design projects to ensure their timely completion within budget (Fujimoto, 2000; Womack, 2006).

The corporate functions participating in LPD include R&D, human resource (HR), and the public relation (PR) (MacDuffie & Helper, 1999). Liker (2004) stated that a long-term perspective in decision making, efficient manufacturing processes, adequate personnel and partners, and effective problem solving are essential to building up the company's capabilities. Flexible production plants that adopt team-based work systems and maintain low level of inventory and repair buffers consistently outperformed traditional mass production plants. The management of those flexible production plants values their employees, provides them with trainings for future growth, and encourages them to involve. This management philosophy has enabled companies to become innovative learning organizations, which generate much better performance (Stenzel & Stenzel, 2004).

### **2.2 Lean Production**

To improve operations, many companies have attempted to achieve a high level of quality, productivity, on time delivery, and flexibility simultaneously (Womack, Jones, & Roos, 1990). Lean production, a concept originated at Toyota Motor Company in the 1950s that stresses on the importance of "just in time" (JIT) manufacturing, is capable of meeting the designers' expectations because it integrates product development, production process, and purchasing as a total system (Warnecke et al., 1995; Womack et al., 1990). In fact, lean production encompasses several components, such as total quality management, continuous improvement, design for manufacturability, flexible manufacturing, and close supplier relationships (Liker, 2004; Shah & Ward, 2003). The application of JIT philosophy to manage parts procurement enables manufacturers to carry out fast and effective prototyping and production startups (Fujimoto, 2000; Warnecke et al., 1995).

## **3. TARGET COSTING**

### **3.1 Target Costing Concept**

Target costing can be implemented in various stages of product development including product concept, product planning, and product design. Through inter-departmental integration, it can accomplish the goals of developing new product and ensure that its functionality, quality, and price are acceptable to

consumers (Cooper & Slagmulder, 2003; Dekker et al., 2003; Ellarm, 2006; Fujimoto, 2000; Tani et al., 1994). Target costing is a long-term comprehensive management system that includes the company's financial plans for the next five years (Monden, 1995; Tani et al., 1994). The key principles of target costing include price-led costing, consumer focus, design emphasizing, product life-cycle orientation, cross-functional structure, and value-chain involvement (Swenson, Ansari, Bell, & Kim, 2003). Using this approach, the development of a customer desired product is planned in detail. In addition, target cost is determined by subtracting the product's target profit from its estimated competitive market price. The product's target cost is subsequently achieved through implementing a series of value engineering (VE) by the design department (Cooper et al., 1997; Ellarm, 2006; Monden, 1995; Tani et al., 1994).

### **3.2. Target Costing Applications**

Target costing has been applied to both assembly and process industries (Tani et al., 1994). Many case studies, such as Daihatsu Motors, Matsushita Electronic, Olympus Optical, Toyota Motors, and Sony, had been conducted to investigate the practices of target costing in Japan during the decade of 1990s (Cooper et al., 1999; Fisher, 1995; Kato, Böer, & Chow, 1995).

Disregard its wide spread implementations in Japanese firms, target costing is still relatively new to the U.S. companies with only a few implementations. To examine the target costing practice in the U.S., Swenson et al. (2003) conducted four case studies: Boeing, Caterpillar, DaimlerChrysler, and Continental Teves. They reported that the American implementations of target costing are consistent with those in Japan, which emphasized on employing cross-functional teams, listening to the voice of customer, reducing new product development costs, and eliminating wastes throughout the supply chain. These companies demonstrated certain commonalities in supporting the target costing process. DaimlerChrysler had five cross-functional platform teams. It also used "Toolboxes," including value engineering/value analysis, Kaizen, and lean manufacturing, to improve productivity and reduce costs. In the past, Boeing attempted to provide almost anything that customer wanted without considering the cost. It now starts to assess whether the cost of innovation is greater than the value to its customers. Both DaimlerChrysler and Continental Teves view their supply chain as a part of the extended enterprise where they could share information to meet cost reduction goals (Swenson et al., 2003). Moreover, Ellarm (Ellarm, 2006) compared the theoretical and actual target costing implementations among the U.S. companies in the industries of computer peripherals, semiconductors, and telecom services. This study reported distinctive features in target costing implementation, such as frequent and earlier involvement of the suppliers. There appears to be a tight linkage between supplier management and the design function in target costing implementation, which allows suppliers to become involved early in the process and therefore maximizes product value, shortens time-to-the-market, and ensures manufacturability (Ellarm, 2006).

Target costing is less popular in Europe. An Irish study showed that target costing is one of the least applied cost management techniques among Irish manufacturing companies (Pierce, 2002). In Netherlands, Dekker and Smidh (2003) surveyed 32 manufacturing companies and found that 19 of them claimed to use target costing concept but under different names. Their target costing processes, with the main objective of cost reduction, were developed independently of the Japanese practice.

## **4. APPLYING TARGET COSTING TO PRODUCT DEVELOPMENT**

Brand companies conduct market research, establish planned profit margins, and conceptualize new product design in the phase of the market-driven target costing. Companies are no longer limited to practicing concurrent engineering by forming cross-functional teams among various departments within a company. In the product-level phase, companies are expanding target costing practice beyond their borders to the members of their value-chain in order to accomplish its key objective: developing new, price-competitive, and quality products with a reasonable time-to-the-market. While brand companies dictate the nature of the partner relationship with suppliers, the contract manufacturers should take actions to strengthen their core competencies to meet the component-level target cost. For example, implementing lean manufacturing provides contract manufacturers with the needed competitive advantage by reducing the turn around time of their proto samples.

However, a brand company's decision to form a partner relationship with a certain contract manufacturer is based on its competitive strategy. They typically maintain a long-term strategic partner relationship with those contract manufacturers who are capable of producing or even designing sophisticated products with high volume. On the other hand, as the order volume increases, a contract manufacturer can focus more on improving productivity, increasing product quality and complexity, and reducing production costs. These improvements in turn will increase the chance of the contract manufacturer to become a strategic partner of the brand company. In conclusion, the success of a brand company in the sporting goods industry is built upon a group of capable and cooperative contract manufacturers acting as long-term strategic partners. The contract manufacturers, on the other hand, will have a better chance to succeed with the assistance and continual business from the brand company. This win-win collaboration can be solidified by the implementation of target costing.

## REFERENCES

- Cooper, R., & Chew, W. B. 1996. Control tomorrow's costs through today's design. *Harvard Business Review*, 74(1): 97.
- Cooper, R., & Slagmulder, R. 1997. *Target costing and value engineering*. Portland, Oregon: Productivity Press.
- Cooper, R., & Slagmulder, R. 1999. Development profitable new products with target costing. *Sloan Management Review*, 40(4): 23-33.
- Cooper, R., & Slagmulder, R. 2003. Interorganizational costing, Part 2. *Cost Management*, 17(6): 12-21.
- Dekker, H., & Smidt, P. 2003. A survey of the adoption and use of target costing in Dutch firms. *International Journal of Production Economics*, 84: 293-305.
- Dyer, J. H., & Hatch, N. W. 2004. Using supplier networks to learn faster. *MIT Sloan Management Review*, 45(3): 56-63.
- Ellarm, L. M. 2006. The implementation of target costing in the United States: theory versus practice. *Journal of Supply Chain Management*, 42(1): 13-26.
- Fisher, J. 1995. Implementing target costing. *Journal of Cost Management*, 9(2): 50-59.
- Fujimoto, T. 2000. Shortening lead time through early problem-solving: a new round of capability-building competition in the auto industry. In U. Jürgens (Ed.), *New Product Development and Production Networks*. Berlin: Springer.
- Ibusuki, U., & Kaminski, P. C. 2007. Product development process with focus on value engineering and target-costing: a case study in an automotive company. *International Journal of Production Economics*, 105: 459-474.
- Karlsson, C., & Åhlström, P. r. 1996. Difficult path to lean product development. *Journal of Production Innovation Management* (13): 283-295.
- Kato, Y., Böer, G., & Chow, C. W. 1995. Target costing: an integrative management process. *Cost Management*, 9(1): 39-51.
- Liker, J. K. 2004. *The Toyota way: 14 management principles from the world's greatest manufacturer*. New York: McGraw-Hill.
- MacDuffie, J. P., & Helper, S. 1999. Creating lean suppliers: diffusing lean production through the supply chain. In J. K. Liker, W. M. Fruin, & P. S. Adler (Eds.), *Remade in America: Transplanting and Transforming Japanese Management Systems*: 154-200. New York: Oxford University Press.
- Monden, Y. 1995. *Cost reduction system: target costing and Kaizen costing*: Productivity Press.
- Morgan, J. M., & Liker, J. K. 2006. *The Toyota product development system: integrating people, process, and technology*: Productivity Press.
- Pierce, B. 2002. Target cost management: comprehensive benchmarking for a competitive market. *Accountancy Ireland*, 34(2): 30-32.
- Schonberger, R. J. 2005. Lean extended: it's much more (and less) than you think. *Industrial Engineer* (December).
- Shah, R., & Ward, P. T. 2003. Lean manufacturing: context, practice bundles, and performance. *Journal of Operations Management*, 21(2): 129-149.
- Stenzel, C., & Stenzel, J. 2004. Cost and performance management: tactics used by learning organizations. *The Journal of Corporate Accounting and Finance*, 15(3): 37-60.
- Swenson, D., Ansari, S., Bell, J., & Kim, I.-W. 2003. Best practices in target costing. *Management Accounting Quarterly*, 4.2: 12-21.

- Tani, T., Okano, H., Shimizu, N., Iwabuchi, Y., Fukuda, J., & Cooray, S. 1994. Target cost management in Japanese companies: current state of the art. *Management Accounting Research*, 5(1): 67-81.
- Warnecke, H. J., & Hüser, M. 1995. Lean production. *International Journal of Production Economics*, 41(1-3): 37-43.
- Womack, J. P. 2006. Why Toyota won, *Wall Street Journal. (Eastern edition)*: Feb 13, A.16. New York.
- Womack, J. P., Jones, D. T., & Roos, D. 1990. *The machine that changed the world: the story of lean production*. New York: Harper Perennial.

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## INTERMITTENT EXPLOSIVE DISORDER: MT. VESUVIUS AT WORK

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### ABSTRACT

*Do you have coworkers who are sitting in cubicles simmering, veritable volcanoes of rage just waiting to erupt? A little-known mental disorder marked by episodes of unwarranted anger is more common than previously thought. Intermittent Explosive Disorder affects as many as 7.3 percent of adults - 11.5-16 million Americans in their lifetimes. Mounting layoffs and a slowing economy are reinforcing this growing phenomenon in America, with increased numbers of employees having arguments and breaking down under pressure. Rage is everywhere. Yelling, punching computers, fist fighting, and verbal abuse abound. This paper will define Intermittent Explosive Disorder (IED), discuss the causes and the costs, and describe what managers can do to help.*

**Keywords:** Intermittent Explosive Disorder, Rage, Anger in the Workplace, Stress

### 1. INTRODUCTION

"The single clenched fist lifted and ready,  
Or the open hand held out and waiting.  
Choose:  
For we meet by one or the other."

Carl Sandburg

Do your workmates fly off the handle, lose their cool, or regularly trade insults with each other? Do they throw things at each other, or do they abuse and attack their innocent computers? If this "workplace banter" is becoming more noticeable, you might be sitting next to Mt. Vesuvius, a new workplace phenomenon that is being labeled Intermittent Explosive Disorder (IED) (Work rage, 2001). In addition, many other employees are likely to be sitting in a cubicle simmering – a veritable volcano of rage just waiting to erupt. Rage may run the gamut from discourteous taunting, yelling, and name calling to physically abusive behaviors. Has civility really become such a thing of the past that a new term is needed to capture the essence of these new workplace phenomena? The answer is yes. Bad behavior is seen more and more frequently in America's workplace today and is observed in a variety of actions (Buhler, 2003).

We seem to live in an age of rage. A growing number of customer rage incidents have occurred. For example:

- Checkout counter rage – A woman had half her nose bitten off by a fellow shopper when she insisted on remaining in an express lane with more than the 12 permitted items.
- Parking rage: Youths screamed, swore at, and verbally abused a man in a dispute over a parking space in front of a Costco store and later severely scratched his automobile.
- Air rage: A disruptive passenger who attempted to break into the cockpit on a Southwest Airlines flight to Salt Lake City was beaten, choked, and eventually killed by other passengers.
- ATM rage: When a bank machine swallowed a card, an enraged patron stuck the ATM machine with a utility knife, cursed a nearby clerk, hurled a knife at a cashier and smashed an adjacent fax machine to the ground (Grove, Fisk, & John, 2004).

These incidents only hint at the breadth and severity of rage. Damage caused by rage episodes varies from verbal indignation, to vandalism, to physical injury, and even death (Grove, Fisk & John, 2004). A little-known mental disorder marked by episodes of unwarranted anger is more common than previously thought, a study funded by the National Institute of Mental Health (NIMH) has found. Depending upon

how broadly it is defined, intermittent explosive disorder (IED) affects as many as 7.3 percent of adults – 11.5-16 million Americans in their lifetimes (Asher, 2006).

America is in the middle of a national anger epidemic brought on by stress, by competitive pressures, by poor communication, toxic working environments and all the other paraphernalia of modern working life (Kellaway, 2002). Mounting layoffs and a slowing economy are reinforcing this growing phenomenon in America, with increased numbers of employees having arguments and breaking down under pressure. Rage is everywhere: road rage, airplane rage, mail rage, and desk rage. News reports abound with accounts of angry, stressed-out workers with hair-trigger tempers who erupt in fits of office rage. Yelling, punching computers, fist fighting, and verbal abuse abound. Experts blame the economy gone sour, long hours, increased workloads, deadlines, longer commutes, stock-market tumult, cramped office space, and technology (Genusa, 2001). This paper will define Intermittent Explosive Disorder (IED), discuss the causes and the costs, and describe what managers can do to help.

## **2. DEFINITION OF INTERMITTENT EXPLOSIVE DISORDER**

I was angry with my friend  
I told my wrath, my wrath did end.  
I was angry with my foe:  
I told it not, my wrath did grow.

William Blake

Intermittent explosive disorder (IED) is an impulse control disorder. People who have this disorder have sudden, unpredictable reactions that are violent and aggressive. Their reaction is out of proportion to the event that triggers or provokes the outburst. They may regret the outburst afterwards. They are not violent or aggressive most of the time (Intermittent Explosive Disorder, 2006). People with IED may attack others and their possessions, causing bodily injury and property damage. Typically beginning in the early teens, the disorder often precedes depression, anxiety, and substance abuse disorders (Asher, 2006). Existing family history data suggest that IED or IED-type behavior is familial. First-degree relatives of patients with histories of violent behavior have a high incidence of violent behavior (Coccaro, 2001).

IED most often occurs in young men but can occur in both men and women who are older. In people with this disorder, the aggressive behavior is greatly out of proportion of the triggering event. A person with intermittent explosive disorder may describe these episodes as “spells” or “attacks.” Later the person may be upset or feel remorse, regret, or embarrassment about the aggression (Mayo Clinic, 2006). IED can cause headaches, high blood pressure, heart problems, ulcers, back pain, anxiety, depression, and weight problems. It also can disrupt our relationships and affect our thinking. The tension between expressing and repressing can cause emotional turmoil that can damage relationships and careers. Too often, anger driven underground only results in an eventual blow up (Perry, 2001).

## **3. STATISTICS**

“How much more grievous are the consequences of anger than the causes of it.”  
Marcus Aurelius

Nationwide, nearly one in 10 workers say workplace stress is a major problem for them, making them prime candidates for outbursts of rage. Nearly two-thirds of American workers (61 percent) say workplace stress is a problem for them at least occasionally. One in 10 workers has called in sick because of workplace stress, and one in five has quit a job in the past because of stress. Job stress has caused 30 percent to be unable to sleep, 23 percent to consume excessive alcohol, 17 percent to smoke in excess and 23 percent to eat chocolate. Large numbers of U.S. employees say they are a physical wreck, with 58 percent complaining of work-related back or neck pain, 40 percent complaining of stressed out eyes and 34 percent complaining of hurting hands (Is America suffering, 2002). In a survey on desk rage:

- 42% say yelling and verbal abuse occurs in their workplace.
- 29% admit to yelling at co-workers because of stress
- 23% were driven to tears because of workplace stress
- 14% say they have seen machinery or equipment damaged through workplace rage, and
- 10% say physical violence has occurred in their workplace because of stress (Stack, 2003).

Breathe in, breathe out. This technique may be used for de-stressing, but it doesn't seem like many employees are taking the time to do it these days, particularly during work when their stress levels are highest (Benitez, 2001). If you have witnessed someone become enraged beyond what seems called for, or have gotten unnecessarily angry oneself, you are not alone. Sixteen million American adults, or more than 7 percent of the nation's adult population, could be diagnosed at some time in their lives with "Intermittent Explosive Disorder" (Are you suffering, 2006). IED may be associated with violent behavior such as physical assault, murder, or violent suicide. People who have intermittent explosive disorder:

- Are repeatedly and suddenly violent
- Are unable to stop or control impulsive, aggressive actions
- Destroy property, and
- React way out of proportion to things that happen (Intermittent Explosive Disorder, 2006).

#### 4. REASONS

"The intoxication of anger, like that of the grape, shows us to others, but hides us from ourselves."  
John Dryden

Employees always have encountered workplace stress, but several economic and social trends have either intensified or heightened workers sensitive to war, a bad economy, layoffs, greater workloads, increased productivity demands and longer hours. Mix with small, cramped workspaces that make employees feel restless and disorganized. Add office clutter, shorter response time requirements and a dash of technology to increase customer expectations. Beat out interpersonal communication. Blend with shifting responsibilities and work that is never complete, reducing time spent off work. Add a fluid, diverse, multi-generational workforce with different work process methods, and you have got a recipe for extreme stress (Stack, 2003).

Meanwhile, mergers, downsizings, and the ability of managers to monitor individuals' job performance add more layers of insecurity. As workers fret about layoffs, they do so knowing that with new information technology, their managers can track performance division by division, employee by employee, with startling precision.

A survey by Pitney Bowes of some 1,200 workers found that employees handle an average of 204 messages a day, counting email, voice mail, snail mail, and memos. Although email enables people to communicate more quickly than they once did with faxes and letters, the volume of messages sent and received has increased the workload by 30% in the last three years (Hymowitz & Silverman, 2001).

Other reasons for rage in the workplace include the role of changing technology. We are connected to the office 24/7/365 and the 24-hour business day has become the norm. In addition there are more dual career couples than ever before. These couples are under increasing pressure to balance work and family issues. In addition, with the downsizing of organizations, those surviving employees are continually being asked to do more with less. Also, a decrease in trust levels between employees and their organizations has also contributed to growing incivility (Buhler, 2003).

Workplace incivility can have a ripple effect in the organization. As top executives hammer their middle managers with rudeness and discourteous treatment, the middle managers treat their employees likewise, who then may pass this behavior along to the firm's customers (Buhler, 2003).



Finally, rage occurs in the workplace because coworkers fail to turn off their cell phones during meetings, they jam the photocopier, or fail to refill it, they talk loudly about their private lives, they take things from our desks without returning them, they make coffee or tea for themselves but not for us, and they loiter by our desks while we have work to do. When workers get angry, some just shrug things off. Others seek revenge, but many explode using fierce language, throwing things, and threatening co-workers and subordinates (Flintoff, 2002). Extremely stressful conditions can cause employees to have short tempers and poor working relationships. In a recent survey of 775 workers, 12 percent of workers had quit their jobs to avoid nasty people at work, and 45 percent were thinking about doing so. In addition, more than half of workers lost time worrying about irate or rude people in the office (Stack, 2003).

## **5. COSTS**

“He who angers you conquers you.”  
Elizabeth Kenny

The stakes are high. Workplace aggression and stress affect almost 250,000 U.S. workers annually, according to the Occupational Safety and Health Administration. Stress-related disability cost U.S. corporations more than \$300 billion a year in legal settlements, lost production, and operational expenses, and they cost workers more than \$16 million in lost wages (Solomon, 2001). In addition, a workplace homicide typically costs an employer between \$250,000 and \$1 million. When negligence cases involving serious injury or death do go to court, they are settled for an average of \$500,000 or injury awards averaging \$3 million. Most workplace murders are committed by intruders, but 7 percent of the perpetrators are current or former employees (Feeney, 2003).

As incidents of workplace rage increase, so do insurance coverages. To date, at least three insurance industry participants have responded with workplace violence coverage. The coverage that e-perils.com offers is in the form of a stand-alone policy with limits ranging from \$1 million to \$25 million. Covered individuals can include employees, former employees and non-employees. Lexington Insurance Company has a form of workplace violence coverage. It is a combination insurance product, crisis intervention, and resource replacement policy. Finally, The Chubb Insurance Group offers a three pronged approach designed to meet workplace violence, crime insurance, and kidnap, ransom and extortion needs (McDonald, 2001).

## **6. WHAT CAN MANAGERS DO TO HELP?**

“Anger is only one letter short of danger.”  
Unknown

There are many early warning signs of threatening or potentially violent behavior. Behavior that qualifies as early warning signs might include a decrease in productivity or quality of work, unexplained absences or tardiness, or extreme changes in behavior or displays of emotion, resulting from personal life stresses such as family or financial problems (Rudewicz, 2004). Other warning signs include chronic complaining, increased anxiety, decreased morale, and social isolation (Stone, 2003). Luckily, managers can observe signs of stress in employee behavior. Be observant for the following stress stages:

1. Physical stage: headaches, illness, fatigue.
2. Social stage: negativity, blaming things on others, missed deadlines, working through lunch.
3. Cerebral stage: clock watching, errors in assignments, minor accidents, absent-mindedness, indecisiveness.
4. Emotional stage: anger, sadness, crying, yelling, feelings of being overwhelmed, and depression.
5. Spiritual stage: brooding, crying, wanting to make drastic changes in life, not relating well with people, and distancing themselves from personal relationships (Stack, 2003).

If a manager sees signs of high stress levels and inappropriate behavior in employees, s/he must intervene. There are a number of things managers can do to combat Mt. Vesuvius from exploding all over the workplace.

- Evaluate employee workloads. Overwork is one of the biggest causes of rage in the workplace.
- Confront employee aggression. Think of rage in the workplace as a performance management situation.
- Reduce noise levels. Employees who are exposed to constant, low-level noises in their environments – keyboards, voices or the hum of a photocopier – have elevated levels of stress hormones. Workers in noisier settings run out of steam more quickly and don't concentrate as well.
- Evaluate people on civility. Having specific policies and a new line on your performance appraisal form which rates employees on manners, civility and courtesy might alter the way people behave toward one another. People might think twice before spouting off (Stack, 2003).
- Establish and enforce a violence prevention program. It would seem clear, for example, that an employee who kicks a door, screams profanities, and threatens coworkers and customers with physical harm can and should be fired for violating workplace violence policies (Karr, 2005).
- Conduct scrupulous background and reference checks before a person is hired (Feeney, 2003).
- Allow periodic breathers during the day, especially when everyone is confronted with a great deal of pressure.
- Make sure everyone leaves their desks at lunch and takes vacations.
- Distribute workloads evenly whenever possible, and cultivate a culture where everyone helps each other.

Communicate consistently and predictably. Trust reduces feelings of stress (Stone, 2003).

- Finally, treatment of Intermittent Explosive Disorder (IED) usually involves a combination of psychotherapy and medicine. Cognitive-behavior therapy is a way to help a person with a Mt. Vesuvius personality to identify and change his/her views of the world. This kind of therapy helps the person recognize unhealthy ways of thinking. In addition, the person may be prescribed medicines such as antidepressants, mood stabilizers, or antipsychotic medicine (Intermittent Explosive Disorder, 2006).

## 7. CONCLUSION

“Rudeness is the weak man's imitation of strength.”  
Eric Hoffer

As children, we cried to get our way. If that didn't work, we screamed. If that reaped no results, we threw a temper tantrum, kicking, squirming or holding our breath. That usually did it. People did things for us. It took genuine rage and anger to pull that off, but it got people's attention. Now we have grown up; or have we? Temper tantrums still work for some people. Part of the problem is that we have adopted an attitude as a culture that violence is an acceptable way to solve problems. Media, sports, and films feed this, and as a result it is almost culturally acceptable to be violent. And given that this is a society where people tend to take what they want, that combination becomes deadly.

Employers and employees cannot ignore any type of abuse that happens in the workplace. They have to address it one way or another, either by directly confronting Mt. Vesuvius or by reporting the poor behavior within the organization. If a manager does not address it, the atmosphere in the workplace will continue to grow to be even more aggressive. Above all, managers should strive to create a fair, compassionate workplace this is unlikely to incite an already unstable person. Most people don't go nuts and shoot someone, but there are more people close to that edge than you can ever imagine.

## REFERENCES

- Asher, J. "Intermittent Explosive Disorder Affects Up to 16 Million Americans." June, 2006  
<http://www.nih.gov/news/pr/jun2006/nimh-05.htm>
- "Are You Suffering from Explosive Disorder?" June, 2006.  
[http://www.iol.co.za/general/news/newsprint.php?art\\_id=qw1149543183551B243&sf=](http://www.iol.co.za/general/news/newsprint.php?art_id=qw1149543183551B243&sf=)
- Benitez, T. "All the Rage", *Incentive*, Vol. 175 (1), 8.
- Buhler, P. "Workplace Civility: Has it Fallen by the Wayside?" *SuperVision*, Vol. 64(4), 2003, 20-22.
- Coccaro, E. "Intermittent Explosive Disorder," *Paradigm*, Vol. 12-13, 2001, 22.
- Feeney, S. "The High Cost of Employee Violence", *Workforce Management*, Vol. 82(8), 2003, 23-24
- Flintoff, J. "A Controlled Explosion of Anger: Working Relationships: Studies of Office Behavior Show We are All Prone to Rage and Some of Us Need to Manage it Better.", *Financial Times*, December 3, 2002, 12.
- Genusa, A. "All the rage", *CIO*, Vol. 14(14), May 2001, 30.
- Grove, S, Fisk, R., & John, J. "Surviving in the age of rage", *Marketing Management*, Vol. 13(2), 2004, 1061-3846.
- Hymowitz, C., & Silverman, R. "Stressed Out: Can Workplace Stress Get Worse?" *The Wall Street Journal*, (Eastern edition), January 16, 2001 B1.
- "Intermittent Explosive Disorder",  
[http://www.realage.com/research\\_library/searchResults.aspx?link=file://Utility2/crsfiles/bha](http://www.realage.com/research_library/searchResults.aspx?link=file://Utility2/crsfiles/bha)
- Is America Suffering from "Desk Rage"? *Occupational Hazards*, Vol. 64(2), 2002, 19.
- Karr, K. "Will Rage Turn to Rampage?" *Security Management*, Vol. 49(10), 2005, 66-70, 72-73.
- Kellaway, L. "Leave Rage at Home: A Genuine, Spontaneous Outburst is Preferable to the Fashion for Sanitized Anger Management. But Best of All – Keep Your Ire Away from Work", *Financial Times* – London, April 22, 2002, 17.
- MayoClinic.com. "Intermittent Explosive Disorder." 2006.  
<http://www.mayoclinic.com/health/intermittent-explosive-disorder/AN00306>
- McDonald, C. "New Cove Rages Offered for 'Desk Rage'", *National Underwriter*, Vol. 105(8), February, 2001, 3, 30.
- Perry, P. "Disengage the Rage": Defusing Employee Anger. *Rural Telecommunications*, Vol. 20(1), 2001, 64-66.
- Rudewicz, F. "The Road to Rage. *Security Management*, Vol. 48(2), 2004, 40-46.
- Solomon, M. "Rage in the Workplace", *Computerworld*, Vol. 35(31), July 30, 2002, 32-34.
- Stack, L. "Employees Behaving Badly", *HRMagazine*, Vol. 48(10), 2003, 111-114.
- Stone, F. "Combating Desk Rage in Finance", *AFP Exchange*, 23(3), ay, 2003, 6-7.
- "Work Rage", *New Zealand Management*, Vol. 48(3), 2001, 8.

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# COOL-HUNTING: A BASIS FOR CATALYZING ENTREPRENEURIAL THINKING

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## ABSTRACT

*The writer presents a methodology for catalyzing entrepreneurial thinking among Russian managers participating in an intensive two-year MBA program in Moscow. Utilizing coolhunting, Web surfing, cases, teamwork, and a textbook, processes for opportunity recognition, idea screening, and business plan development are described. The author concludes with examples of business plans and marketing plans which resulted from this methodology.*

**Keywords:** Creativity; Entrepreneurship; Opportunity Recognition; Business Plan; Russia; Pedagogy.

## 1. INTRODUCTION

Teaching entrepreneurship is a complicated process that involves a mix of theory, practice, examples, and case studies of successful entrepreneurs. There is no magic formula to guide a successful entrepreneur, and there is as yet no textbook that can guarantee results. For example, eighteen course syllabi submitted for a retreat sponsored by Rennselear Polytechnic Institute included 116 different subjects that overlapped on only a third of the topics. (Fiet, 2000) I don't recall when I first discovered the article or when the idea actually came to me, but after teaching entrepreneurship since 1996 in Cal State East Bay's Moscow MBA Program, I realized that "The Coolhunt" by Malcolm Gladwell could be a basis for inspiring entrepreneurial thinking and new business ideas (Gladwell.com, 1997). I made the article the introductory reading in the course and the first question on a pre-assignment.

The article describes the primary research process practiced by two coolhunters, Baysie Wightman and DeeDee Gordon, "the Lewis and Clark of cool," as they observe teens, interview cool people, and report fashion trends from the street to their Converse and Placid Planet Boutique employers in 1992. Gladwell describes his experiences coolhunting with Baysie and positions the process in the context of diffusion research. From scouring the streets and shops of Boston, Harlem and the Bronx, both coolhunters evolve into future careers in spotting and reporting youth fashion trends, DeeDee for the marketing research firm Lambesis in Southern California and Baysie for Reebok (Gladwell.com, 1997). Since Gladwell's article was published, his concept has spawned a website ([www.coolhunting.com](http://www.coolhunting.com)), described as a "a daily update on ideas and products in the intersection of art, design, culture and technology;" a wikipedia entry (<http://en.wikipedia.org/wiki/Coolhunting>); and two books (Coolhunting: Chasing Down the Next Big Thing, Gloor and Cooper, 2007, and Chasing Cool: Standing Out in Today's Cluttered Marketplace, Kerner and Pressman, 2007).

My approach includes an attempt to catalyze entrepreneurial thinking by introducing managers to the mindset inherent in the experiential process of coolhunting, "a collection of spontaneous observations and predictions that differ from one moment to the next and from one coolhunter to the next." (Gladwell.com, 1997) Precisely because the course participants are managers, they don't have time to prowl the streets of Moscow in search of cool people and the latest trends. However, by introducing a coolhunting mindset through an analysis of Gladwell's article, my expectation is that during their normal weekday and weekend activities of commuting, dining out, clubbing, shopping, Web surfing, exercising at fitness centers, and others, the participants will look at their surroundings and consider their experiential interactions differently, filtered now through the mindset of a coolhunter.

## 2. LITERATURE REVIEW

How educators instill in prospective entrepreneurs a capability to recognize potential ideas and develop them into viable business opportunities is the subject of much research. Kirzner (1979) proposes that entrepreneurs interpret events differently from other market participants because of entrepreneurial alertness, their own specific personal cognitive and perceptual skills. Gaglio and Katz (2001) discuss the differences between alert and non-alert individuals, and propose an alertness schema that links an

entrepreneur's perceptions of a market situation, "figuring out what is really going on," with schema for the socio-political environment, for an industry, and for market processes. According to Ardichvili, Cardozo, and Ray (2003), personality traits, prior knowledge and experience, and social networks are three coincident factors that act to heighten entrepreneurial alertness. Corbett (2005) contends that "experiential learning theory fits well with entrepreneurship" because it focuses on process. He states that:

"Courses that focus more on learning, improvising, and adapting in reaction to changes suggested by potential customers and other actors in the marketplace may provide additional value to students. To do this, educators can test the students' ability to learn in different manners by using scenarios, role plays, and experiences that tap each individual's ability to grasp and transform experiences in each of the four manners delineated in the experiential learning model (convergent, assimilation, divergent, accommodative)."

In a study by DeTienne and Chandler (2004), students participating in an opportunity recognition training program were asked to keep a log of everyday activities that could be potential opportunities. Their conclusions provide "evidence of a link between training and the ability to generate innovative business ideas within the entrepreneurial classroom." Binks, Starkey, and Mahon (2006) review the literature on the future of the MBA and the business school and evaluate entrepreneurship education in this context. They propose that a "design principle for entrepreneurship education" should be a "live" case study based on students' own activities, because students are more receptive to real-life situations than case studies. The coolhunting pre-assignment appears to be in the mainstream of current research on the relationship of experiential learning to entrepreneurship education and the possibility to teach idea generation and opportunity recognition through alertness to one's surroundings and daily activities.

### **3. COURSE FORMAT**

The courses are taught over 3 to 4 weeks, with class meetings three or four evenings per week from 6:30 – 10:00 pm. The course is based on the Timmons and Spinelli book, New Venture Management: Entrepreneurship for the 21<sup>st</sup> Century, 6<sup>th</sup> edition, 2004, and includes lectures, cases, readings, class discussion, a final exam, and team creation and presentation of a business plan. Teams are limited to 5 or 6 individuals. Students are expected to spend significant time outside of class working on the business plan. Cases and readings are discussed in class, sometimes turned in for credit, sometimes presented by teams to the rest of the class.

### **4. CLASS COMPOSITION**

All students are working managers employed by multinational corporations or by Russian banks, corporations, or government agencies. Representative multinational employers include American Express Bank, Baxter, Boeing, Chase Manhattan Bank, Caterpillar, Coca Cola, Deloitte & Touche, Ernst & Young, Gillette, Hewlett-Packard, LG Electronics, McKinsey & Company, Microsoft, Pepsi Cola, PriceWaterhouse Coopers, Proctor & Gamble, Raffey Bank Austria, in fact almost every multinational corporation that has a presence in Moscow. Russian employers include Aeroflot, Alfa Bank, MFK Renaissance, the Ministry of Taxation, Troika Dialog, and others. The age of the participants ranges from 24-45 years old, and the gender composition is about 40% women, 60% men (California State University, East Bay, 2005).

### **5. PRE-ASSIGNMENT**

The intent of the pre-assignment is to get students thinking about new business ideas, first by understanding the process of coolhunting, then by defining entrepreneurship in their own words, next to speculate on how they might coolhunt in Moscow, and with this speculation as a basis, to come up with three new and "cool" business ideas. Finally they are asked to identify obstacles to creating their businesses. The process is described here step-by-step. My pedagogical objective is to have all class members prepared with their new business ideas before the first class, so that during an intensive course the first 1-2 days are not consumed by exploratory brainstorming. Instead, having already engaged in

individual idea generation, members of teams can now leap forward to collective opportunity recognition and idea screening.

### **5.1 Cool-Hunting Article**

The course pre-assignment is designed to be worked on for seven to ten days before the evening lectures begin, with a notation that it's designed to provide students with a fast-track start on the course and with some directed web surfing in "coolhunting," the essential ingredient for the course project. The first task the students face is to read "The Coolhunt" article, and analyze in some detail who originated the term "coolhunting" and in what context. The objective is for students to identify Gladwell as the author who introduced the terminology and to describe the processes DeeDee and Baysie engaged in to spot fashion trends among the youth culture. Further, the objective is to introduce the coolhunter mindset to prepare the student to pay closer attention to new business opportunities they might spot in their everyday activities.

### **5.2 Star-Bucking**

The Trendwatching website first introduced the concept of Starbucking into business terminology. Students are specifically directed to surf the web, find the site, and explain the concept of Starbucking. Quite interestingly, the definition put forward is the knack of spotting a promising business trend and commercializing it before the founders realize what they have and do it themselves (Trendwatching, 2003). The objective is for students to find and paraphrase the definition, and add relevant commentary from their own experience.

### **5.3 Definition of Entrepreneurship**

Students are next asked to define their understanding of the concept and process of entrepreneurship in their own words, without paraphrasing a dictionary, textbook, or website. The objective is to force them to conceptualize the process after absorbing information from multiple sources and then to synthesize a definition.

### **5.4 Cool-Hunting in Moscow**

Next the pre-assignment leads the students to reflect on their own business environment. They are asked to describe how they would apply the process of coolhunting in Moscow, and what adaptations, if any, would be needed. The objective is to inspire them to provide more than generalities, to think about the Moscow youth and fashion culture, about their own clubbing, shopping, dining out, and hanging out habits, and provide very specific examples of neighborhoods, bars, clubs, events, concerts, schools, universities, whatever locations they conceive as appropriate given the examples in the Gladwell article.

### **5.5 Idea Generation**

Now hopefully inspired by their application of coolhunting to the Moscow consumer environment, students must list and then discuss in some detail three cool ideas for a new business concept that they would like to introduce in Moscow, in the Russian Federation, or in the global marketplace. They are instructed that "discuss" means to give details on which trend(s) or behavior(s) they observed, how they thought of their cool idea, and why the concept has business potential. These ideas form the basis for team deliberations on the first or second evening of the course. Above all, the primary objective is to come up with new ideas, not ideas that have been commercialized abroad and which might be replicated in Moscow or Russia.

### **5.6 Problem Identification**

Finally, the students must list and describe three problems or obstacles that would prevent them from implementing their cool ideas. Common reasons cited include lack of financing, bureaucratic red tape, inability to access resources, and crime and corruption. These problems will later become part of a SWOT analysis when teams analyze the business environment for their idea.

### **5.7 Resource Links**

The pre-assignment includes a list of 26 web links that all deal with coolhunting, trendspotting, or new business ideas. The objective is to facilitate student discovery of information sources that might aid them in catalyzing their own new business ideas. Representative sites include:

1. <http://www.bzzagent.com>
2. <http://www.trendwatching.com>
3. <http://www.springwise.com>
4. <http://www.youthintelligence.com>
5. <http://www.trendcentral.com>
6. <http://www.lstylereport.com>
7. <http://www.hipsterhandbook.com>
8. <http://www.eonline.com>
9. <http://buzz.yahoo.com>
10. <http://www.pbs.org/wgbh/pages/frontline/shows/cool/>

In some classes, students are also asked in the pre-assignment to list and evaluate any interesting coolhunting or trendspotting websites that they have discovered through their own web surfing.

## 6. TEXTBOOK

I have found that the Timmons and Spinelli book is an excellent vehicle for teaching entrepreneurship, and that the examples, anecdotes, statistics, and cases translate the many aspects of entrepreneurship into practical application. In my opinion the best tools in the text after The Business Plan Guide are the Venture Opportunity Screening Exercises (VOSE). Once a team has completed the twelve sections, they basically have all the information needed to write a business plan. While it's usually not possible to collect all this information given the limitations of working managers pursuing a three or four-week evening course, it is possible to work on selected VOSE sections. In some classes when there is ample time, I try to incorporate use of all the VSOE as a prerequisite assignment to the final business plan, while in other classes I use only selected sections including Exercise 9, which requires the team to assess their commitment to the business idea and plan, and Exercise 10, which asks for discussions of flaws and downside risks (Timmons and Spinelli, 2004).

## 7. INTRODUCTION TO COURSE

In the first class meeting, the students turn in their pre-assignments. Individuals take turns giving their responses to the questions, and as the class progresses through the questions, I ask students to give one of their business ideas, but not their best one, so as not to give a good idea away. After 7-10 pre-assignment days of web surfing and developing their individual cool ideas, there is usually a lively discussion the first night of class. Following the discussion, I give a PowerPoint presentation based on Gladwell's Coolhunt article, in which I present synonyms and substitutions for the word "cool" as the American culture's vocabulary has evolved, including "hip," "bad," "rad," "groovy," "far out," "gone," "totally," "no doubt," "out 'a sight," "radical," "excellent," and so on.

I make specific reference to Gladwell's discussion of diffusion research based on a study of the spread of hybrid seed corn in Iowa in the 1930s. Gladwell notes "Everyone else made his decision overwhelmingly because of the example and the opinions of his neighbors and peers. Isn't this just how fashion works?" (Gladwell.com, 1997) Then I refer to a slide from Kotler's 8<sup>th</sup> edition that shows the bell curve of time to adoption of innovations, which he had taken from Diffusion of Innovation, 3<sup>rd</sup> edition, by Everett M. Rogers (Kotler, 1994). This aids in legitimizing coolhunting as a valid marketing research process in the minds of the students when they can see its relationships to consumer behavior.

Gladwell's conclusion that "coolhunting represents the ascendancy, in the marketplace, of high school" doesn't have much meaning in the Russian context (Gladwell.com, 1997). Therefore I close my presentation with comments that coolhunting observes the need to belong to a group, the desire to fit in with one's peers, and yet to stand apart at the same time; that coolhunting reflects the influence of reference groups, the psychological risks of purchase behavior, the potential for post-purchase dissonance from making the wrong choice. This summary adds credence to coolhunting for the students as the process is linked again with consumer behavior concepts that they have studied.

Next I introduce the concept of trendspotting and differentiate it from coolhunting by pointing out that while coolhunting is primarily practiced in the realm of youth fashion trends, trendspotting can be applied to all areas of life. Representative web sites are introduced and include:

1. <http://aol.smartmoney.com/trendspotting/>  
(Trends in the economy, personal finance, small business and technology.)
2. <http://www.entrepreneur.com>  
(Ideas and trends for small business entrepreneurs.)
3. <http://www.newhope.com>  
(Everything new in the natural products industry.)
4. <http://asia.cnet.com>  
(Trends in the Asian electronics industry.)
5. <http://news.zdnet.com>  
(More trends in the global electronics industry.)
6. <http://www.cbsnews.com/stories/2003/10/23/60minutes/main579657.shtml>  
(An inside look at undercover marketing and buzz creation.)

The objective here is to motivate students to gather more information from these and other trendspotting websites which they might use in formulating or revising their cool business ideas.

## **8. IDEA SCREENING**

Once teams of 5 or 6 managers are formed, they each share their three new business ideas from the pre-assignment and create a team pool of 15 to 18 ideas for consideration. Class time is given for team discussion on multiple occasions, and follows a presentation on brainstorming. To unleash creative thinking at this point in idea screening, I introduce a right brain, left-brain exercise intended to catalyze an open mind and suspension of judgment. Students are asked to select one side of a paper, use the hand that they usually write with, and draw a picture of what they did on their last vacation. Once completed, they are then directed to turn the paper over, use their opposite hand, and draw a picture of where they would like their career to be in five years. The exercise creates a lot of initial apprehension and then subsequent excitement, and hopefully induces some creative thinking as the teams shift to evaluating their ideas.

After a couple of classes in which the teams have group time to discuss their ideas, and following a lecture presentation on the VOSE, the teams are required to submit a list of their top ten business ideas. This requires them to reject 5 to 8 ideas from the collective idea pool. Teams are then given more class time to come up with ten screening criteria, using the VOSE for examples. Criteria are determined by each team, and might include degree of financing needed, access to capital, barriers to entry, degree of red tape, degree of competition, market share of competitors, and so on. The five components of Porter's Five Forces analysis can often constitute a useful part of the criteria. Next the teams are required to create a screening grid, listing the criteria across the top but now only seven ideas on the left margin. Teams can use weighted or unweighted criteria to rank each business idea by each criterion.

A scale of one to ten is easiest to work with. The more positive impact that a criterion has on the success of a business idea, the higher the number it should be assigned; the more negative impact, the lower the number. For example, if competitor strength is high, that's a negative worth a ranking of 1, 2, or 3. Conversely, if access to financing is high, that's a positive worth an 8, 9, or 10. Next the team multiplies each ranking by the weight assigned the criteria and totals the score for each business idea. The idea with the highest ranking then becomes the subject of the team's business plan, for which both a paper and a presentation have to be created. Tables 1 presents an example of an unweighted ranked list. There is a fallback option in which teams can pick another idea, with instructor feedback, if they don't like their number one ranked idea.



**Table 1: Ranked List of Seven New Venture Ideas**

	Criteria	1	2	3	4	5
		Target Market Exists	Market Growth Rate	Threat of Entry	Power of Buyers	Power of Suppliers
	Idea					
1	Metro Disco	5	5	1	1	1
2	Three-Star Hotel	10	9	5	6	5
3	Public Laundromats	7	9	5	7	5
4	Business Class Metro	7	7	1	1	1
5	Vegetarian Restaurant	8	5	7	7	6
6	Regional Air Taxi Service	9	9	3	1	1
7	Driving School for Women	9	9	8	4	6

**Table 1 continued: Ranked List of Seven New Venture Ideas**

	Criteria	6	7	8	9	10	Total
		Degree of Rivalry	Financing Available	Degree of Red Tape	Intellectual Property Protection	Degree of Coolness	
	Idea						
1	Metro Disco	3	3	1	3	9	32
2	Three-Star Hotel	9	7	5	6	5	67
3	Public Laundromats	7	7	6	7	6	66
4	Business Class Metro	9	3	1	1	9	40
5	Vegetarian Restaurant	3	7	7	4	5	59
6	Regional Air Taxi Service	4	5	3	7	7	49
7	Driving School for Women	2	9	7	7	8	69

## 9. BUSINESS PLAN TOPICS

I first tested the article with the Moscow MBA-19 group in Spring 2005, found that the students liked the pre-assignment approach with coolhunting and trendspotting questions and links, and that they generated some very creative business ideas. Subsequently I used the article and the same pre-assignment format with the MBA-21 group in Spring 2006 and had similar results. A list and brief description of the business plans from the teams in each group follows. Later in Fall 2006 I also taught Marketing Strategy to the MBA-21 group. I've included their marketing plan ideas here as well.

### 9.1. MBA-19 Business Plans (Spring 2005)

Aerotaxi: short-hop air taxi service in the Moscow region and adjacent cities where regular flights are not offered or the transportation infrastructure is limited. (Six months after the team presented its business plan, an aerotaxi service was launched in Moscow; unfortunately the students were not involved.)

Babushki Online: Internet services for grandparents whose sons and daughters, and for children whose mothers and fathers, already have Internet access at home; training in the use of email and web surfing.

Game Mania: one-stop retail outlet for all variety of board games (checkers, chess, monopoly, and so on), as well as a gaming club to support the board game culture in Moscow.

Metro Business Company: a plan to attract commuters out of their cars by renting carriages from the Moscow Metro and upgrading them to business class standards. (Coffee, newspapers, air conditioning.)

President E-School: online distance learning tutorials to assist students with homework and high school and university entrance exams.

ProbOK.net: a traffic jam solution company for Moscow that transfers streaming video from cameras at highly-congested traffic points and provides it to commuters through image, video, or text format to cell phones, PDAs by SMS or MMS, and PCs by email.

Prostirni: a network of self-service Laundromats for students living in university hostels and for residents of low-budget hotels. (No self-service Laundromats exist in Moscow.)

StoGramm Bar (100 Gram Bar): a chain of ryumochnyas, a Soviet-style quick-stop snack bar based on Russian zakuski snacks but with vodka as the centerpiece, to capitalize on nostalgia for the Soviet era.

## **9.2 MBA-21 Business Plans (Spring 2006)**

Onyx Studio: a chain of manicure/pedicure salons close to business centers and office complexes to provide male and female customers with more convenient access and expanded hours than existing competitors.

Smoothie Burst: a plan for a chain of smoothie bars and kiosks in shopping malls, airports, and amusement parks, first in Moscow and the Moscow region, later in St. Petersburg.

RichFloat River Taxi Company: a business to provide fast and predictable all-weather transportation by hovercrafts on Moscow waterways, thereby assisting the commuter to avoid city traffic jams and route delays. Includes a mini-bus shuttle from Sheremetyevo Airport to a nearby canal for waterway access.

World of Holidays: a retail, wholesale, and on-line shop to provide holiday cards and gifts, interior design accessories, and unique handicrafts from around the world to Russian and expatriate consumers in Moscow.

## **9.3 MBA-21 Marketing Plans (Fall 2006)**

BMW Remington Shavers: a plan for Remington to expand its Russian product lines from hair care and grooming products to men's shavers with its new BMW line.

Grill & Chill Restaurant Chain: a "grill-it-yourself" restaurant chain to be founded in Moscow and expanded to the Moscow region and then St. Petersburg.

Life Insurance Supermarket (LIS): term and whole life insurance, annuities, and accidental risk coverage for the Russian middle class.

MBA Loan Consulting Agency (MLCA): a marketing division within the Institute of Business & Economics, Cal State East Bay's MBA partner in Moscow, to match student financial needs with Moscow lending institutions to enable needy students to attend the MBA program.

Sake introduction by Group OST: a plan to expand the product line of ZAO "Group Ost," founded in 1998 in the Moscow region, to include sake, and to capitalize on the growing trend among Russian consumers for Japanese foods and beverages.

## 10. CONCLUSION

I was particularly gratified by the creativity shown by most teams in the MBA-19 group in the choice of business plan ideas. Each team's idea seemed to "catch the wave" of things that were happening in Moscow in the Spring of 2005: concern over increasing traffic congestion, more and more access to the Internet, nostalgia for the Soviet era. The business plans and marketing plans for MBA-21 seemed to me less timely and less creative in comparison. It would be ideal if the individual students could actually roam around Moscow in true coolhunting fashion as DeeDee and Baysie do, but given their work commitments, that's not realistic. However, in their social activities and with their circles of friends, I assume they do gain enough exposure to the new and to the cool. Overall, I am very satisfied with the process, find it very useful for catalyzing opportunity recognition, idea generation, and new business ideas, and plan to continue using it in the Moscow program.

## REFERENCES

- Ardichvili, A., Cardozo, R., and Ray, S., "A theory of entrepreneurial opportunity identification and development," *Journal of Business Venturing*, Vol. 18, 2003, 105-123.
- Binks, M., Starkey, K., and Mahon, C., "Entrepreneurship Education and the Business School," *Technology Analysis and Strategic Management*, Vol. 18, (1), February 2006, 1-18.
- California State University, East Bay, An Assessment of Program Management Practices in the context of Principles of Good Practice in Overseas International Education Programs for non-U.S. Nationals, February 2005, [http://www.csueastbay.edu/wasc/pdfs/GoodPractices\\_Final.pdf](http://www.csueastbay.edu/wasc/pdfs/GoodPractices_Final.pdf), retrieved May 30, 2007.
- Corbett, A., "Experiential Learning Within the Process of Opportunity Identification and Exploitation," *Entrepreneurship Theory and Practice*, July 2005, 473-491.
- DeTienne, D. and Chandler, G., "Opportunity Identification and Its Role in the Entrepreneurial Classroom: A Pedagogical Approach and Empirical Test," *Academy of Management Learning and Education*, Vol. 3, (3), 2004, 242-257.
- Fiet, J., "The Theoretical Side of Teaching Entrepreneurship," *Journal of Business Venturing*, Vol. 16, 2000, 1-24.
- Gaglio, C., and Katz, J., "The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness," *Small Business Economics*, Vol. 16, 2001, 95-111.
- Gladwell, M., The Coolhunt, March 1997, [http://www.gladwell.com/1997/1997\\_03\\_17\\_a\\_cool.htm](http://www.gladwell.com/1997/1997_03_17_a_cool.htm), retrieved May 30, 2007.
- Gloor, P., and Cooper, S., *Coolhunting: Chasing Down the Next Big Thing*, American Management Association, New York, 2007.
- Kerner, N., and Pressman, G., *Chasing Cool: Standing Out in Today's Cluttered Marketplace*, Simon & Schuster, New York, 2007.
- Kirzner, I., *Perception, Opportunity, and Profit*, University of Chicago Press, Chicago, 1979.
- Kotler, P., *Marketing Management: Analysis, Planning, Implementation, and Control*, Prentice-Hall, Upper Saddle River, 1994.
- Timmons, J., and Spinelli, S., *New Venture Creation: Entrepreneurship for the 21<sup>st</sup> Century*, Irwin, Boston, 2004.
- Trendwatching.com, Starbucks, March 2003, <http://www.trendwatching.com/trends/2003/03/STARBUCKING.html>, retrieved May 30, 2007.

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# A STRATEGY TO ENHANCE DSS CAPABILITIES FOR THE IMPROVEMENT OF DECISION PERFORMANCE

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## ABSTRACT

*Since decision support systems (DSS) are typically designed to enhance the capabilities of decision makers, it is expected that they lead to better decision performance. Based on a literature review, the relationship between IT including DSS and decision-making is not well understood. Thus, it is important to identify what factors influence the relationship between IT and decision performance. In the IS literature, information quality is one of two major dimensions for evaluating the success of information systems and decision quality is a function of information quality. Hence, it would be worth investigating the effects of information quality provided by DSS on decision performance. This research is expected to extend a body of research examining the effects of factors that can be tied to human decision-making performance.*

**Keywords:** Decision Support Systems, Information Quality, Problem-Solving Performance.

## 1. INTRODUCTION

The investigation of factors that can be tied to decision performance is important, since the factors will be useful as a basis for improving decision performance. Todd and Benbasat (2000) provide a comprehensive literature review of the impact of IT on decision-making. Based on their literature review, the relationship between IT and decision-making is not well understood (Benbasat et al., 1993; Eierman et al., 1995; Sharda et al., 1988). For example, decision support systems (DSS) are typically designed to enhance the capabilities of decision makers. Thus, it was expected that they lead to better decision performance (Todd and Benbasat, 2000). This means that by extending the capability of the decision maker to process information, better decisions are expected. But, this perspective suggesting a direct relationship between the use of DSS and decision quality is limited in terms of its practical application and lacks of explanatory power (Benbasat et al., 1993; Eierman et al., 1995; Sharda et al., 1988).

To further clarify the role of various moderating and mediating variables that influence decision performance, researchers investigated decision-maker capability in the context of DSS (Benbasat and Taylor, 1982) and in the context of experts or knowledge-based systems (Dhaliwal and Benbasat, 1996; Gregor and Benbasat, 1999; Nah et al., 1999), and the key mediating processes related to decision strategy in the context of DSS (Silver, 1990). Despite many decision performance studies that examined these factors, the relationship between the factors and decision performance is still not well understood (Todd and Benbasat, 2000). Thus, it is important to identify what factors influence the relationship between IT and decision performance.

## 2. LITERATURE REVIEW

Wang and Strong's (1996) research develops a hierarchical framework that captures the aspects of data quality (DQ) that are important to data consumers. They collected 118 data quality attributes from data consumers and consolidated them into twenty dimensions. Although the 20 dimensions were ranked by importance ratings, the highest-ranking dimensions did not capture the essential aspects of data quality. Furthermore, they found that 20 dimensions were too many for practical evaluation purposes. Thus, they conducted a two-phase sorting study and grouped the 20 intermediate dimensions into four categories. The data quality categories are: intrinsic, contextual, representational, and accessibility.

Based on their framework, intrinsic DQ represents that data have quality in their own right. In their study, the attributes included in intrinsic DQ are accuracy, objectivity, believability, and reputation. Contextual DQ highlights the requirement that data quality must be considered within the context of the task at hand; that is, data must be relevant, timely, complete, and appropriate in terms of amount so as to add value. Representational DQ and accessibility DQ emphasize the importance of the role of systems; that

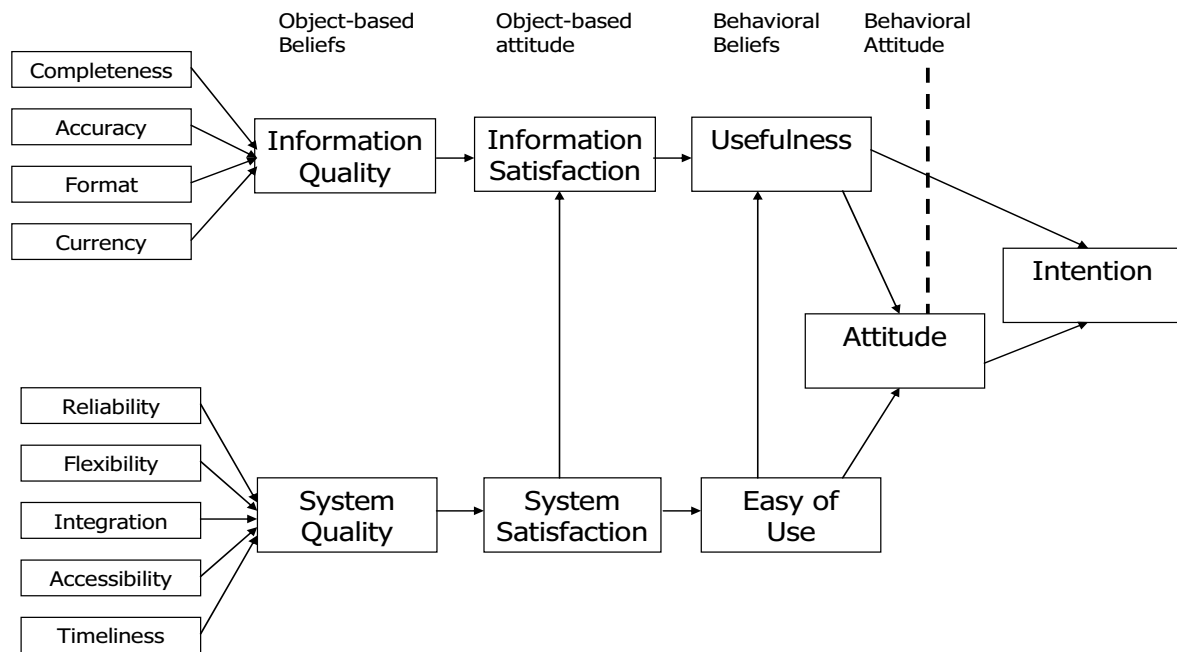
is, the system must be accessible but secure, and the system must present data in such a way that they are interpretable, easy to understand, and represented concisely and consistently for the data to be considered of good representational quality.

According to the knowledge management literature, data is a prerequisite for information and information can be created from its raw data. The literature describes distinctions among data and information. Tuomi (1999, p. 103) states: "The generally accepted view sees data as simple facts that become information as they are combined into meaningful structures." Davenport and Prusak (1998) consider data as a set of discrete, objective facts about events. Similarly, data are understood to be symbols that have not yet been interpreted, and information is data with meaning (Spek and Spijkervet, 1997). Or, data are simple observations of states of the world, and information is data endowed with relevance and purpose (Davenport, 1997).

At this point, it can be inferred that as various data quality attributes were grouped into the four categories, information quality attributes also can be grouped into four categories. This is possible because information is created from its raw data. Therefore, based on Wang and Strong's data quality framework and the knowledge management literature, the aspects of information quality are also intrinsic, contextual, representational, and accessibility. In the IS literature, information quality is one of two major dimensions for evaluating the success of information systems (DeLone and McLean, 1992, 2003) and decision quality is a function of information quality (Stephenson, 1985). Hence, it would be worth investigating the effects of information quality provided by DSS on decision performance. This research is expected to provide a basis for deciding whether information quality provided by a specific information system influences decision performance.

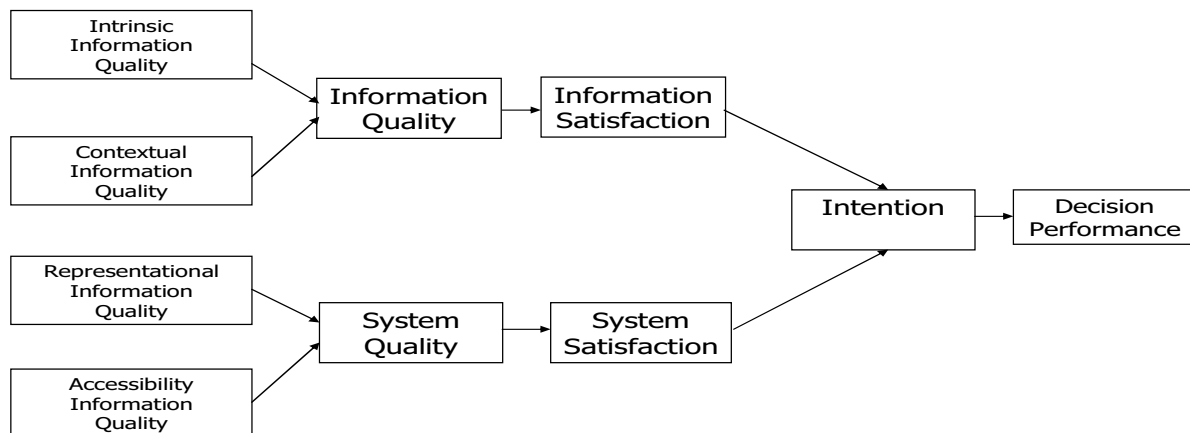
Wixom and Todd (2005) developed a single unified research model by integrating two primary research streams – the user satisfaction literature and the technology acceptance literature (see Figure 1). A vast body of technology acceptance studies has focused on the predictions of information technology acceptance and usage by linking an individual's attitudes and beliefs (ease of use and usefulness) with the behavior of interest (system usage) (Davis 1989, Szajna 1996, Venkatesh et al. 2003). On the other hand, within the user satisfaction literature, various subsets of beliefs about system and information characteristics have been used to measure user satisfaction (DeLone and McLean 1992, 2003). Wixom and Todd (2005) addressed the fact that user satisfaction with the systems and its information output is a weak predictor of system usage (Davis et al. 1989, Goodhue 1988, Hartwick and Barki 1994, Melone 1990), while the technology acceptance model (TAM) offers only limited guidance about how to influence usage through the systems and its information output (Taylor and Todd 1995, Venkatesh et al. 2003). Thus, they distinguished beliefs and attitudes about the system and information characteristics from beliefs and attitudes about using the system. Specifically, in their model they described not only how a set of system and information characteristics influence beliefs and attitudes with the system and the information it produces, but also how these attitudes toward the system and information influence the behavioral beliefs of usefulness, ease of use, and, ultimately, system usage (see Figure 1). The information characteristics used for their study to measure information quality are completeness, accuracy, format, and currency. These characteristics are only part of attributes in Wang and Strong's (1996) four data quality aspects: intrinsic, contextual, representational, and accessibility. To measure information quality more precisely, more information quality attributes should be evaluated. Thus, this study will use the attributes in Wang and Strong's study (1996) instead of the four characteristics in Wixom and Todd model.

**FIGURE 1: THE INTEGRATED MODEL OF USER SATISFACTION AND TECHNOLOGY ACCEPTANCE (WIXOM AND TODD, 2005)**



Based on the discussion above, the following research model and hypotheses are proposed.

**FIGURE 2: HYPOTHESIZED RESEARCH MODEL**



H1: There is a positive relationship between intrinsic information quality provided by a DSS and information satisfaction.

H2: There is a positive relationship between contextual information quality provided by a DSS and information satisfaction.

- H3: There is a positive relationship between representational information quality provided by a DSS and system satisfaction.
- H4: There is a positive relationship between accessibility information quality provided by a DSS and system satisfaction.
- H5: There is a positive relationship between information satisfaction and intention to use.
- H6: There is a positive relationship between system satisfaction and intention to use.
- H7: There is a positive relationship between intention to use and decision performance.

### 3. RESEARCH METHODOLOGY

Wang and Strong's (1996) validated instrument used to measure data quality will be used as the survey instrument for this study after minor wording changes are made to fit the DSS context. A pretest of the questionnaire will be administered to some professors, professionals, and graduate students to find ambiguous worded questions. Based on their suggestions, minor changes will be made. To test the survey instrument' wording and procedures, a couple of rounds of a pilot testing will be conducted. The subjects will be DSS users who have work experience. The questionnaire will ask the respondent to rate the importance of information quality attributes in decision making on a 7-point Likert-type scale, ranging from 1 (strong disagree) to 7 (strongly agree).

### 4. CONCLUSIONS

Wixom and Todd (2005) asserted that information quality beliefs shape information satisfaction. To support their assertion, Wixom and Todd used the concept from the attitude behavior literature that beliefs about objects (e.g., information quality) are linked to attitude toward an object (e.g., information satisfaction) (Ajzen and Fishbein, 1980). Next, based on Wixom and Todd's model (2005), satisfaction with the information is expected to influence perceptions of usefulness. Wixom and Todd state (2005, p. 91): "the higher the overall satisfaction with the information, the more likely one will find the application of that information useful in enhancing work performance." Therefore, with information satisfaction, a system user will find the usage of information to improve decision performance. In short, the information quality provided by a DSS will influence the level of satisfaction, which in turn will influence the beliefs about the consequences of using the information. Finally, these beliefs will lead to the improvement of decision performance. Thus, it is expected that there is a positive relationship between information quality provided by a DSS and decision performance.

### REFERENCES

- Ajzen, I. and Fishbein, M., *Understanding Attitudes and Predicting Social Behavior*, 1980, Prentice-Hall, Englewood Cliffs, NJ.
- Benbasat, I., DeSanctis, G., and Nault, B.R., "Empirical Research in Managerial Support Systems: A Review and Assessment. In *Recent Developments in Decision Support Systems*, C. Holsapple and A. H. Winston (eds.). NATO ASI Series F: Computer and System Sciences, Vol. 101, Springer-Verlag Publishers, 1993, pp. 383-437.
- Benbasat, I. and Taylor, R.N., "Behavioral Aspects of Information Processing for the Design of Management Information Systems," *IEEE Transactions on Systems, Man, and Cybernetics*, Vol. SMC-12, No.4, July-August, 1982, pp.439-450.
- Davenport, T.H., *Information Ecology: Mastering the Information and Knowledge Environment*, New York: Oxford University Press, 1997.
- Davenport, T.H. and Prusak, L., *Working Knowledge: How Organizations Manage What They Know*, Boston: Harvard Business School Press, 1998.
- Davis, F. D., "Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology," *MIS Quarterly*, Vol. 13, No. 3, 1989, pp. 319-340.
- DeLone, W.H. and McLean, E.R., "Information Systems Success: The Quest for The Dependent Variable," *Information Systems Research*, Vol. 3, No. 1, 1992, pp. 60-95.
- DeLone, W.H. and McLean, E.R., "The DeLone and McLean Model of Information Systems Success: A Ten-Year Update," *Journal of Management Information Systems*, Vol. 19, No. 4, Spring 2003, pp. 9-30.

- Dhaliwal, J.S. and Benbasat, I., "The Use and Effects of Knowledge-Based System Explanations: Theoretical Foundations and a Framework for Empirical Evaluation," *Information Systems Research*, Vol.17, No.3, 1996 Sep., pp.342-362.
- Eierman, M. A., Niederman, F., and Adams, C., "DSS theory: A model of constructs and relationships," *Decision Support Systems*, Vol. 14, 1995, pp.1-26.
- Goohue, D. L., "IS Attitudes: Toward Theoretical and Definitional Clarity," *Database Adv. Infor. Systems*, Vol. 19, No. 3, 1988, pp. 6-15.
- Gregor, S. and Benbasat, I., "Explanations from knowledge-based systems: A review of theoretical foundations and empirical work," *MIS Quarterly*, Vol. 23, No. 4, 1999, pp. 497-530.
- Hartwick, J. and Barki. H., "Explaining the Role of User Participation in Information System Use," *Management Science*, Vol. 40, No. 4, 1994, pp. 440-465.
- Melone, N., "A Theoretical Assessment of the User-Satisfaction Construct in Information Systems Research," *Management Science*, Vol. 36, No. 1, 1990, pp. 76-91.
- Nah, F.H., Mao, J., and Benbasat, I., "Effectiveness of using expert support technology for individual and small group decision making," *Journal of Information Technology*, Vol. 14, 1999, pp. 137-147.
- Sharda, R., Barr, S.H., and McDonnell, J.C., "Decision Support System Effectiveness: A Review and an Empirical Test," *Management Science*, Vol. 34, No. 2, 1988, pp. 139-159.
- Silver, M.S., "Decision Support Systems: Directed and non-directed change," *Information Systems Research*, Vol. 1, No. 1, 1990, pp. 47-70.
- Spek, R.V.D. and Spijkervet, A., *Knowledge Management: Dealing Intelligently with Knowledge*, Utrecht: Kenniscentrum CIBIT, 1997.
- Stephenson, B.Y., "Management by Information," *Information Strategy: The Executive's Journal*, Vol. 1, No. 4, 1985 Summer, pp. 26-32.
- Szajna, B., "Empirical Evaluation of the Revised Technology Acceptance Model," *Management Science*, Vol. 42, No. 1, 1996, pp. 85-92.
- Taylor, S. and Todd, P. A., "Understanding Information Technology Usage: A Test of Competing Models," *Information Systems Research*, Vol. 6, No. 2, 1995, pp. 144-176.
- Todd, P. and Benbasat, I., "The Impact of Information Technology on Decision Making: A Cognitive Perspective," In *Framing the Domains of IT Management*, Pinnaflex Educational Resources, Inc., R.W. Zmud (ed.), 2000, pp.1-14.
- Tuomi, I., "Data Is More Than Knowledge: Implications of the Reversed Knowledge Hierarchy for Knowledge Management and Organizational Memory," *Journal of Management Information Systems*, Winter, Vol. 16, No. 3, 1999, pp. 103-117.
- Venkatesh, V., Morris, M., Davis, G., and Davis, F., "User Acceptance of Information Technology: Toward a Unified View," *MIS Quarterly*, Vol. 27, No. 3, 2003, pp. 425-478.
- Wang, R.Y. and Strong, D.M., "Beyond Accuracy: What Data Quality Means to Data Consumers," *Journal of Management Information Systems*, Vol. 12, No. 4, Spring 1996, pp. 5-34.
- Wixom, B. H. and Todd, P. A., "A Theoretical Integration of User Satisfaction and Technology Acceptance," *Information Systems Research*, Vol. 16, No. 1, 2005, pp. 85-102.

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## ORGANIZATIONAL COMMITMENT RECALL IN TIMES OF CRISIS

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Silva Karkoulian, Lebanese American University, Beirut, LEBANON

### ABSTRACT

*After a crisis, employees' organizational commitment may be affected. This research examined the effect of a war crisis on the commitment of employees using Meyer and Allen (1997) three component model of commitment that is, effective, continuous and normative commitment. The study was carried out in a Middle Eastern country (Lebanon) that witnessed a 33 day war starting July 12 2006 (now referred to as the "July War") that caught its citizens and businesses by surprise. Daily activities were disrupted and unforeseen financial losses were incurred. Participants were 244 professionals working in medium sized companies in the retail sector. The survey took place during the month of November, 2006, 4 months after the crisis. The results indicated that after a crisis, overall commitment did not change. However, affective and normative commitment increased while continuous commitment decreased. The three types of commitment were also affected by gender and status.*

**Keywords:** Commitment, Crisis, Gender, Status.

### 1. INTRODUCTION

An organization is not simply the physical and financial assets structure, but also the people who are committed to work and integrate within the organization on the basis of a mutually dependent relationship. The focal point of every organization therefore is its human resources. The management of the actions and interactions of the individuals across all levels within both the micro as well as the macro environment, will affect the performance of the organization, and its ability to cope with both favorable and unfavorable events.

The word crisis is derived from the Greek word "*krisis*", meaning decision, or judgment (Preble, 1997). When a crisis occurs within an environment/organization, it usually disrupts daily activities and can generate fear of financial loss (Ren, 2000). The impact on the organization could be immediate or long-term (Paraskevas, 2006); thus coping measures i.e decisions and judgments, must be formulated in advance in order to minimize its negative effect. According to Fink (1986) an organization should plan for a crisis by artistically eliminating a great deal of the uncertainty and risk in order to have more control over its fate. Unfortunately, not all potential crises can be planned for as they can be created by unpredictable outside forces or events which no amount of planning can foresee.

The Lebanese economy witnessed favorable economic conditions prior to the "July War" referring to the 2006 Lebanese-Israeli conflict which lasted 33 days (July 12-August 13). Even though the first two quarters of 2005 witnessed slow growth, seven percent increase in GDP was reported between July 2005 and June 2006 which stimulated both European and Arab investment as well as tourism (InfoPro, 2006). Lebanese foreign direct investment had increased as Arab investors have been looking for non Western opportunities and Lebanon seemed like a good prospect for investing their cash surpluses. Cash surplus also quadrupled in the country during the first half of 2006 compared with the same period of 2005 reaching \$2.5 billion by June 2006 (InfoPro, 2006). The Tourism Minister at the time had anticipated 1.6 million visitors to Lebanon during 2006 double that of 2005 and expected to generate more than \$2 billion in revenues from this sector alone. Hence, businesses such as retailers, hotels, residential buildings and beach resorts invested billions of dollars in anticipation for a 'booming' summer (Lebanon Wire, 2007). However, the "July War" caught Lebanon by surprise, incurring unforeseen financial losses and disrupting daily activities thus decreasing revenues and potentially causing major job losses, and general disruption. The impact of this unexpected war, which has created both an economic and a cultural crisis, is expected to last for a long time.

## 2. LITERATURE REVIEW

Employees' commitment to their organization may be affected following a crisis. With Commitment literature telling us that job performance and commitment are positively related (Riketta, 2002; Chen, Silverthorne, Hung, 2006), it is then imperative that we examine the effect of a crisis such as war on the employee's commitment defined in the current research as the employee's goal to remain with the organization (Meyer & Allen, 1997).

Meyers & Allen (1997) suggested a three-component model of commitment and developed a scale to measure them which is generally representative across different cultures (Ko, Price, & Mueller, 1997; Sulimand, & Iles, 2000). (a) Affective commitment involves the recognition, participation and emotional attachment with the organization leading to the sentiment of wishing to remain employed in the organization; (b) Continuance commitment is founded on the bases of profit coupled with continued participation on one hand, and the cost coupled with leaving on the other hand (Kanter, 1968) creating a desire for wanting to continue employment; (c) Normative commitment, involves an emotional obligation towards the organization i.e. a person should continue employment.

Past research have examined the effects of factors such as downsizing, stress, and job insecurity on employees' commitment. Research evidence indicates that downsizing is associated with decreased Organizational commitment (Farrell, 2003; T.D.Allen et al., 2001; Ligon et al., 2000). Thornhill, Saunders, & Stead (1997) studied the influence of organizational downsizing on employees who survived the process. They reported that during downsizing, the employees' commitment decreased and was affected by 5 factors: "need for fairness and perceived justice, creation of appropriate line management styles and skills to support the transitional period, open and realistic communication to support the planning and implementation stages, demonstration of meaningful senior management commitment to the changes, and a clearly defined direction to help to alleviate survivors' uncertainties" (Thornhill, Adrian, Sanders, Mark and Stead, Jo, 1997, p. 8). However, Mathieu and Zajac (1990) suggested that highly committed employees may experience greater negative reactions after organizational downsizing than less committed employees would experience.

Montgomery et al. (1996) examined the effect of job stress in the financial service profession on 288 stockbrokers in the US and concluded that excessive job stress decreases productivity and commitment. Gaither (1999) studied the effect of commitment as a mediating factor on job stress on 1,088 pharmacists in the US. He concluded that as commitment increased it decreased job turnover intention by reducing the negative effects of job stress. Yousef (2000) found that the level of commitment to the organization is positively influenced by job performance in 447 participants operating in various industries in the United Arab Emirates. In addition, Sager (1990) found that organizational commitment negatively influenced job stress.

Job insecurity can have serious consequences for the organization too. Reduced commitment and high turnover intentions are some of such consequences which might threaten organizational stability (Robinson and Rousseau, 1994). Rosenblatt and Ayalla (1996) investigated the job security effect on employees' attitudes toward work. Their findings showed that job insecurity had a negative effect on perceived organizational support, intention to leave, organizational commitment, and resistance to change.

In sum, downsizing, job stress, and job insecurity are all seen by the employees as negative experiences and have been associated with reduced commitment which might threaten organizational stability. Since the war crisis is a negative occurrence does it then similarly lead to reduced organizational commitment? What if employees were asked to recall their previous commitment to the organization before the crisis and contrast it with their commitment after the crisis? Would the result lead to a reduction in organizational commitment?

When individuals are asked to recall experiences or thoughts that they have previously had at a certain time, and contrast it with the present, they usually rely on their memory to recollect past events, thoughts and/or opinions. However, they find it difficult to accurately retrieve incidents or thoughts that happened

previously because memory traces in individuals are poor accounts of the initial percept (Green, 2004). When the memory of an event is brought back to consciousness, new facts may have been added to the previous event. Individuals' perception of the present is in part affected by past experiences they have had (Luthans, 2005) making their perceived memory their real memory which can impact current decisions.

The present study theorizes that after a crisis such as war, organizational commitment will be lower based on the recalled accounts of its employees.

### 3. SAMPLE AND MEASUREMENT

Two hundred- forty- four of the 300 surveyed professionals working in medium sized companies in the retail sector in Lebanon completed the survey. The response rate was 81.3% of which 45.9% were females and 54.1% males.

The survey took place during the month of November, 2006, 4 months after the crisis (before the crisis - after the crisis = 4 months).

The Component-model of Commitment developed by Allen & Meyer (1990a, 1997) was used in this research for it was specifically designed to measure the three types of commitment to the organization; i.e. Affective, Continuance, and normative commitments. The Component-model of Commitment is a widely used and intensively tested scale ex. Culpepper, 2000; Jaros, 1997. It includes 24 items, 8 items per commitment type. Respondents were requested to specify their responses to the items using a seven-point Likert scale both before the crisis and after the crisis. The scale anchors were labeled (1) strongly agree to (7) strongly disagree with (4) for neutral.

The questionnaire also included 2 demographic questions that asked about gender and status as potential mediating factors.

### 4. FINDINGS

In accordance with previous researches on organizational commitment using Allen & Meyer (1990a, 1997) three component model of commitment, subscales of the questionnaire showed high reliability among each other. Reliability for affective commitment before the crisis was  $\alpha = 0.896$  and after the crisis,  $\alpha = 0.934$ . For continuance commitment, reliability before the crisis was  $\alpha = 0.757$  and after the crisis  $\alpha = 0.793$ . Also, for normative commitment, reliability before the crisis was  $\alpha = 0.715$ , and after the crisis  $\alpha = 0.730$ .

In order to assess the level of commitment after the crisis and participants' recall before the crisis, we conducted pair-wise t-tests. First, the researchers examined the change in the overall commitment levels averaged across all the subscales. Second, the test measured the different commitment levels after and before the crisis per commitment type i.e. affective, continuance, normative commitments in order to study the effect the crisis had on the different types of employees' commitment.

When comparing the overall commitment mean before and after the crisis, results showed that it changed slightly (After the crisis Mean 3.646; before the crisis Mean = 3.687), indicating that the overall employees' commitment did not change much. Nevertheless, when the different types of commitment were measured the results were as follows: (see Table-1)

**TABLE-1 MEAN AND STANDARD DEVIATION SCORES FOR THE DIFFERENT TYPES OF COMMITMENT**

TYPES OF COMMITMENT	BEFORE CRISIS		AFTER CRISIS	
	Mean	S.D	Mean	S.D
Affective Commitment	2.959	1.151	3.8975	1.592
Continuance Commitment	4.3299	1.036	2.7807	1.141
Normative Commitment	3.7746	0.884	4.2623	1.0586

Average	3.687	1.0236	3.646	1.264
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#### *Affective Commitment*

The pairwise t-test revealed a statistically significant increase in participants' level of affective commitment from before the crisis (M = 2.959, SD=1.151) to after the crisis (M=3.8975, SD=1.592, t (243) =11.135, p<0.001, r=0.58). The eta squared statistic (0.33) indicated a large effect size.

#### *Continuance Commitment*

The pairwise t-test revealed a statistically significant decrease in participants' level of affective commitment from before the crisis (M = 4.3299, SD=1.036) to after the crisis (M=2.7807, SD=1.141, t (243) =-15.882, p<0.001, r=0.023). The eta squared statistic (0.50) indicated a large effect size.

#### *Normative Commitment*

The pairwise t-test revealed a statistically significant increase in participants' level of normative commitment from before the crisis (M = 3.7746, SD=0.884) to after the crisis (M=4.2623, SD=1.0586, t (243) =9.401, p<0.001, r=0.66). The eta squared statistic (0.266) indicated a large effect size.

The causal relationship between each type of commitment and the mediating factors (i.e. gender and status) were then analyzed using regression analysis.

#### **Affective Commitment**

Affective commitment showed no significant correlation with gender and status before the crisis. After the crisis, also no significant correlation was found with status; however, gender had a negative correlation (see Equation 1).

$$\text{Equation 1 - Affective commitment After War} = 4.925 - 0.552 \text{ Gender} \\ 0.008$$

#### **Continuance Commitment**

Continuous commitment showed a significant positive correlation with status and a negative correlation with gender before the crisis (see equation 2). However, after the crisis, gender only had a significant positive correlation (see Equation 3).

$$\text{Equation 2 - Continuance commitment before the war} = 4.359 + 1.312 \text{ Status} - 0.461 \text{ Gender} \\ 0.000 \quad 0.000$$

$$\text{Equation 3 -Continuance commitment after the war} = 2.382 + 0.349 \text{ Gender} \\ 0.02$$

#### **Normative Commitment**

Normative commitment showed a significant positive correlation with gender (see Equation 4) and no significant correlation with status before the crisis. However, after the crisis, no significant correlation was found with either status or gender.

$$\text{Equation 4 -Normative commitment before the war} = 4.034 + 0.424 \text{ Gender} \\ 0.000$$

## **5. DISCUSSION**

The present study hypothesized that after a crisis such as war, organizational commitment will be lower based on the recalled accounts of its employees. The researchers assessed organizational commitment at two points in time, one before the crisis and one after the crisis. The results indicated no overall change in commitment level. This is contrary to past research on the after effect of negative occurrences such as downsizing, job stress and job insecurity which suggested a reduction in commitment level (Farrell, 2003; Ligon et al., 2000). An explanation could be that the Lebanese people may have adapted to living in an unstable environment. Nevertheless, the different components of commitment had varying results. There was a significant increase in participants' level of commitment for the affective commitment subscale as compared to its recalled level before the crisis. This increase could have been as a result of participants'

emotional attachment to the organization after surviving the crisis leading to the sentiment of wanting to continue employment. Results also indicated a significant decrease in participants' level of commitment for the continuous commitment subscale as compared to its recalled level before the crisis. This decrease could have resulted from participants' increased feeling of physical insecurity as a result of the war which could have outweighed the costs associated with leaving their organization and thus might have caused them to consider leaving. There was also a significant increase in participants' level of commitment for the normative commitment subscale as compared to its recalled level before the crisis. This could have resulted from participants' feeling of obligation towards their organization after such crisis for they were still employed.

The researchers also examined the effect of gender and status on participants' level of commitment. Status correlated positively with continuous commitment before the crisis but showed no correlation after the crisis. Before the crisis, part-time employees were probably committed to the organization hoping to become permanent employees thus the profit coupled with continued participation before the war outweighed the cost associated with leaving. This is contrary to a study by Van Dyne and Ang (1998) on professional workers in Singapore which found that contingent workers had lower affective commitment to their organization. However, the crisis could have decreased their chances to become full time employees and as a result affected their continuous commitment level. On the other hand, affective commitment was not gender specific before the crisis. Nevertheless, males had a positive relation with affective commitment after the crisis as opposed to females. As for continuance commitment, before the crisis, males had a positive relationship with continuous commitment while females had a negative relationship. However, after the crisis, females had a positive relationship. Finally, females and normative commitment were positively related before the crisis while males negatively related. No gender specific relation existed after the crisis. A possible reason to explain this is the more active presence of women in the workforce since 1970s caused by cultural development and increased educational levels. Added to this, the heavy migration of Lebanese men to the gulf countries and the cultural pressure exerted on them to secure their future careers and bear their social responsibilities as primary family earners (Ghazi, 1997). In comparison, studies have difficulty arriving to agreement relating gender and commitment. Some studies have reported that men are less committed than women (Gould, 1975) while others reported the opposite (Marsden, 1993; Aranya, et al, 1986).

## **6. CONCLUSION AND LIMITATIONS**

The level of organizational commitment may change depending on the form of commitment under certain circumstances such as a crisis. The results from this study indicated that after a crisis, affective and normative commitment levels increased while continuous commitment decreased. Gender and status were mediating factors that could have contributed to the change.

This study took place in Lebanon after the "July War", which could be Culture specific and/or situation specific. Participants' recollection may have been influenced by their current emotions which could have been still high at the time of the investigation. Nevertheless, the findings indicate that human resource managers need to pay more attention to the effect of negative events or crisis on the commitment level of employees and plan ahead for such occurrences to minimize its negative impact.

The outcome from this research add to the general body of literature on commitment and further our awareness on the impact of crisis on the commitment of employees. With the war implicated as a crisis, further studies are needed to see whether other kinds of crisis would yield the same or different results. Finally, the findings of this research are based on responses of a relatively small sample of professional employees in medium size companies in the retail sector in Lebanon. As such, the findings can not be generalized to all Lebanese professionals. Further studies should explore whether the same results apply for non-professional employees and to other sectors.

## REFERENCES

- Allen, Nathalie J. and Meyer, John P., "The Measurement and Antecedents of Affective, Continuance, and Normative Commitment to the Organization". *Journal of Occupational Psychology*, Vol. LXIII, 1990, 1-18.
- Allen, Tammy D., Freeman, Daniel M., Russell, Joy E., Reizenstein, Richard C. and Rentz, Joseph O., "Survivor reactions to organizational downsizing: Does time ease the pain?", *Journal of Occupational and Organizational Psychology*, Vol. LXXIV, 2001, 145-164.
- Aranya, Nissim, Kushnir, Talma, and Valency Aharon, "Organizational Commitment in a Male-dominated Profession", *Human Relations*, Vol. IL, 1986, 433-448.
- Chen, Jui-Chen, Silverthorne, Colin and Hung, Jung-Yao, "Organization Communication, Job Stress, Organizational Commitment, and Job Performance of Accounting Professionals in Taiwan and America", *Leadership & Organization Development Journal*, Vol. XXVII (4), 2006, 242-249.
- Culpepper, Robert A., "A Test of Revised Scales for the Meyer and Allen (1991) Three-Component Commitment Construct", *Educational and Psychological Measurement*, Vol. LX (4), 2000, 604-616.
- Farrell, Mark A., "The Effect of Downsizing on Market Orientation: The Mediating Roles of Trust and Commitment", *Journal of Strategic Management*, Vol. XI (1), 2003, 55-74.
- Fink, Steven. *Crisis Management: Planning for the Inevitable*, American Management Association, New York, 1986.
- Gaither, Caroline. A. "Career Commitment: A Mediator of the Effects of Job Stress on Pharmacists' Work-Related Attitudes. *J Am Pharm Assoc*. Vol. XXXIX (3), 1999, 353-61.
- Ghazi, A., Society, September 1997; Lebanon's Culture, <http://www.ghazi.de/society.html>
- Gould Stephen, "Correlates of Organization Identification and Commitment", (Doctoral Dissertation), Michigan State University, East Lansing, 1975.
- Green, M., Eyewitness Memory is Unreliable, 2004; Visual Expert Human Resources, [www.visualexpert.com/Resources/eyewitnessmemory.html](http://www.visualexpert.com/Resources/eyewitnessmemory.html)
- InfoPro. *Economic Impact of the July 06 War and Steps Towards Recovery*. InfoPro, Lebanon, 2006.
- Jaros, Stephen J., "An Assessment of Meyer and Allen's (1991) Three-Component Model of Organizational and Turnover Intentions", *Journal of Vocational Behavior*, Vol. LI (3), 1997, 319-337.
- Kanter, Rosabeth M., (1968), "Commitment and social organization: a study of commitment mechanisms in Utopian communities", *American Sociological Review*, Vol. 33, pp. 499-517.
- Ko, Jong-Wook, Price, James L., and Mueller, Charles W., "Assessment of Meyer and Allen's Three Component Model of Organizational Commitment in South Korea", *Journal of Applied Psychology*, Vol. LXXXII (6), 1997, 961-973.
- Lebanon Wire, Lebanon expects \$2b from tourism. *Lebanon Wire*, June 2006; [www.lebanonwire.com/0606MLN/06062222DPM.asp](http://www.lebanonwire.com/0606MLN/06062222DPM.asp)
- Ligon, Ethan, Thomas, Jonathan and Worrall Tim, "Mutual Insurance, Individual Savings and Limited Commitment", *Review of Economic Dynamics*, Vol III (2), 2000, 21-246.
- Luthans, Fred, *Organisational behaviour*, McGraw Hill, New York, 2005.
- Mathieu, John and Zajac David, "A Review and Meta-Analysis of the Antecedents, Correlates and Consequences of Organizational Commitment", *Psychological Bulletin*, Vol. CVIII, 1990, 171-194.
- Marsden, Peter V., Kalleberg, Arne L., and Cook, Cynthia R., "Gender Differences in Organizational Commitment: Influences of Work Positions and Family Roles", *Work and Occupations*, Vol. XX (3), 1993, 368-390.
- Meyer, John. P. and Allen, Nathalie, J., *Commitment in the Workplace: Theory, Research, and Application*. Sage Publications, Thousand Oaks, 1997.
- Montgomery, Douglas C., Blodgett, John G., and Barnes, Joanne H., "A Model of Financial Securities Salespersons' Job Stress", *The Journal of Services Marketing*, Vol. X (3), 1996, 21-38.
- Paraskevas, Alexandros, "Crisis Management or Crisis Response System?", *Management Decision*, Vol. XLIV (7), 2006, 892-907.
- Preble, Joe., "Integrating the Crisis Management Perspective into the Strategic Management Process", *Journal of Management Studies*, Vol. XXXIV (5), 1997, 769-791.
- Ren, Chiang, "Understanding and Managing the Dynamics of Linked Crisis Events", *Disaster Prevention and Management*, Vol. IX (1), 2000, 12-17.

- Riketta, Micheal, "Attitudinal Organizational Commitment and Job Performance: A Meta-Analysis", *Journal of Organizational Behavior*, Vol. XXII (3), 2002, 257-266.
- Robinson, Sophie L. and Rousseau, Denise M., "Violating the Psychological Contract: Not the Exception but the Norm", *Journal of Organizational Behavior*, Vol. XV , 1994, 245-59.
- Rosenblatt, Zehava and Ayalla, Ruvio, "A Test of a Multidimensional Model of Job Insecurity: The Case of Israeli Teachers", *Journal of Organizational Behavior*, Vol. XVII, 1996, 587-605.
- Sager, James K., "Reducing Sales Manager Job Stress", *The Journal of Consumer Marketing*, Vol. VII (4), 1990, 5-14.
- Sulimand Abubakr M. and Iles, Paul A., "The Multi-Dimensional Nature of Organizational Commitment in a non-Western Context", *Journal of Management Development*. Vol. IX (1), 2000, 71-82.
- Thornhill, Adrian, Sanders, Mark and Stead, Jo., "Downsizing, Delaying - but Where's the Commitment?: The Development of a Diagnostic Tool to Help Manage Survivors . *Personnel Review*, Vol. XXVI (1), 1997, 81-98.
- Van Dyne, Lynn and Ang, Simon, "Organizational Citizenship Behavior of Contingent Workers in Singapore", *Academy of Management Journal*, Vol. ILI, 1998, 692-703.
- Youssef, Darwish, "Satisfaction with Job Security as a Predictor of Organizational Commitment and Job Performance in a Multicultural Environment", *International Journal of Manpower*, Vol. XIX (13), 1998, 184-194.

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# DEPLOYING THE MEASUREMENT OF KNOWLEDGE MANAGEMENT BY A BALANCED SCORECARD

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## ABSTRACT

*Knowledge Management is getting imperative in today's business world. As to gain sustainable competitive advantage, organizational knowledge base must be well protected, cultivated and shared among employees. Literature review on knowledge conversion was presented so as to understand how knowledge management strategy can be assessed by the balanced scorecard. Results of the survey study show that customer relevancy, internal capability and organization learning, have significant effects on the respondents' reported satisfaction of their knowledge management.*

**Keywords:** Knowledge Management; Explicit Knowledge, Tacit Knowledge, Knowledge Conversion.

## 1. INTRODUCTION

The majority of empirical research emphasized the different natures of knowledge. Davenport and Prusak (1998) defined knowledge as, "a fluid mix of framed experience, contextual information, values and expert insight that provides a framework for evaluating and incorporating new experiences and information (p. 5)." Conventionally, it is a set of models that describe various properties and behaviors within a domain. The importance of knowledge management is originated from the fact that people sometime don't know what they are supposed to be learnt. In a study, it was found that 78% of companies in the study reported that poor management was the key reason for them losing business opportunities (KPMG, 2003). As described by Fernandez, Gonzalez and Sabherwal (2004), knowledge is often being lost from an organization through employee attrition or retrenchment. As a result, knowledge management should be in place in order to protect the intellectual assets and help organizations to acquire, store and utilize knowledge in a flexible and effective way. The present study, therefore, performed a more detailed investigation of the basic elements of knowledge management and proposed the gap analysis as to identify knowledge gap within organization, with a view to filling some gaps in the research concerning this topic.

## 2. LITERATURE REVIEW

### 2.1 The Concept of Knowledge Conversion

Knowledge can be either tacit or explicit (Polanyi, 1966). Tacit knowledge represents those knowledge cannot be codified and inexpressible. Tacit knowledge always refers knowledge that people learnt from experience and practice. Alternatively, knowledge that can be expressed in some written form is called explicit knowledge. Alternatively, Nelson and Winter (1982) suggested that explicit knowledge as technological knowledge that can be well defined in a book or other media. As suggested by Cooke (2002), all new knowledge is tacit at the beginning. Two issues associated with tacit knowledge were identified by Gourlay (2002), i.e. whether tacit knowledge was an individual trait or shared by others; and whether tacit knowledge could be converted into explicit knowledge. If tacit knowledge can be codifying into explicit knowledge, it is importance to investigate the model and techniques for the process. "Knowledge conversion" is a process that making tacit knowledge explicit and codified.

As summarized by Stover (2004), the knowledge transfer can be classified as the following four categories:

tacit to tacit (the knowledge transfer happened in socialization, e.g. mentoring, learning by doing);

tacit to explicit (the knowledge transfer happened in externalization, where the knowledge is written or communicated in some permanent or semi-permanent way, e.g. stories, narrative, presentation);

explicit to explicit (the knowledge transfer happened in some systematic procedure, e.g. computer database, expert system);



explicit to tacit (the knowledge transfer happened in internalization process, e.g. active participation and repetition).

In today's knowledge-based economy, managers must be the facilitators for the knowledge conversion (Nonaka and Takeuchi, 1995; Stewart, 1997). Lubit (2001) suggested the following four ways for organizational knowledge conversion:

- coaching, mentoring and observing experts;
- work sharing arrangements in groups, networks and communities of practices;
- recording tacit knowledge in learning histories, e.g. written narratives;
- developing routines around critical situations (contract reviews, agendas, who to include in major decisions).

Therefore, knowledge management in an organization is not solely related to knowledge sharing, but also how to facilitate the knowledge conversion (MacNeil, 2003).

## **2.2 Obstacles in Knowledge Conversion**

Baumard (1999, p. 11) suggested that scattered knowledge in organization is barrier to knowledge conversion. As suggested by Nonaka and Takeuchi (1995), tacit knowledge is not easily converted into explicit knowledge because of the nature of tacit knowledge, and the social interaction is the key in knowledge conversion. People in the organization may choose to share (or not share) their knowledge with other colleagues in different departments (Arora, 2002). Leveraging the organization's knowledge becomes difficult. According to Fernandez et al. (2004), it is also difficult for organization to keep their knowledge base because of employee attrition or retrenchment.

Some research efforts have explored the barriers in organizational knowledge-sharing. Ardichvili, Page and Wentling (2003) conducted an in-depth case study of virtual communities of practice in a large multinational corporation on its knowledge-sharing network. They found that reasons for employees hesitate to share their ideas including the fear of criticism, fear of misleading the community members. In another study that investigated barriers to the absorption of management knowledge, Kuznetsov and Yakavenka (2005) found that linguistics, culture, training and ambience of the respondents influenced their knowledge transfer.

Sun and Scott (2005) investigated the barriers to knowledge transfer in the organization by Delphi technique. A total of 14 sources from which the barriers arise were obtained. They are individual imperatives, organizational imperatives, inter-organizational imperative, organizational climate, team climate, inter-organizational climate, organizational relationship, team relationships, intra-organizational relationships, competencies, organizational systems and structures, team structuring, inter-organizational systems and structures, team norm. They classified the barriers from individual level, team level, and organizational level.

## **3. EVALUATION OF KNOWLEDGE MANAGEMENT BY BALANCED SCORECARD**

Measuring knowledge management is not an easy task. Relatively little research has investigated the measuring methods (Arora, 2002). Experience curves and learning curves are commonly used. As argued by Arora (2002), these methods focus on the outcomes and neglecting the process of knowledge transfer.

Implementation of knowledge management is a continuous process and all parties in organization involved. An integrative conceptual framework of effective knowledge transfer in organization was proposed by Goh (2002). Factors such as leadership, problem-solving/seeking behaviors, support structures, adsorptive and retentive capacity, types of knowledge were identified for the effectiveness of knowledge transfer within an organization.

The importance of assessing knowledge management focuses primarily on the ability to visualize the level of collaboration and the sharing of knowledge. It aims at reducing knowledge gap, and thus, narrowing the strategic gap in achieving the company's goal. Therefore, it is suggested to use Balanced Scorecard to

measure and manage the cause and effect linkages between the level of knowledge management and the business objectives in an organization. As suggested by Kaplan and Norton (1992), the balanced scorecard evaluates corporate performance from the following four perspectives: financial perspective, customer perspective, internal process perspective, learning and growth perspective. Based on these perspectives, we can evaluate whether the existing knowledge management in an organization meets its original objectives.

#### **4. N EMPIRICAL STUDY**

As to investigate the applicability of balanced scorecard as a measurement of knowledge management, an empirical study was conducted. Questionnaires consisted of five main constructs: Financial relevancy, customer relevancy, internal capability, organization learning and satisfaction of the existing knowledge management. Five hundred Hong Kong companies were randomly selected from the public database provided by Hong Kong Trade Development Council. Questionnaires were mailed to the managing director of these five hundred companies. About 148 companies in Hong Kong completed the survey and the valid response rate is 29.6%. The respondents represent a wide range of industries, including accounting and finance, education, electronics, food supply, information technology, retailing and trading.

A standard multiple regression was performed to examine the relationship between satisfaction level of the existing knowledge management as the dependent variable with those independent constructs. The model was significant at the 0.001 level. The independent variables explained 73% of variance in the DV ( $R^2 = 0.73$ , adjusted  $R^2 = 0.72$ ,  $F$  value = 94.789). Customer relevancy, internal capability and organization learning are positively related to the DV. The regression coefficients for the DV of these constructs were positive and significant. However, the regression coefficient for the financial relevancy on the DV was not significant and negative.

#### **5. DISCUSSION**

Knowledge management is a continuous process for all companies as to gain competitive advantages. The present study's findings suggest that efforts to assess the knowledge management should be directed at the balanced scorecard approach. Results of the survey study confirm that the effective knowledge management is a complex construct. Organizations need to be aware of their knowledge management strategies whether well fitted with their existing business strategies. This framework also provides some direction for future research on the assessment of knowledge transfer in organizations.

#### **REFERENCES**

- Ardichvili, A., Page, V. and Wentling, T. Motivation and barriers to participation in virtual knowledge-sharing communities of practice, *Journal of Knowledge Management*, Vol. 7(1), 2003, 64-77.
- Arora, R. Implementing KM – a balanced score card approach, *Journal of Knowledge Management*, Vol. 6(3), 2002, 240-249.
- Baumard, P. *Tacit Knowledge in Organizations*. Sage, London, 1999.
- Cooke, P. *Knowledge Economics, Clusters, Learning and Cooperative Advantage*. Routledge, London, 2002.
- Davenport T. and Prusak L. *Working Knowledge*. Harvard Business School Press, Boston, MA, 1998.
- Fernandez, B., Gonzalez, I. and Sabherwal, R. *Knowledge Management – Challenges, Solutions and Technologies*. Prentice Hall, Upper Saddle River, N.J., 2004.
- Goh, S. G. Managing effective knowledge transfer: an integrative framework and some practical implication, *Journal of Knowledge Management*, Vol. 6(1), 2002, 22-30.
- Gourlay, S. Tacit knowledge, tacit knowing or behaving. Paper presented at the Third European Conference on Organizational Knowledge, Learning and Capabilities ([http://www.alba.edu.gr/OKLC2002/Proceedings/pdf\\_files/ID269.pdf](http://www.alba.edu.gr/OKLC2002/Proceedings/pdf_files/ID269.pdf)), Athens, Greece, April 2002.
- Kaplan, R. S. and Norton, D. P. Balanced scorecard-measures that drive performance, *Harvard Business Review*, January-February, 1992, 71-79.
- KPMG. KPMG's European KM Survey 2002/2003. Paper available at the following web: <http://www.knowledgeboard.com/cgi-bin/item.cgi?id=1505>, 2003

- Kuznetsov, A. and Yakavenka, H. Barriers to the absorption of management knowledge in Belarus, *Journal of Managerial Psychology*, Vol. 20(7), 2005, 566-577.
- Lubit, R. Tacit knowledge and knowledge management: the keys to sustainable competitive advantage, *Organizational Dynamics*, Vol. 29(4), 2001, 164-178.
- Macneil, C. M. Line managers: Facilitators of knowledge sharing in teams, *Employee Relations*, Vol. 25(3), 2003, 294-307.
- Nelson R. R. and Winter, S. G. *An Evolutionary Theory of Economic Change*. The Belknap Press of Harvard University Press, Cambridge, Mass, 1982.
- Nonaka, I. and Takeuchi, H. *The Knowledge-Creating Company: How Japanese Companies Create the Dynamics of Innovation*. Oxford University Press, New York, 1995.
- Polanyi, M. *The Tacit Dimensions*. Doubleday, New York, 1966.
- Stewart, T.A. *Intellectual Capital*. Nicholas Brealey Publishing, London, 1997.
- Stover, M. Making tacit knowledge explicit: The ready reference database as codified knowledge, *Reference Services Review*, Vol. 32(2), 2004, 164-173.
- Sun, P. Y. T. and Scott, J. L., An investigation of barriers to knowledge transfer, *Journal of Knowledge Management*, Vol. 9(2), 2005, 75-90.

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## THE ECO TAXES: THE FIRST GLOBAL TAXES

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### ABSTRACT

*The collection is privilege of the State government over the citizens and companies to sustain the state structure and to attend the people necessity. The traditional taxation is conceived through the one nation - one state logic, whereas the nation's individuals accept to contribute to sustain the state that is committed to return benefits for the people. However, the global economic transform this logic when claims for global standard taxes. Nowadays, some of the traditional taxation modes are inadequate for the economic dynamic and others remain well. In addition, some special activities are growing in the global economy and claims attention for the wealth availability for taxation, as such the funds move and the e-business. In addition, the claim for eco taxes to promote sustainable development is a remarkable reality.*

**Keywords:** Taxation; Global; Environment.

### 1. INTRODUCTION

The enforcement of taxes is one prerogative of the State government over the citizens. This prerogative comes from the sovereign political power of the State, that should attend the people need with the revenues received by the collection activity. In short term, taxation is the power of the government to collect revenues from the citizens, without to return direct services for them, but only committed to supply diffuse benefits for all the society, to be attended by the State structure working.

In fact, the taxation power is not only a privilege of the government, but a exclusive power of the governments. It means, nobody else is enable to catch revenues from the people, against their will or without to return them some good or advantage. The other exclusive activity of the State power is the violence monopoly, because only the State is enable to use the force against the citizen. The force used by the State, through the police and the regulatory power, is a political legitimized enforcement and supported by previous law, as such the taxation activity.

Therefore, the taxation enforcement for the liberal society is justified on the political power delegated to the State government that declares himself as nation's representative. The nation is a human group unified by historic and cultural traditions capable to organize himself as State that sustains his legitimacy just as representative of the nation. The nation is the essential human community behind the State structure and commands him the exclusive power for taxation enforcement and use of force.

### 2. THE PERMANENCE OF THE STATES AND THE TAXES

Some recent theories foresees a future world without states (Guehenno, 1994), and a world without states would be a world without taxes. But, the world without states should be imagined also a world without political legitimized use of the force. The use of the force without the political justification would not be a - public use - but a - private use -, just founded only on the strongest law. The world without states and only composed of non-government or non-states human organizations would be a world only composed of the companies, the non-profit organizations, as such Red Cross, Greenpeace, ATTAC, and armed groups, as such Al Qaeda, Hezbollah or ETA, and the last armed groups certainly would prevail.

The world without states would be a world without taxes, too, and the people, organizations and companies should catch their incomes trading goods and services among them. The competition would be for natural, technical and human resources, and the maintenance of the production and management sites would be kept by privates armies. So, the human society experience would be transformed from the contest among nation's interests to the contest among private goals of groups.

Therefore, it is good sense to conclude that the world without states could not keep the contemporary human civilization level for progress. So, the states must to remain just as the most successful kind of

human society organization to keep the human stability, security, wealth and progress. Today, it exists some regions in the world that could not maintain themselves within organized states, as such Haiti, Somalia or Afghanistan, that must to be controlled by others states.

### **3. THE ONE-STATE/ONE NATION LOGIC OF TAXATION**

If the states should remain, so, taxes will continue too, just to keep the states structures and benefits. But, the logical of tax system is founded on the relations of the State with their sudits, citizens. The citizens are the individuals of the nations, and the state represents the nation's interests. So, the people that wish a state to protect and benefit themselves must to pay taxes for maintenance of the state structure.

Therefore, the taxation is a sovereign expression of the state, but the taxation enforcement commands only over their citizen. It means, one state can collect imposts only over the individuals of the nation that represents and never over non-citizens that do not catch wealth inside his territory. It means that one state can not interfere in the taxation power of another state, or, any state can impose taxes over the citizens of another state, neither over facts abroad induced by foreigners.

The logical of the tax system was built for one only state action inside himself, and each state on his nationals. Meanwhile, today is remarkable the increase of the potential interferences among states about taxation, induced not only by the commerce activity, but also by global common interests, as such, e-business, finance, environment and even sport, whereas the states are more and more compelled to accept tax rules imposed by the global society and not only by their local logical needs.

The former conflicts between states about taxes were solved by treaties and conventions about reduction or to avoid double taxation, commonly caused by commerce interests, but the parts rule their taxation system themselves. However, taxation systems must to go along with the economic dynamic and the mode of wealth circulation or maintenance.

Therefore, some kind of taxes were created and suitable for feature of ancient economic activities declining today, while some kind of new economic activities demand another kind of taxes and even new kind of taxes. So, it is good sense to appreciate what kind of taxes must be increased, improved or created, because of the new economic activities and social interests (Posner, 1995) enlarging, and what kind of taxes can be decreased or even removed, because are not adequate with the new economic activities. One strong trendy about taxes is just the taxation that comes from international engagement that brings compelled intervention over the national tax systems and is not enacted by the legislative house representative of the nation (Ezcurra, 2005).

### **4. THE WEALTH FACTS BEFORE TAXATION SIGHT**

The taxes are imposed over facts that express wealth availability. Naturally, the wealth economic facts that attracts taxation are the commerce, the heritage and the profits. Along the history, the countries developed some technique to command taxes on wealth economic facts. Therefore, the tax systems commonly impose taxes over border trade, to protect the national industry and market, taxes on property, that intends to reach the rich private heritage, the income taxes, that aims the profits or revenues of people and companies, and the circulation taxes, that attacks the goods transfer or service rendered, that assumes different subtypes, as such sales taxes, consumption taxes and VAT.

Customs taxes charged on border commerce among the states, keep outstanding interest for the world commerce. Through these customs taxes, nations protect their inside market, their work force and production systems against the foreign commodities. These taxes use two alternative systems: first, import tax, charged on foreign products, and second, export tax, charged on national commodities for export. Import tax increases the price of foreign goods, bought abroad, and protects the domestic market. Export tax is rarely collected and aims to prevent the sale of some commodity abroad, when essential to avoid the internal shortage.

The income tax, perhaps, is the most well-known of taxes. The federal income tax is charged inside USA since the 20<sup>th</sup> century beginning (Fay, McKinnis & Brown, 2004). This type of tax generally aims at the revenue earned by the contributor, citizen or company, over a year, and it accepts diversified concepts and range for the 'income' and 'revenue' description from country to country. Furthermore, income tax systems use different methods to assess individuals and companies wealth, earnings, winnings, revenues, costs and profits, requiring complex accountancy structure to extract the tax due from private players. Meanwhile, this tax does not impact the trade operation directly.

The property taxes or land taxes are a old kind of taxation. This tax is normally charged on real estate property and it means that somebody, who owns a plot of land or a building, is obliged to pay that annually. Companies as well the citizens are obliged by this tax.

Business activity is charged usually by the consumption tax, the sales tax or the service tax. These three kinds of taxes act over the transfer price of the commodities sold or over the service price that was given. Sometimes, tax charges the sum of the goods and services, when sold together. Sales tax is normally demanded only once at the end sale to the definitive consumer and consumption tax is usually assessed, step by step, throughout the production of a commodity.

The European Value-Added Tax (VAT) is a typical sample of consumption tax (Farmer & Lyal, 1994). The action of the consumption tax loads all the players of the production or trade chain. Each one player pays a percentage amount over his sales price and can deduct from that amount, the same tax paid when had purchased the commodities or consumer inputs, included at the price achieved from their supplier. Consequently, every player in the chain, in fact, pays a part of the total of tax amount that is finally supported by the definitive consumer. Service tax, when demanded only by the service that was given, without commodities added, is charged on total service sale's price. The duty on financial operations charged on fund investment, loans, money exchange, insurance, stock purchasing and any specific bank business is a remarkable service tax.

## **5. THE NATIONAL TAXATION GOING AWAY AND THE COMING GLOBAL TAXATION**

In the past, wealth was based on the land and its products, and the consumers' markets were local. Therefore, the predominance of tax incurred over that goods and affected local economic events. Later, on industrial society dynamic, the economic activity was shared among several stages and moved wealth power to the sales and revenues. Concurrently, commerce reached long distance markets and the taxation on the circulation, incomes and customs barriers had became the most adequate method.

Today, the main feature of wealth is mobility. The best expressive wealth is the bonds, stocks and on line funds transfer using the electronic framework. The faster circulation of goods or their holder certificates keeps the same importance for economic development and world wealth improvement. Therefore, taxation framework certainly must change to accompany the technical mobility advance, such occurred at former ages of the economic history. Nowadays, there are some proposals to include new taxation methods in the economic scenario to reach that new dynamic wealth.

Therefore, the customs taxes are not adequate for the new global economy. In fact, the most efforts of the countries today is to remove the international barriers and duties that obstructs the free trade among nations markets. In addition, the indirect subsidies is the matter up to date, too, because of the harmful effect for the overseas trade, just condemned and repressed by the WTO dumping safeguard system. Subsidy practice included in tax policy of the nations, commonly, is more effective and invisible instrument to protect internal production, instead of customs taxation, therefore that has requested more attention in the international trade meetings.

The property taxes have not important performance in the tax collection today because they can not catch significant amount of revenues. Indeed, if the most of economic wealth is not on the lands and buildings, but on the funds and papers, it is not suitable to impose heavy taxes over these estates. The land taxation should remain only for local government support.

The income taxes are up to date, but, in the global economy, the spread of the double taxation treaties will remove the question of the income tax payment from the 'how much pay' to 'where pay', remembering the harmful role of the tax heaven sustained by the developed countries to absorb the wealth escape from taxation.

The consumption taxes, in spite of their adaptation for the wealth move through goods transfer and service render, induce remarkable obstacles for the production and consumption because of superimposed controls and bureaucracy for the companies. Besides, the share of revenues collected results in competition among the several governments that injures the trade relationship and corrodes the federation pact (Hellerstein, 2005).

Besides the taxation traditional modes mentioned above, some special activities are growing at the global economy and claims attention for the wealth availability for taxation, for instance, the funds motion and the e-business. In addition, the claim for eco taxes to promote sustainable development (Selicato, 2005) is a unchangeable reality.

About the finance movement, it is relevant to regard the Tobin Tax proposal, maybe, the pioneer theoretical idea to reach the wealth mobility, defending the institution of a international standard tax, to discourage the transfer of short-term funds across borders, motivated by financial speculation, inducing economic unbalance, currency instability and business insecurity.

The Tobin Tax would function as capital's taxation and would be imposed by a little rate charged over the financial transfer across borders, and would be collected by the country which the asset moved out. The countries could have several tax rates, within a minimum level and fixing a minimum term for the funds free move. So, the Tobin Tax would be a sample of global taxation, but its acceptance by the developed countries is remote.

The taxation over the e-business should increase, substituting part of the taxation over common non-electronic commerce. The taxation over the e-business is a problem for the governments because part of the transactions are free from any taxation and it means losses for government revenues, above all because the free tax e-business can incentive the tax payer to choose the e-commerce to release his tax charge. Meanwhile, to avoid the escape from taxation and harmful competition among the states, it would be suitable to arrange global standard taxes for goods and services, adopted by all the countries, as the Tobin Tax proposal for funds movement.

Finally, the upward green taxes imposed by the states to incentive or unfavour the companies that care or disdain the environmental preservation and restoration. Indeed, the green taxes can be assumed as the first global taxes, because they do not follow the national logic of taxation, but they are conceived in accordance with the global logic of preservation, whereas the countries must to enforce their international agreements and one nation must to contribute not only for the national interest but for the global interests, too, and the nations are loaded not by his wealth but by the injure caused. Besides, the taxation on e-business and on the funds are only proposals today and the green taxes are reality.

## REFERENCES

- Ezcurra, Marta Villar, Constitución Europea y Fiscalidad, Direito Tributário Internacional, São Paulo, Quartier Latin, 2005, 409-428.
- Farmer, Paul and Lyal, Richard, European Community Tax Law, Clarendon, Oxford, 1994.
- Fay, Jack R, McKinnis, Michael R & Brown, Mary L, So When Did Income Taxation Begin in the United States?, Review of Business Research, V. II, N. 2, 2004, 103-110.
- Guéhenno, Jean-Marie, O fim da democracia, Rio de Janeiro, Bertrand Brasil, 1994.
- Hellerstein, Walter, Subnational State Tax Incentive in the United States: Constitutional Restraints and Congressional Oversight, Direito Tributário Internacional, São Paulo, Quartier Latin, 2005, 375-394.
- Posner, Richard A., "Overcoming Law", Cambridge, Massachusetts, Harvard University Press, 1995.
- Sandford, Cedric, Godwin, Michael and Hardwick, Peter, "Administrative and compliance costs of Taxation", Bath, UK, Fiscal Publications, 1989.

Selicato, Pietro, capacita Contributiva e Tassazione Ambientale, Direito Tributário Ambiental, São Paulo, Malheiros, 2005, 257-311.

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## CROSS-CULTURAL DIFFERENCES AFFECTING THE PROPENSITY TO ADOPT SELF-SERVICE TECHNOLOGY

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### ABSTRACT

*Many retailers today are using products and services that are characterized by technology-facilitated transactions. Highly sophisticated self-service technology allows companies to interact with consumers while providing fast and effective customer service. The proliferation of technology-based interactions suggests a need to assess the extent to which consumer characteristics, such as cultural heritage, influences the likelihood of using technology-based self-services. This study discusses the potential influence of cultural dimensions on the likelihood to use self-service technologies in the retail environment.*

**Keywords:** Cultural Influences, Product Adoption, Self-Service Technologies, Retail environment.

### 1. INTRODUCTION

The importance of self-service technology in the retail environment has increased significantly over the last decade (Dabholkar and Bagozzi, 2002). Many consumers have come to expect interaction with self-service technologies. Moreover, technology-based interactions are expected to become an increasingly important ingredient for long-term success in the delivery of services for retailers (Bitner, Brown, and Meuter, 2000).

The desire to use self-service technologies is often influenced by such factors as consumer attitudes toward specific technologies (Curran, Meuter, and Surprenant, 2003) and the level of technology anxiety exhibited by consumers (Meuter, Ostrom, Bitner, and Roundtree, 2003). While a significant amount of research has been conducted identifying interpersonal differences in consumers, such as attitudes and aversion to risk with respect to desire and willingness to use self-service technology, much less research has looked at demographic characteristics such as cultural background as a mediating factor in self-service technology usage. The purpose of this study is to highlight potential cultural factors that may influence the likelihood of consumers using technology-based self-services in the retail environment.

### 2. SELF-SERVICE TECHNOLOGIES

The competitive nature of most retail environments today, coupled with the need to minimize overhead costs related to personnel and capital expenditures, has resulted in many companies introducing technology that allows consumers to purchase products and services on their own. Self-service technology is dramatically changing how retailers offer products and services.

Common self-service technologies being used today by retailers include: 1) telephone-based technologies and interactive voice response systems, 2) direct online connections and Internet-based interfaces, 3) interactive freestanding kiosks, and 4) video or CD technologies (Bitner, Ostrom, and Meuter, 2002). Specific examples of self-services would include automated hotel checkout, banking via ATMs or by telephone, self-scanning checkouts at grocery or discount stores, and Internet shopping.

Some consumers have been very responsive to new technology-based self-service, while other consumers have been much less receptive. For example, some retailers who are using in-store Internet kiosks are finding out that not all consumers are interested in using the new technology (Mearian, 2001). Why some consumers embrace new technology to process retail transactions and others actively resist is a critical question that needs further investigation. Bobbitt and Dabholkar (2001) report that consumer attitudes will have a strong, direct, and positive effect on intentions to use technology-based self-service.

Mick and Fournier (1998) argue that consumers can simultaneously exhibit positive feelings (such as intelligence or efficacy) and negative feelings (such as ignorance or ineptitude) towards new technology. Similarly, Venkatesh (2000) found that “computer playfulness” and “computer anxiety” serve as anchors that users employ in forming perceptions of ease of use about new technology. Therefore, consumers can seemingly be arrayed along a hypothetical technology-belief continuum with their position on the continuum correlating with their propensity to embrace technology (Parasuraman, 2000).

Studies have also shown that perceived performance satisfaction, usefulness, self-efficacy, inherent novelty seeking, need for interaction with a service employee, self-consciousness and social influence may impact a consumers attitude toward using technology (Dabholkar et al., 2002; Davis, Bagozzi, and Warshaw ,1989, 1992; Ellen, Bearden, and Sharma,1991). In addition, some consumers have shown a preference to self-service technology because of ease of use or because it helps them avoid interaction with retail employees (Dabholkar, 1996; Meuter, Ostrom, Roundtree, and Bitner, 2000). Not surprisingly, Szymanski and Hise (2000) also found convenience to be a key factor influencing e-satisfaction with technology use in retailing.

Several studies have also looked at user profiles to explain receptiveness to self-service technologies. For example, Barczak, Ellen, and Pilling (1997) looked at consumers’ use of ATMs, automatic deposits/withdrawals, and telephone banking and identified the consumer profiles of security conscious, maximizers, instant gratifiers, and hassle avoiders. Other studies have looked at age profiles of consumers to predict the adoption rate of consumer-related technologies (Gilly and Zeithaml, 1985).

### **3. CULTURAL DIFFERENCES IN INDIVIDUAL BEHAVIOR**

Culture has been defined as “the collective programming of the mind which distinguishes the members of one group from another” (Hofstede, 1980). Cultural differences have been observed and reported in a number of studies to have a significant impact on consumer decision-making and individual behavior (Erumban and de Jong, 2006; Leo and Hartel, 2005; Singh, 2006). Hofstede (1980) originally identified four dimensions of culture which influence the way people interact and behave. A fifth dimension was added later (Hofstede, 2001). The five dimensions are briefly discussed below.

**1) Individualism/Collectivism** – Cultures differ from one another in terms of the perceived role of the individual versus the role of the group. This dimension refers to the degree to which individuals in a society prefer to act as individuals rather than as members of a social group. People in individualistic societies are inclined to make their own choices and therefore more inclined to be innovative and adopt new ideas (Erumban et al., 2006). In contrast, members in collective societies tend to conform to the norms of the group or society and are less likely to accept new ideas. Individualists tend to be concerned primarily with separating the self from others by displaying qualities of uniqueness and not allowing others to influence them. Collectivists, however, are concerned with affiliating and maintaining a connectedness.

**2) Power Distance** - The power distance dimension refers to the degree to which members of society accept an uneven distribution of power. Cultures with large power distance tend to be hierarchical, while cultures with small power distance tend to value equality where knowledge and respect are perceived as sources of power. Research has shown that individuals are more innovative when they are given autonomy and empowerment (Mumford and Licuanan, 2004). Moreover, cultures with a high degree of power distance tend to be less open to new ideas because this may require decision-making on issues where little information is known (Lee and Peterson, 2000).

**3) Uncertainty Avoidance** – The uncertainty dimension concerns the extent to which people seek to avoid, or feel threatened by, ambiguous or risky situations. Individuals in cultures characterized by high uncertainty avoidance may be risk averse in trying new ways of doing things, and tend to emphasize continuity and stability rather than innovation and change. Consumers in high uncertainty avoidance cultures are likely to wait for others to try new products and base their expectations on others (Singh, 2006). In cultures with low uncertainty avoidance, members may more readily embrace change, may show more initiative, and may be more accepting of different views and new ideas.

**4) Masculinity/Femininity** – Masculine societies place a high value on earnings, recognition, achievement, competition, and material things. Feminine societies are characterized by care giving, nurturing, co-operation, and concern for social relationships and quality of life. Hofstede (2001) found that organizations in masculine cultures emphasized innovative activities, such as training.

**5) Long-Term/Short-Term Orientation** - Hofstede (2001) added a fifth cultural dimension called Confucian Dynamism (later changed to Long/Short-Term Orientation), and reflects whether a society has a long-term or a short-term orientation. This dimension, based on Confucianism, captures the distinctive cultural characteristic of East Asian cultures: diligence, patience, frugality, and long-term orientation. A society with a long-term orientation places a high value on traditional values. Cultures with a short-term orientation place less importance on tradition and are more open to new ideas (i.e., products).

### **3.1 Asian vs. American Culture**

Using the cultural dimensions identified by Hofstede (2001), an East Asian culture, such as Chinese or Korean, would be characterized as: 1) a highly collective society that prefers to conform to the norms of the group or society and not likely to accept new ideas, 2) a large power distance society that emphasizes hierarchical order in interpersonal relationships and where communication between the hierarchical levels are limited and not encouraged, 3) a strong uncertainty avoidance society that tends to emphasize continuity and seeks to avoid risk (i.e., new products or ideas, 4) a more feminine society that values nurturing, co-operation, and concern for social relationships, and does not encourage innovative activities, and 5) a society that is dominated by Confucian values of diligence, patience, frugality, and long-term orientation (traditional values).

In contrast, a western society culture like the United States would be characterized as: 1) a highly individualist society where freedom, self-expression, and acceptance of new ideas are valued, 2) a small power distance society that values equality and autonomy in decision-making, 3) a low uncertainty avoidance society where members embrace change and are accepting of different views and new ideas, 4) a masculine society that places a high value on recognition, achievement, and material things, and 5) a society with a short-term orientation is not tradition oriented, and is open to new ways of doing things.

## **4. DISCUSSION/IMPLICATIONS**

Self-service technology is likely to become increasingly more important as retailers continue to strive to minimize costs and maximize service in order to remain competitive in the marketplace. Of equal importance to retailers seemingly is the need to determine consumers' propensity to accept and use the new self-service technology. Not all consumers embrace self-service technology in the retail environment today. Some consumers actively seek out self-scanning checkouts, online banking services, and Internet shopping options. Other consumers, however, intentionally avoid such self-service technologies.

Using the cultural influences identified by Hofstede (2001), it is hypothesized that U.S. consumers with Asian cultural heritage, such as Korean or Chinese, are slower to adopt self-service technologies found in the retail marketplace. The Asian culture is characterized as a highly collective society that prefers to conform to the norms society and is less likely to accept new ideas, such as new ways to conduct retail transactions (i.e. self-scanning check-outs, Internet shopping). Similarly, the Asian culture has been shown to be a strong uncertainty avoidance society that seeks to avoid risk. This would seem to imply that this group of consumers would not eagerly embrace new services or new technology in the retail setting because of the uncertainty of potential outcomes, such as incorrect charges or identity theft.

The Asian culture is also considered a feminine society that tends not to encourage innovative activities to the degree that a masculine society like the American culture does. In addition, the Asian culture is viewed as a long-term society that values patience and traditional values. Patience and traditional values do not lend themselves to the quick adoption of new technology in the retail environment. However, a short-term orientation and the fast pace lifestyle of the typical American consumer does suggest a greater likelihood of adopting time saving self-service technologies when conducting retail transactions.

A more effective promotional strategy for the Asian consumer might be to stress how easy and safe the technology is with respect to protecting identity theft or minimizing incorrect charges. The adoption of self-service technology seemingly will go smoother if the uncertainty associated with using the technology is reduced. In addition, emphasizing that behaviors, such as Internet shopping and online banking, are now common practices for many consumers should reinforce to the Asian consumer that such behaviors conform to the shopping norms of the U.S. consumer.

Marketers may also need to reduce the power distance between themselves and their Asian heritage customers. Providing detailed information regarding how a specific technology-based retail transaction works should help in the decision-making process for these customers. Moreover, providing this additional information may also enhance the trust the customers have in the self-service technology. A more informed customers will also be able to discuss the different types of technology among themselves, which should also lead to a more rapid adoption of the self-service technology.

## 5. CONCLUSION

Cultural differences have been observed and reported in a number of studies to have a significant impact on consumer behavior. This paper has highlighted potential cultural factors that may influence the likelihood of consumers using technology-based self-services in the U.S. retail environment. Self-service technology is likely to become increasingly more important as retailers strive to minimize costs and maximize service in order to remain competitive in the marketplace. However, retailers need to determine consumers' propensity to accept and use the new self-service technology. Retailers need to be aware of cultural influences and possibly develop different strategies aimed at different types of consumers to encourage the adoption of these self-service technologies.

## REFERENCES

- Barczak, Gloria, Ellen, Pam S., and Pilling, Bruce K., "Developing Typologies of Consumer Motives for Use of Technologically Based Banking Services," Journal of Business Research, Vol. 38, 1997, 131-139.
- Bitner, Mary Jo, Brown, Stephen W., and Meuter, Matthew L., "Technology Infusion in Service Encounters," Journal of the Academy of Marketing Science, Vol. 28 (1), 2000, 138-149.
- Bitner, Mary Jo, Brown, Ostrom, Amy L., and Meuter, Matthew L., "Implementing Successful Self-Service Technologies," Academy of Management Executive, Vol. 16 (4), 2002, 96-109.
- Bobbitt, Michelle L. and Dabholkar, Pratibha A., "Integrating Attitudinal Theories to Understand and Predict Use of Technology-Based Self-Service," International Journal of Service Industry Management, Vol. 12 (5), 2001, 423-450.
- Curran, James M., Meuter, Matthew L., and Surprenant, Carol F., "Intentions to Use Self-Service Technologies: A Confluence of Multiple Attitudes," Journal of Service Research, Vol. 5 (3), 2003, 209-224.
- Dabholkar, Pratibha A., "Consumer Evaluations of New Technology-Based Self-Service Options: An Investigation of Alternative Models of Service Quality," International Journal of Research in Marketing, Vol. 13 (1), 1996, 29-51.
- Dabholkar, Pratibha A., and Bagozzi, Richard P., "An Attitudinal Model of Technology-Based Self-Service: Moderating Effects of Consumer Traits and Situational Factors," Journal of the Academy of Marketing Science, Vol. 30 (3), 2002, 184-201.
- Davis, Fred D., Bagozzi, Richard P., and Warshaw, Paul R., "User Acceptance of Computer Technology: A Comparison of Two Theoretical Models," Management Science, Vol. 35 (8), 1989, 982-1003.
- Davis, Fred D., Bagozzi, Richard P., and Warshaw, Paul R., "Extrinsic and Intrinsic Motivation to Use Computers in the Workplace," Journal of Applied Social Psychology, Vol. 22 (14), 1992, 1109-1130.
- Ellen, Pam S., Bearden, William O., and Sharma, Subhash, "Resistance to Technological Innovations: An Examination of the Role of Self-Efficacy and Performance Satisfaction," Journal of the Academy of Marketing Science, Vol. 19 (4), 1991, 297-307.
- Erumban, Abdul Azeez and de Jong, Simon B., "Cross-Country Differences in ICT Adoption: A Consequence of Culture?," Journal of World Business, 41, 2006, 302-314.

- Gilly, Mary C. and Zeithaml, Valarie A., "The Elderly Consumer and Adoption of Technologies," Journal of Consumer Research, Vol. 12 (December), 1985, 353-357.
- Hofstede, Geert, Culture's Consequences: International Differences in Work Related Values, Sage: Beverly Hills, CA., 1980.
- Hofstede, Geert, Culture's Consequences: Comparing Values, Behaviors, Institutions, and Organizations Across Nations, Sage: Thousand Oaks, CA., 2001.
- Lee, Sang M. and Peterson, Suzanne J., "Culture, Entrepreneurial Orientation, and Global Competitiveness," Journal of World Business, 35, 2000, 401-416.
- Leo, Cheryl, Bennett, Rebekah, and Hartel, Charmine E. J., "Cross-Cultural Differences in Consumer Decision-Making Styles," Cross Cultural Management, 12 (3), 2005, 32-62.
- Mearian, Lucas, "Staples Installing Internet Kiosks in All U.S. Retail Stores," Computerworld, January 30, 2001, 1-3.
- Meuter, Matthew L., Ostrom, Amy L., Roundtree, Robert I., and Bitner, Mary Jo, "Self Service Technologies: Understanding Customer Satisfaction with Technology-Based Service Encounters," Journal of Marketing, Vol. 64 (July), 2000, 50-64.
- Meuter, Matthew L., Ostrom, Amy L., Bitner, Mary Jo, and Roundtree, Robert I., "The Influence of Technology Anxiety on Consumer Use and Experiences With Self-Service Technologies," Journal of Business Research, Vol. 56 (11), 2003, 899-906.
- Mick, David Glenn and Fournier, Susan, "Paradoxes of Technology: Consumer Cognizance, Emotions, and Coping Strategies," Journal of Consumer Research, Vol. 25 (September), 1998, 123-147.
- Mumford, Michael D. and Licuanan, Brian, "Leading for Innovation: Conclusions, Issues, and Directions," Leadership Quarterly, 15, 2004, 163-171.
- Parasuraman, A., "Technology Readiness Index (TRI): A Multiple-Item Scale to Measure Readiness to Embrace New Technologies," Journal of Service Research, Vol. 2 (4), 2000, 307-320.
- Singh, Sangeeta, "Cultural Differences in, and Influences on, Consumers' Propensity to Adopt Innovations," International Marketing Review, 23 (2), 2006, 173-191.
- Szymanski, David M. and Hise, Richard T., "E-Satisfaction: An Initial Examination," Journal of Retailing, Vol. 76 (3), 2000, 309-322.
- Venkatesh, Viswanath, "Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model," Information Systems Research, Vol. 11 (4), 2000, 342-365.

# COMPARATIVE ANALYSIS OF FACTORS INFLUENCING JOB SATISFACTION OF ACCOUNTING PROFESSIONALS

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## ABSTRACT

*The purpose of this study is to explore which of 78 factors may influence the level of job satisfaction of Caucasian and Hispanic American accounting professionals. In addition, the study explores the relationships among these 78 job satisfaction factors as well as between these 78 factors and demographic questions.*

**Keywords:** Employee Job Satisfaction, Accounting Profession

## 1. DATA COLLECTION

To collect data, the job satisfaction questionnaire was mailed to 2,000 Caucasian and 1,600 Hispanic American accounting graduates. Two mailings were conducted with each group of graduates. As a result, the 150 usable questionnaires were received from Caucasian accounting graduates and 130 usable questionnaires from Hispanic American accounting graduates. Data analysis involved regression models and dummy variables.

For the demographic information, the Caucasian accounting graduates were younger and more likely to obtain the CPA license, and to work in CPA firms and corporations which are larger employers. The average age was 32 years for the Caucasian respondents and 37.4 years for the Hispanic American respondents. Considering college education, the percentage of respondents with advanced degrees such as MBA or Master of Accounting was 82 percent of Caucasians and 88.5 percent of Hispanic Americans. As to accounting certification, 48 percent of the Caucasian respondents held CPA license compared to 22.3 percent of the Hispanic American counterparts. In analyzing the education level of the respondent parents, 48 percent of the Caucasian respondent parents graduated with a bachelor degree or higher compared to 16.2 percent of the Hispanic American parents. As to employment, 47 percent of the Caucasians worked in public accounting and 49.3 percent in corporate accounting, whereas 21.3 percent of the Hispanic Americans were employed in public accounting and 36.1 percent in corporate accounting. Considering the size of the employer, 60 percent of the Caucasian respondents worked for an employer with 500 or more employees compared to 30.8 percent of Hispanic American counterparts.

As the level of job satisfaction, the Hispanic American accounting graduates are slightly more likely to be satisfied with their jobs and to continue to work with current employers and are slightly less likely to perceive fair pay for work. In analyzing the level of job satisfaction, 88 percent of the Caucasian accounting graduates agreed very much, moderately and slightly as to perceiving satisfaction with their jobs compared to 91.5 percent of the Hispanic American counterparts. The intention to continue to work with current employer was indicated by 79.3 percent of the Caucasian respondents and 84.6 percent of the Hispanic American respondents. In contrast, 74.7 percent of the Caucasians perceived receiving fair pay for work completed compared to 63.1 percent of the Hispanic American respondents.

## 2. RESULTS

Across the different types of employment within the accounting profession (public, private and government), both Caucasian and Hispanic American accounting professionals varied in their perceptions of which factors influence the level of job satisfaction. Both the Caucasian and Hispanic Americans working in public accounting are more probably to agree with that they like the people they work with but are less likely to agree with dissatisfied with their benefits received and their work performance not being appreciated. Both the Caucasians and Hispanic Americans working in corporate accounting are less likely to agree with the following job satisfaction factors: feel isolated within their organizations, work harder due to incompetence of other employees, their supervisors provide them with helpful performance

feedback, and their employers promote understanding of racial, ethnic and religious groups. In comparison, both groups are less likely to agree with work assignments are not fully appreciated, organizational goals are not clear, and they are not satisfied with benefits received. Both Caucasians and Hispanic Americans are more likely to agree that their efforts to do good work are blocked by red tape. At the same time, these two groups are less likely to agree with the following job satisfaction factors: good communication exists within organization, supervisors provide helpful performance feedback, inclusion in a variety of team projects, and supervisors do not consider gender in making job assignments. Interestingly, both groups working in corporate and government accounting are less likely to agree that their supervisors provide helpful performance feedback.

The size of the employers affects which factors that influences the level of job satisfaction of both Caucasian and Hispanic American accounting graduates. Both groups who work for small employers are more likely to agree with there are benefits that they do not have which they should have. Both Caucasian and Hispanic American accounting graduates working for large employers are more likely to agree with the following job satisfaction factors: colleagues accept the individuals and their opinions as part of a work team, included in a variety of team projects, their benefits received are as good as most other employers offer, their benefit package is equitable, their employers promotes understanding of racial, ethnic and religious groups, employers encourage openness with gender and racial diversity, and employers provide meetings on cultural diversity. Both groups who work for larger employers are less likely to agree that rules make doing a good job more difficult and peers treat certain individuals differently due to their racial background.

Both Caucasian and Hispanic American accounting graduates who are CPAs are more likely to agree with the following job satisfaction factors than non-CPA accounting professionals: isolated in their organizations, their jobs are meaningless, employees and their job performance are unappreciated by their employers when they think about their compensation, and organizational goals are not clear to employees. Besides these general negative responses, Caucasian and Hispanic American CPAs are more likely non-CPAs to be satisfied with their chances for promotion in that they can advance as rapidly with their current employers as with other employers. Finally, Caucasian and Hispanic American CPAs are more likely to agree that any report of a discriminatory act would be handled fairly by their employers and employees are not afraid to report any act of sexual harassment to their supervisors compared to non-CPAs. Related to CPAs, both Caucasian and Hispanic American, who hold accounting certifications other than CPAs such as CMAs and CIAs, are more likely to be satisfied with their chances for promotion and are less likely to have their peers interact with them as individuals and not as a member of a particular racial group than accounting professionals without certifications. Accounting certifications like CPA, CMA and CIA seem to make accounting professionals more convinced that their chances for promotion are better. In summary, since CPAs possess unique expertise that other employees in their organizations do not understand, it is natural CPAs can feel isolated and unappreciated as well as believe their jobs are meaningless and unpaid compared to non-CPAs. In contrary, the CPA license can enhance the probability for promotion and advancement for accounting professionals.

The age factor influences accounting professionals to become stable in jobs as they grow older. Older Caucasian and Hispanic American accounting professionals are more likely to hold the following job satisfaction factors than younger ones: to be satisfied with choice of professions being accounting and enjoy their jobs, to remain both in the accounting profession and with their current employers, to be accepted as part of work teams and to have their opinions valued, and to believe benefit package is equitable considering some benefits are missing. Older accounting professionals seem to perceive more job satisfaction and have longer retention rates than younger counterparts.

Female accounting professionals are less likely to agree with the following job satisfaction factors than male counterparts: supervisors and peers treat differently employees due to their gender, supervisors are unfair to employees and express little interest in subordinate feelings, supervisors assign employees projects that increase their visibility in organizations, employees are invited to all meetings to which their peers at that level are invited and know what it takes to succeed in their organizations, employees' opportunity for promotion is the same as peers in spite of their gender, and employers promote

understanding of racial, ethnic and religious groups represented by employees. One would expect females to be more sensitive to gender issues.

Hispanic American accounting professionals are more likely to have the following job satisfaction factors than Caucasian counterparts: satisfied with choice of profession, look forward to going to work and satisfied with present work environment, have a very level of job satisfaction and know what it takes to succeed within their organizations, communication seems good within their organizations, colleagues value their opinions and accept them as part of the team, supervisors provide helpful feedback about their performance and do not consider gender in making job assignments, and employers encourage openness concerning gender/racial diversity. Hispanic Americans tend to be very people oriented even in the job environment.

Caucasian accounting professionals have issues concerning their job satisfaction.

In contrast to Hispanic Americans, Caucasian accounting professionals are less likely to agree that employees receive appropriate recognition for doing a good job and red tape does not prevent them from doing a good job as well as supervisors treat employees as individuals so that they feel as part of the dominant culture of their organizations. Also, Caucasian accounting professionals are less likely to agree that employees are not adequately prepared on how to advance in their organizations.

### **3. CONCLUSION**

In considering the education factor, both Caucasian and Hispanic American accounting professionals who have advanced degrees like MBA or Master of Accounting are less likely to agree with high level of job satisfaction and satisfied with present work environment, intent to remain in accounting profession and with current employer, sense of pride in doing my job, supervisors assign employees projects that increase their visibility in the organizations, peers interact with employees as individuals and not as members of racial groups, and employees doing good performance have a fair chance for promotion. Caucasian and Hispanic American accounting professionals with master degrees have many areas of concern that would influence their level of job satisfaction.

The education level may influence specific job satisfaction factors of accounting professionals. Both Caucasian and Hispanic American accounting professionals whose parents have less than high school education are more likely to agree with my peers treat employees differently they treat others and are less likely to agree about which benefits, which employees should have but do not have. Accounting professionals whose parents have less than high school education may be very sensitive to potential discrimination and also very critical of employers not providing every possible fringe benefit to employees. In contrast, Caucasian and Hispanic American accounting professionals whose parents have bachelor or master degree are more likely to agree few rewards for employees who work for certain employers. Accounting professionals whose parents have college education seem to have expectations for higher compensation.



# CORPORATE SOCIAL RESPONSIBILITY AND PERFORMANCE: ROLES OF INTERNAL COMPETENCY AND EXTERNAL FORCE

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## ABSTRACT

*There is an increasing interest shown by academics and firms on examining corporate social responsibilities (CSR). However, in Asia there are very few studies on this and is slowly acknowledging the importance of CSR. This paper examines the role of CSR in enhancing corporate performance and the role of internal competency and external force driving CSR. Hypotheses test is conducted through a survey study amongst Thai listed companies. We find that there are significant relationship between CSR and performance, and significant effects of internal competency and external force on CSR activity accept the role of governance.*

**Keywords:** Internal competency; external force, corporate social responsibility, corporate performance.

## 1. INTRODUCTION

Corporate social responsibility (CSR) is an issue that has been increasingly attracting by business, political, and public interests in the past decade. Specifically, companies today must comply with a growing number of national regulations and international standards governing the environment, labor standards, human rights, anti-corruption practice and corporate governance. The businesses can become more profitable and sustain their activities over the long term they must optimize the balance among their economic, social, and environmental objectives. Moreover, during the past 20 years the social performance of companies has come under increasing scrutiny from a reach variety of stakeholder groups (Kapstein, 2001) and recognition that CSR cannot be separate from corporate strategy for improving profit and sustainability. Thus, beside the companies must contribute to growing economy, companies today must also contribute to support social needs and efficient management of environment, that CSR is an important acknowledgment for many firms and academic researchers.

Interestingly, while there is an increasingly attention to CSR Bowman and Jacobs (2003) has reported the study on CSR in Asia, based on the websites of the top 50 companies in each country and they found that Thailand has score points on CSR penetration at 60 percent of domestic companies in the study. However, evidence of CSR-related projects are less than half of Thailand's top earners, as compared to India's 72 percent. This brings about the question of what factors force a firm to engage in CSR? And why are some organizations more CSR than others? Remarkably, this issue has a few investigate about the factors driver that influences the managerial decision making in a CSR, mostly is conceptual that suggests to empirical validation. Following the concept of CSR is that companies should conduct their business on demonstrate of manage is consideration for the broader social environment in order to serve constructively the needs of society, to the satisfaction of society (Garland and Ven, 2006) that various of stakeholder groups including the employees, customers, suppliers, non-governments, to manage the impact of their activities (Kuk et al. 2005), while enable all requirements, firms have to priority their internal resources which this management force sustainability of firm. The benefit of social and environmental activities may generate stronger competitive advantage that is the ability to outperform rivals on profitability (Grant, 1995).

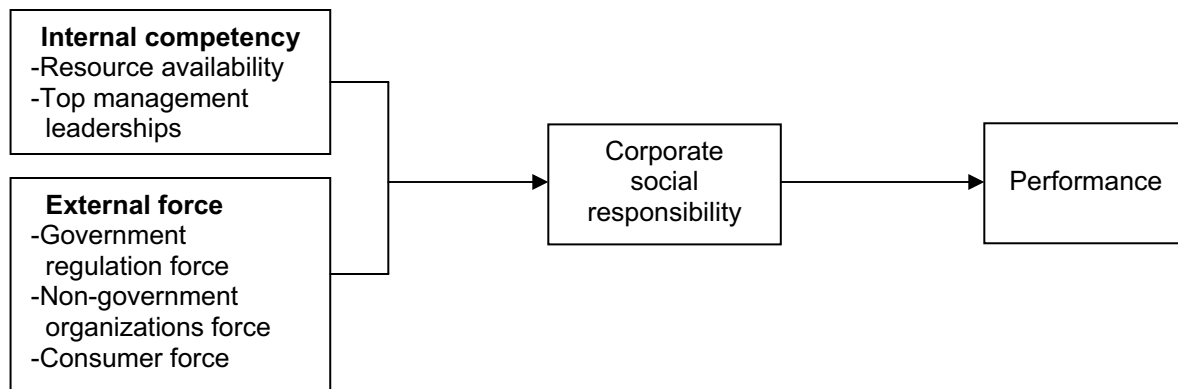
Therefore, the purpose of this paper is to investigates 1) whether the internal competency and external force enhance CSR activities? And 2) whether CSR are important activity for superior performance?

The remaining part of this study is structured as follows: 1) the relevant literature on CSR is reviewed. 2) The research method of the study is described, followed by a discussion of the empirical results. 3) The study ends with theoretical and managerial contributions, suggestions for further research, and conclusion.

## 2. RELEVANT LITERATURE ON CORPORATE SOCIAL RESPONSIBILITY

Modern society companies are under increasing pressure from the various stakeholder groups including the employees, customers, supplies, non-government organizations, and government that may impact their activities and as a result their legitimacy has been challenged. Based on legitimacy theory, corporations consider these rules and the expectations of powerful stakeholder groups as economic restrictions in their course towards maximizing profits as a resource to guarantee the corporation's continued existence (Palazzo and Schere, 2006). From review literature we find that much research has focus on finding the link between CSR and increase business performance. However, researchers have few examining the factors that promote or factors that driver the CSR. Here, we explore the set of influencing factors that at drivers as for CSR actions within the firm in the dimension of internal competence; resource and top management leadership and external forces including consumer, government regulation, and non-government. Figure 1 presents the conceptual framework for this study. The framework depicts the relationships among the factors that drive CSR and corporate performance. Justification for the association between factor drivers of CSR is based on prior literature, while the relationship between CSR and corporate performance we propose that has positive relationship.

**FIGURE 1  
RELATIONSHIP MODEL**



### 2.1 Corporate Social Responsibility

Corporate social responsibility is related to complex issues such as environmental protection, human resource management health and safety at work, relations with local communities, and relations with suppliers and consumers (Branco and Rodrigues, 2006). McWilliams et al. (2006) argued that engaging in CSR can help firms to create some of resources and capability. The contribution that CSR may generates to superior corporate performance, which the relationship between CSR activities and performance has been an important topic of debate but the result not clear. Researchers have reported that the findings are positive, negative, and neutral impact of CSR on firm performance (Wu, 2006). However, recently reviews on the empirical CSR literature indicate a positive correlation between investing in socially responsible activities and financial performance (Margolis and Walsh, 2003). At the most basic lever, CSR increases the customer's willingness to purchase the company's products (Sen and Bhattacharya, 2001) can also influence loyalty (Sureshchandar et al., 2002). On the other hand a social responsible company transmits the impression of being responsible with its product, and the honesty and safety to the performance generates confidence and safety to the consumers (Salmones et al., 2005). Thus, in this study we propose that CSR is likely to have a positive relationship with corporate performance. Therefore,

Hypothesis 1: The greater the corporate social responsibility, the more likely that firm will achieve higher performance.

## **2.2 Internal Competency**

If the CSR is an import activity to enhance corporate performance, it is thus necessary to understand what factor drives the company to engage in CSR activity. In this paper based on resource-base theory to analyze of how CSR, in these argue that it may be driver form in side a firm that is resource and capability. In the resource-based view, resources are classified as tangible, intangible, and personnel-based (Grant, 1991). These resources are not productive on their own, the analysis also needs to consider a firm's organizational capabilities, its abilities to assemble, integrate, and manage these bundles of resource (Russo and Fouts, 1997). In this study we examine common internal competency in relation to CSR are resource availability to the firm and top management leadership abilities.

### **2.2.1 Resource Availability**

Resource availability is critical for success in social responsibility extent to firm's tangible and intangible resource endowment that it may be physical technology used in a firm, a firm's plant and equipment, or financial term. Firm's resource to become valuable in terms of allow the firm to exploit opportunities or neutralize threats in the firm's environment (Barney, 1991). That engaging in CSR involves costs, as it might require purchasing environmental friendly equipments, implementing stricter quality controls, safety and environmental programs (Branco and Rodrigues, 2006) thus resource availability are importance to require for investments in CSR activities. Kemp (1993) suggest that firm resource and capability situation it essentially before adopt the policy. Similarly, Russo and Fouts (1997) suggest that embrace the notion of improves social and environmental performance also requires a fundamental shift in a firm's human resource and the organizational capabilities required to manage. In addition, Melnyk et al. (2003) suggest that corporate resource should play an important roles in the environmental position consider and experience has a greater impact on the selection and use of environmental options. Bianchi and Noci (1998) note that the pro-active green strategy is problematic because it requires resources and skills to invest new equipment, training, creation of new skills etc. Overall, therefore, we expect that more resource availability will attach higher social responsibilities.

Hypothesis 2: The stronger the resource availability, the more likely that firm will act better corporate social responsibility.

### **2.2.2 Top Management Leadership**

Beside, resource availability of firm the top management leadership is seen as important factor that affects to CSR. Top management can be support, leadership, and commitment to change in activities and programs (Lambert, 1998). Moreover, Szekely and Knirsch (2005) find that it always takes a leader to transform a company into a sustainable, socially responsible enterprise, individual needs to be both a good leader and a good manager, his or her sustainability work starts by management and developing a system of incentives to reward leaders at all levels who develop and push for that adoption of sustainability practices also responds to flexibility to change and engage in dialogue and partnerships with different members of society, that these factors can be mainly managerial and organizational. Empirical study of Carter and Jennings (2004) find that top management leadership is positively related to purchasing social responsibility. Thus, too explore these relationships we prose to test the following hypotheses.

Hypothesis 3: The stronger the top management leadership, the more likely that firm will act better corporate social responsibility.

## **2.3 External Force**

Following the legitimacy theory, the organization is seen as part of a broader social construct whose expectation it has ongoing operations without excessive societal sanctions being imposed (Ratanajongkol et al., 2006). Specifically stakeholder, they are particularly the force of firm if they have access to resources that are relatively critical to the focal organization (Kolk and Pinkse, 2005). For example, stockholders can bring in capital; suppliers can provide material knowledge or immaterial expertise; local communities can offer knowledge and loyalty; and customer can provide loyalty and positive word-of-mouth. Thus mangers should prioritize responsiveness to stakeholder groups that present significant threat of opportunities to the achievement of the organization's objectives (Welcomer et al., 2003). From

this perspective, we examine the major external force are government regulation force, non-government organizations force, and consumer force.

### **2.3.1 Government Regulation Force**

An Organization requires complying with government regulations including legislation in the areas of safety, the environment, and diversity (Carter and Jennings, 2004). The prior research about the whether government regulation is drivers of CSR has been proposed by Berry and Rondinelli (1998), they suggest that more stringent regulations, increasing legal liabilities, and more stringent legal enforcement are driving corporations to adopt proactive environmental management. The finding from empirical investigation from Handfield et al. (1997) find that regulation has positive effect on firm's environmental initiatives. To explore these issues empirically, we propose to the following hypothesis.

Hypothesis 4: The stronger the government regulation force for social responsibility, the more likely that firm will act better corporate social responsibility.

### **2.3.2 Non-governmental Organizations Force**

Non-governmental organizations (NGOs) Vakil (1997) define as "sale-governing, private, not-for-profit organizations that gear to improving the quality of life of disadvantage people". NGOs has become more powerful in calling business to account for polices in the areas of fair trade, human rights, workers' rights, environmental impact, financial probity and corporate governance (Knox, and Maklan, 2004). Harrison (2003) notes that in market campaigns are the first to publish ethical buyer guides. Recently, few research efforts to explore the influence of NGOs on responsibility. There has some efforts to examine such as Zanden and Hyllman (2006) investigate effects of NGOs on transitional corporations responsibility. Chapple and Moon (2005) examine one reasons of any CSR activity that is reported on Web site in the Asian countries for investors, actual potential employee, NGOs, or business customers. Therefore we propose to test the following hypothesis in line with available evidence.

Hypothesis 5: The stronger the non-government organizations force for social responsibility, the more likely that firm will act better corporate social responsibility.

### **2.3.3 Consumer Force**

Increasingly, consumers expect companies to be socially responsible (Cone, 2002; Blum, 2002) and demanding increasingly demand in-depth information on product quality, product ingredients and manufacturing, that mean they are concerned with the health and security aspects of products and production sites as well as with recycling issues, it is crucial to note that consumers can be powerful to banning or boycott products is tarnish (Szekely and Knirsch, 2005). That type of customer demand can lead the purchasing function to evaluate the environmental friendliness of products and packaging, reduce packaging material and engage in the design of products of disassembly, recycling, and reuse (Carter and Carter, 1998). Consequently, Haigh and Jones (2006) note that consumer can promote CSR practice through their purchase decisions in product-markets. Thus, pressure from consumer might be promoting social responsibility action within the firm.

Hypothesis 6: The stronger customer force for social responsibility, the more likely that they will achieve greater CSR.

## **3. RESEARCH METHODS**

### **3.1 Sample**

To test the hypotheses, we collected data through a questionnaire study distributed to companies listed on the Stock Exchange of Thailand. The survey was sent to executives representing 451 companies from the manufacturing, service, and properties companies for primary reasons the operations of these companies are expected to have an impact on a broad range of stakeholder. Shareholders, customers, regulators, environmental groups, employees, politicians, the community, and vendors are all relevant stakeholders. We received 99 responses, of which 97 were complete and usable (21.5% response rate), Aaker et al. (2001) note that rare response for a mail survey that is without an appropriate follow-up procedure is less than 20%. Thus, this response rate we considered is acceptable. To assess potential

non-response bias, we compared early and late respondents with respect to various firm characteristics, including number of full-time employees, total capital, and firm age, did not reveal any sign of non-response bias.

### **3.2 Variables**

CSR we measured by scale items adopted from Worthington et al. (2006). These items reflected to activity across a wide range of social, ethical and environmental areas, sponsorship for local events, support for community, environmental initiatives and staff related issues are particularly prominent. Items for each scale were scored on a 5-point scale, ranging from "Strongly disagree" to "Strongly agree".

Corporate performance measure was assessed on growth, profitability and reputation. For example measure financial reports on net income growth, return on assets, and perceived reputation adopted from Salmons et al. (2005), this items focus on behavior, commitment, and price tolerance. Item used self-reported measure on 5-point scale.

In designing the questionnaire of independent variable based on the extent literature and instruments were selected for adopted to measure construct. Resource availability we measure by four items consistent with technology and business resource, technical resources, and new business practices needed for implementation, these items were generally consistent with the expected theoretical constructs. Top management leadership were measure by six items, sample items for these items were: decision's influence, do problem solving, clearly defined areas of responsibility, these consisted prior literature. Government regulation pressure was measured by four item adopted from Carter and Jennings (2004), were focus on current government legislation and threat of future government legislation. Non-government pressure was measured by three items; there was an emphasis on activity and attitudes that affect an organizational. Consumer pressure was measured by four items that focus on organization's customer were influenced by its social, ethical and environmental behavior.

Moreover, prior studies have found a positive relationship between firm age and CSR (Perrini, 2006) that we control firm age. Also we control firm size because many research find that small business here more difficulty than larger firms to take their social responsibility that they have no time or resources to dedicate to social responsibility (Tilley, 2000) or the small business context does impose barriers on social responsibility taking (Lepoutre and Heene, 2006). Beyond firm age and firm size we included control industry membership that have been identified by many theoretical and empirical researchers as a factor that affects corporate social. Different industries have different characteristics, which may relate to risks to society, potential growth, employment opportunities, competition and government interference (Cormier and Magnan, 2003).

### **3.3 Method**

We purified our measures using exploratory factor analysis and reliability analysis. The factor analyses conducted was done separately on each set of the items due to limited observations. We performed a factor analysis with varimax rotation we summarize the results in Table 1. Overall all factor loading are greater than the .4 cutoff (Nunnally and Bernstein, 1994). The reliability of the measurements was evaluated by Cronbach alpha coefficients. All reliabilities are greater than .7 (Nunnally and Bernstein, 1994). The descriptive statistics for all variables, along with their correlations, appear in Table 2. All independent variables correlate significantly with the dependent variable. Further, high bi-variate correlations might indicate a potential collinearity-problem. Commonly used cut-offs for detecting such problems are 0.8-0.9, but lack of high bi-variate correlations does not necessarily imply lack of collinearity if this involves more than two variables (Mason and Perreault, 1991). To check for multi-collinearity, the variance inflation factors (VIF) were calculated. Different acceptable size of VIF have been proposed, but seems to be a generally agreed upon 10 (Neter et al., 1985). Thus, multicollinearity will not constitute a problem to the interpretation of the results.

**TABLE 1**  
**RESULTS OF MEASURE VALIDATION**

Items	Factor Loadings	Cronbach Alpha
Corporate performance	.64 - .91	.96
Corporate social responsibility	.54 - .90	.93
Resource availability	.62 - .94	.91
Top management leadership	.95 - .97	.94
Government regulation force	.79 - .91	.85
Non-government force	.90 - .95	.92
Consumer force	.85 - .93	.86

**TABLE 2**  
**DESCRIPTIVE STATISTICS AND CORRELATION MATRIX**

Variable	CP	CSR	RA	TM	GR	NG	CN	FA	FS	IN
Mean	3.47	3.35	3.33	3.64	3.52	3.46	3.68	21	1268	4.97
Standard deviation	0.70	0.87	0.76	0.92	0.76	0.91	0.69	10.2	795	2.18
Performance (PE)										
Corporate social responsibility (CSR)	.26**									
Resource availability (RA)	.58**	.46**								
Top management leadership (TM)	.34**	.56**	.33**							
Government regulation force (GR)	.56**	.23 *	.58**	.21 *						
Non-government force (NG)	.23 *	.69**	.42**	.48**	.25*					
Consumer force (CN)	.24 *	.63**	.36**	.63**	.28**	.64**				
Firm age (FA)	.19	.11	.14	.06	.13	.09	.02			
Firm size (FS)	.01	.09	.13	.04	.18	.04	.14	.29**		
Industry (IN)	.16	.17	.23	.19	.17	.02	.11	.22*	.01	

\*p <.05

\*\*p <.01

To analyze the data, we used OLS regression because both dependent and independent variables in this study were neither nominal data nor categorical data; OLS is an appropriate method for examining the hypothesized relationship Aulakh et al. (2000).

To investigate the role of internal competency and external force – CSR, we first use all independent variable on CSR, the model of the aforementioned relationship, after that we assess a set of simple regression each separately. Next, we investigate the relationship between CSR and performance. These was tested by estimating the following regression equations:

$$\text{Equation 1: corporate social responsibility} = \beta_{01} + \beta_1 \text{ Resource availability} + \beta_2 \text{ Top management leadership} + \beta_3 \text{ Governmental regulation} + \beta_4 \text{ Non-government} + \beta_5 \text{ Customer} + \varepsilon$$

$$\text{Equation 2: corporate social responsibility} = \beta_{02} + \beta_6 \text{ Resource availability} + \varepsilon$$

$$\text{Equation 3: corporate social responsibility} = \beta_{03} + \beta_7 \text{ Top management leadership} + \varepsilon$$

$$\text{Equation 4: corporate social responsibility} = \beta_{04} + \beta_8 \text{ Governmental regulation} + \varepsilon$$

$$\text{Equation 5: corporate social responsibility} = \beta_{05} + \beta_9 \text{ Non-government} + \varepsilon$$

$$\text{Equation 6: corporate social responsibility} = \beta_{06} + \beta_{10} \text{ Consumer} + \varepsilon$$

$$\text{Equation 7: Performance} = \beta_{07} + \beta_{11} \text{ corporate social responsibility} + \varepsilon$$

## 4. RESULTS AND DISCUSSION

Table 3, summarizes the regression. First, focusing on the relationship between CSR and corporate performance (Hypothesis 1) are having significant support ( $b_{11} = 0.20$ ,  $p < 0.05$ ). This indicates that CSR is an important variable that influences on corporate performance. Similar to Al-Tuwaijri et al. (2004) findings that “good” environmental performance is significantly associated with “good” economic performance.

Next, the result of focusing on the role factors drive of CSR. Overall, the separate analyses the results suggest that all factors drive the CSR. When we pool all of variables in equation 6 the result shows that the internal competency driver factors both the amount of emphasis on top management leadership and organization that have resource availability appears to affect the CSR ( $b_1 = 0.19$ ,  $p < 0.05$ ; and  $b_2 = 0.17$ ,  $p < 0.10$ ;) thus supports Hypothesis 2 and Hypothesis 3. That associates with Worthington et al. (2006) in general initiatives on CSR came from the top of the organization and according to corporate resources does the firms' consider action play an important role in the environmental options that system in a time consuming and potentially expensive undertaking (Melnik et al., 2003).

According to external force factor the non-government force, and consumer force are driver to greater CSR ( $b_4 = 0.42$ ,  $p < 0.01$ ; and  $b_5 = 0.19$ ,  $p < 0.10$ ). And that because of the non-government organizations are promotional and anchored pressure groups also sought occasional collaborations with public corporations and institutional investors (Haigh and Jones, 2006). And CSR is important to consumers as such firms should continue and possibly expand their current CSR efforts (Basil and Weber, 2006). Thus, support Hypothesis 5 – 6.

Surprisingly, the government regulation force is not significant ( $b_3 = 0.09$ ,  $p > 0.10$ ), thus does not support Hypothesis 4. This result shows that the governance may be enhance the role to play in prescribing CSR, following the study of Kuasirikun (2005) by interviews found that some respondents suggested that the government should take a pro-active stance and introduce social and environmental legislation. Also furthermore, the results of multiple regressions that use more independent variables in the prediction of the dependent variable following equation 1 are some significantly weak variables and the government regulation force is not significant but separate test of all variables are significant that may be because of the effect of sample size are seen most directly in the statistical power of the significance testing and generalizability of the result (Hair et al., 2006).

## 5. CONTRIBUTIONS AND FUTURE DIRECTIONS FOR RESEARCH

### 5.1 Theoretical Contributions and Future Direction for Research

This paper attempts to contribution to the literature in at least two respects. First, despite the popular notion on CSR; however few study to investigate what factors driver to increasing CSR activity. This study provides important theoretical contribution expanding on previous knowledge and literature of CSR. For advancing the field theoretically, this works consider both legitimacy orientation and capability of CSR for corporate performance that previous study was mixed by considering the diversity performance. Although, this study finds that overall hypothesis was of significant support but we limited to few sample size corporate for CSR orientation in the same model. In addition, this study adds to the knowledge on the. Future research is needed to confirm this model by large data.

### 5.2 Managerial Contributions

The findings of the study suggest that CSR is an important determinant of performance. As such, it appears the managers should strive to improve the CSR of their business in their efforts to attain higher business performance. The study suggests several factors as important determents of CSR. Specifically, a CSR appears to be facilitated by the amount of emphasis top management place on CSR through continual reminders to employees that it is critical for them to be sensitive and responsive to social and environmental issues. Importantly, a CSR appears new for the role of government which is not significant and at the same time CSR requires to resource, that in the future the government may be able to support CSR activity of firm via policy or law such as tax incentive. Lastly, the results shows that the needs or behaviors of public or social can affect to CSR.

**TABLE 3**  
**RESULTS OF OLS REGRESSION ANALYSIS**

Independent Variables	Models						
	1	2	3	4	5	6	7
Resource availability	0.19** (0.10)	0.45*** (0.11)					
Top management leadership	0.17* (0.08)		0.54*** (0.08)				
Government regulation force	0.09 (0.10)			0.21** (0.12)			
Non-government force	0.42*** (0.09)				0.68*** (0.07)		
Consumer force	0.19* (0.13)					0.61*** (0.10)	
Corporate social responsibility							0.20** (0.08)
Firm age	0.09 (0.06)	0.12 (0.08)	0.14 (0.08)	0.17* (0.09)	0.12 (0.07)	0.14 (0.07)	0.22** (0.07)
Firm size	0.08 (0.06)	0.18 (0.07)	0.15 (0.07)	0.17 (0.09)	0.09 (0.06)	0.05 (0.07)	-0.05 (0.07)
Industry	0.11 (0.03)	0.09 (0.04)	0.09 (0.04)	0.17 (0.04)	0.21*** (0.03)	0.13 (0.03)	0.17 (0.08)
Adjusted R <sup>2</sup>	0.57	0.22	0.32	0.07	0.50	0.40	0.08

\*p <.10

\*\*p <.05

\*\*\*p <.01

<sup>a</sup>Beta coefficients with standard errors in parenthesis

## 6. CONCLUSION

This study we explored the role of internal competency and external force driver of CSR. The internal competency we consider both in resource and top management leadership, while external force we consider to wards government force, non-government force, and consumer force. In the process, we reaffirmed that CSR, as vital components of corporate performance, warrant organization attention for successful implementation of CSR. This requires a resource, top management leadership, and external force that will increase CSR activity except the governance does not force the CSR, which is increasingly becoming a key factor in superior corporate performance.

## REFERENCES

- Aaker, David A., Kumar, V. and Day, George S., Marketing Research. New York: John Wiley and Sons, 2001.
- Aulakh , Preet S., Kotabe, Masaaki and Masaaki and Teegen, Hildy., "Export Strategies and Performance of Firms from Emerging Economies: Evidence from Brazil, Chile, and Mexico", Academy of Management Journal, 43(3), 2000, 342-361.
- Branco, M. C. and Rodrigues, L. L., "Corporate Social Responsibility and Resource-Based Perspectives", Journal of Business Ethics, 69, 2006, 111-132.
- Barney, J., "Firm Resources and Sustained Competitive Advantage", Journal of Management, 17 , 1991, 771-782.
- Berry, Michael A. and Rondinelli, Dennis A., "Proactive Corporate Environmental Management: A New Industrial Revolution", The Academy of Management Executive, 12(2), 1998, 38-50.
- Bianchi, R. and Noci, G., "Greening SMEs Competitiveness", Small Business Economics, 11, 1998, 155-180.



- Blum, DE., "9 out of 10 Companies have Charity Marketing Deals", *The Chronicle of Philanthropy*, 15, 2002, 39.
- Bowman, Jo and Jacobs, Heather., "Asia Slowly Acknowledging Importance of CSR", *PR Week*. (London ed.). Mar, 2003, 1-8.
- Carter, Craig R. and Carter Joseph R., "Interorganizational Determinants of Environmental Purchasing: Initial Evidence from the Consumer Products Industries", *Decision Science*, 29(3), 1998, 659-685.
- Chapple, Wendy and Moon, Jeremy., "Corporate Social Responsibility (CSR) in Asia", *Business and Society*, 44(4), 2005, 415-441.
- Cone., *Cone Corporate Citizenship Study: The Role of Cause Branding*. Cone Inc: Boston, 2002.
- Cormier, D. and Magnan, M., "Environmental Reporting Management: A Continental European Perspective" *Journal of Accounting and Public Policy*, 22(1), 2003, 43-62.
- Graafland, Johan and Ven, Bert, van de., "Strategic and Moral Motivation for Corporate Social Responsibility", *The Journal of Corporate Citizenship*, 22, 2006, 111-123.
- Grant, R.M., "The Resource-based Theory of Competitive Advantage", *California Management Review*, 33(3), 1991, 114-135.
- Haigh, Matthew and Jones, Mare T., "The Drivers of Corporate Social Responsibility: A Critical Review", *The Business Review*, 5(2), 2006, 245-251.
- Hair, Joseph F., Black, William C., Babin, Barry J., Anderson, Rolp E. and Tatham, Ronald L., *Multivariate Data Analysis*, Six Edition, Pearson International Edition, 2006.
- Handfield, Robert B., Steve, Walton V., Lisa, Seegers K. and Steven, Melnyk A., "Green Value Chain Practices in the Furniture Industry" *Journal of Operations Management*, 15(3), 1997, 293-315.
- Harrison, Rob., "Corporate Social Responsibility and the Consumer Movement", *Consumer Policy Review*, 13(4), 2003, 127-131.
- Kapstein, E. B., "The Corporate Ethics Crusade", *Foreign Affairs*; 80(5), 2001, 105-119.
- Kemp, R., "An Economic Analysis of Cleaner Technology: Theory and Evidence. In K. Flischer and J. Schort", *Environmental Strategies for Industry, Washington. DC*. Island Press, 1993, 79-113.
- Knox, Simon and Maklan, Stan., "Corporate Social Responsibility: Moving Beyond Investing Towards Measuring Outcomes", *European Management Journal*, 22(5), 2004, 508-516.
- Kolk, Ans and Pinkse, Jonatan., "Stakeholder Mismanagement and Corporate Social Responsibility Crises", *European Management Journal*, 24(1), 2005, 59-72.
- Kuasirikun, N., "Attitudes to the Development and Implementation of Social and Environmental Accounting in Thailand", *Critical Perspectives on Accounting*, 16, 2005, 1035-1057.
- Kuk , George, Fokeer, Smeeta and Hung, Woan Ting., "Strategic Formulations and Communication of Corporate Environmental Policy Statements: UK Firms' Perspective", *Journal of Business Ethics*, 58, 2005, 375-385.
- Lambert, Douglas M., James Stock R. and Lisa, Ellram M., *Fundamentals of Logistics Management*, Boston, MA:Irwin. New Yok, NY: McGraw-Hill, 1998.
- Lepoutre, J. and Heene, A., "Investigating the Impact of Firm Size on Small Business Social Responsibility: A Critical Review", *Journal of Business Ethics*, 67, 2006, 257-273.
- Margolis, J. D. and Walsh, J. P., *Misery Loves Companies: Rethinking Social Initiatives by Business*. *Administrative Science Quaterly*, 48, 2003, 268-305.
- Mason, C. H. and Perreault, W. D., "Collinearity, Power, and Interpretation of Multiple Regression Analysis", *Journal of Marketing Research*, 28(3), 1991, 268-280.
- Melnyk, Steven A., Sroufe, Robert P. and Calantone, Roger., "Assessing the Impact of Environmental Management Systems on Corporate and Environmental Performance", *Journal of Operations Management*, 21, 2003, 329-351.
- Neter, John, William Wasserman and Michael H. Kutner., *Applied Linear Statistical Models: Regression, Analysis of Variance, and Experimental Designs*, 2<sup>nd</sup> Edition. Homewood: Richard D. Irwin, Inc, 1985.
- Nunnally, Jum C. and Bernstein, Ira H., *Psychometric Theory*. New Yok, NY: McGraw-Hill, 1994.
- Palazzo, Guido and Schere, Andreas G., "Corporate Legitimacy as Deliberation: A Communicative Framework" *Journal of Business Ethics*, 66, 2006, 71-88.
- Perrini, Francesco., "SMEs and CSR Theory: Evidence and Implications from and Italian Perspective" *Journal of Business Ethic*, 67, 2006, 305-316.

- Ratanajongkol, Sunee, Davey, Howard and Low, Mary., "Corporate Social Reporting in Thailand: the News is All Good and Increasing" *Qualitative Research in Accounting and Management*, 3(1), 2006, 67-83.
- Russo, Michael V. and Fouts, Paul A., "A Resource-Based Perspective on Corporate Environmental Performance and Profitability", *Academy of Management Journal*, 40(3), 1997, 534-559.
- Salmones, M. G., Crespo, Angel H. and Bosque, Ignacio R., "Influence of Corporate Social Responsibility on Loyalty and Valuation of Services", *Journal of Business Ethics*, 61, 2005, 369-385.
- Sen, S. and Bhattacharya, C. B., "Does Doing Good Always Lead to Doing Better? Consumer Reactions to Corporate Social Responsibility" *Journal of Marketing Research*, XXXVII (May), 2001, 225-243.
- Sureshchandar, G. S., Rajendran C. and Kamalanabhan T. J., "Customer Perceptions of Service Quality- A Critique", *Total Quality Management*, 12, 2002, 111-124.
- Szekely, Francisco and Knirsch, Marianna., "Responsible leadership and Corporate Social Responsibility: Metrics for Sustainable Performance", *European Management Journal*, 23(6), 2005, 628-647.
- Tilley, F., "Small Firm Environmental Ethics: How Deep Do They Go? Business Ethics", *A European Review*, 9(1), 2000, 31-41.
- Vakil, A. C., "Confronting the Classification Problem: Toward a Taxonomy of NGOs", *World Development*, 25(12), 1997, 2057-207.
- Welcomer, S. A., Cochran, P. L., Rands, G. and Haggerty, M., "Constructing a Web: Effect of Power and Social Responsiveness on Firm-Stakeholder Relationship", *Business and Society*, 42(1), 2003, 43-82.
- Worthington, Ian, Ram, Monder and Jones, Trevor., "Exploring Corporate Social Responsibility in the U.K. Asian Small Business Community" *Journal of Business Ethics*, 67, 2006, 201-217.
- Wu, Meng-Ling., "Corporate Social Performance, Corporate Financial Performance, and Firm Size: A Meta-Analysis", *Journal of American Academy of Business*, 8(1), 2006, 163-171.
- Zanden, Niklas E. and Hyllman, Peter., "Exploring the Effects of Union-NGO Relationship on Corporate Responsibility: The Case of The Swedish Clean Clothes Campaign", *Journal of Business Ethics*, 64, 2006, 303-316.

# WHAT LEADERSHIP STYLE IS MORE APPROPRIATE FOR THE ETHICAL NEEDS OF THE ORGANIZATION AND THE WORKERS IN THE 21<sup>ST</sup> CENTURY?

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## ABSTRACT

*A recent study conducted by the American Management Association (AMA) involving 462 executives who were asked, "What characteristics are needed to be an effective leader today?" 56 % ranked ethical behavior as an important characteristic, followed by sound judgment (51%) and being adaptable/flexible (47%) (AMA, 2007, p. 1). The purpose of this paper is to provide more insight about personal ethics, leadership ethics, and business ethics. This essay will address the following question: What leadership style is more appropriate for the ethical needs of the organization and the workers in the 21<sup>st</sup> century? The first section of this essay has a discussion on business ethics including data gathered from undergraduate students concerning their ethical perspectives and styles using Dr. Williams' Ethical Awareness Inventory tool. The second section examines three ethical leadership styles: servant leadership, steward leadership, and transformational leadership. The final section closes with a conclusion of the essay question.*

**Keywords:** Business Ethics, Leadership Theory, Business Management, Virtue, Servant Leadership, Stewardship

## 1. INTRODUCTION

The term leadership ethics has been in existence since the medieval era of Aristotle and Socrates (Moser & Vander Nat, 1987) impacting critical thinking and decision-making as well as creating conflicts in social groups. In the 21st century, research studies as well as the media have disclosed unethical leadership behaviors have risen where leaders deliberately harm others through their actions (e.g. WorldCom, Enron, and Martha Stewart). There is a need to understand how to improve ethical cultural perspectives, leadership styles, and to understand how vulnerable an organization is to unethical leaders. A recent study conducted by the American Management Association (AMA) involving 462 executives who were asked, "What characteristics are needed to be an effective leader today?" 56% ranked ethical behavior as an important characteristic, followed by sound judgment (51%) and being adaptable/flexible (47%) (AMA, 2007, p. 1).

Jeremy Bentham (1748-1832) and John Stuart Mill (1806-1873) postulated that the rational goal of good ethics is to achieve the greatest amount of satisfaction over the less amount of dissatisfaction establishing one of the primary tenets found in utilitarian theory of ethics. Immanuel Kant (1724-1804) postulated that the rational goal of ethics was to accept that there are some things we ought to do and other things that we ought not to do, in contrast to the utilitarian principle. Aristotle's (384-322, B.C.) postulated that practicing good ethics would lead to living a good life. He classified people practicing good ethics as virtuous people. Of course, the overt behavior of virtuous people would align with a given set of virtues such as being fair, honest, and trustworthy. An obvious contrast exists between the theories leading due to the vague underlying meanings of what is considered right or wrong, or fair. In business ethics, the vague underlying meanings leads to gaps in leadership problem solving and decision-making relative to the needs of the organization, stakeholder, customer, and environment. To gain more insight about what is right or wrong relative to leadership and business ethics, this essay will address the following question: What leadership style is more appropriate for the ethical needs of the organization and the workers in the 21<sup>st</sup> century? The first section of this essay contains a discussion on business ethics including data gathered from undergraduate students concerning ethic perspectives and styles using Dr. Williams' Ethical Awareness Inventory tool. The second section examines three ethical leadership styles: servant leadership, steward leadership, and transformational leadership. The final section closes with a conclusion of the essay question.

### **1.1 What is Ethics?**

The sense of ethics has been around since people began living in social groups requiring some form of law and order to exist and prevent pandemonium. Individuals are born with innate knowledge and they have gained explicit knowledge throughout the decades enlightening them that ethics is not a religion, a law, or feelings (Goldman, 1998; Nonaka & Takeuchi, 1995; Wren, 1994). We also know that we cannot see ethics or adequately measure the impacts of ethical decision-making, which creates ethical dilemmas, additional conflicts, and competing views with those who are not results-oriented (Williams, 2007). Hence, Ruggiero (2004, p. 3), declared, "Ethics is the study of the choices people make regarding right and wrong" or standards of behavior. Hosmer (2003) described ethics as dynamic due to the subjectivity existing in the contextual meaning of beliefs, values, and meanings. The dynamism in ethics is similar to a swinging pendulum whereas the ethical ideologies can swing too far to the left and impose on the ethics of a certain group. If ideologies swing too far in the opposite direction, the proposed act can be unethical to another group.

### **1.2 Utilitarian, Kantian, and Virtue Ethics**

The Utilitarian approach factors in the consequences of the act, the cost benefit analysis, and the goal of achieving the greatest good for the greatest number in decision-making and problem solving. Under utilitarianism, the rationale is that actions should benefit the greatest number while inflicting minimum pain on the few in an effort to preserve existence of the whole. Conversely, in Kantian ethics, which is a more contemporary approach, Kant postulated that people ought to be treated as an end to a means rather than the means to the end, with little regard to the consequences of the act. Kant in using categorical imperatives felt that if the act is moral and ethical, the act should become a universal law for all people.

Aristotle suggested that practicing good ethics leads to living a good life. Aristotle believed that in order to achieve the good life, the individual must be a virtuous person. Aristotle (as cited in Boatright, 1997) defined a virtue as, "A character trait that manifests itself in habitual action" (p. 66). In this sense, a person with strong virtues displays those qualities in his/her everyday activities. Some common recognized virtues are honesty, compassionate, strong willed, reliable, trustworthy, although Aristotle considered pride (personal achievements), shame (regret for failures and wrongs), and justice (cognizant of fairness) as virtues (Boatright, 1997). In this sense, the ethical leader overtly displays and promotes ethical activities and conducts business in an ethical manner based on personal beliefs and morals.

The problem emerging from these ethical theories in business emerges from two polarities, the business polarity, and the worker polarity. The business polarity contains three significant factors, challenges and threats in the competitive business environment, the need to increase market share value, and the need to increase profitability. These needs can influence activities that some may regard as unethical, but legal. For instance, people may feel that selling tobacco products is unethical due to the health issues arising from consuming these products. How would a virtuous leader function in this environment? This ethical dilemma is only the tip of the iceberg because in business many activities may be considered unethical by some, but legal.

The worker polarity is directly impacted by decisions made to support the business polarity. The worker polarity contains three significant factors are well, the need for job security, health and retirement benefits, and a safe non-hostile working environment (quality of life factors). Using the utilitarian approach, one could say that profitability is necessary for business survival, which in turn, provides jobs, products, and services (economic growth) for the people living in the society. Businesses may need to downsize or relocate to offshore locations to earn the needed profits and to promote longevity of the business. However, leaders may implement other activities considered unethical and illegal to promote organizational growth or self-attainment that will affect the worker polarity

In balancing the business and work polarities, are some of these acts "necessary evils" merely a sign of what is needed to be an effective leader in the highly competitive environment we are facing in the 21<sup>st</sup> century? In using quality terms, there is too much noise in the process to root-cause the source of leadership unethical behavior purposely conducted or inadvertently because of poor decisions. New leadership models are needed to serve as a framework in promoting good ethics and good business.

Some theorists believe the source of unethical behavior is the drive for wealth and prosperity. John Solomon (as cited in Boatright, 1997) in discussion of virtue ethics stated:

The bottom line of the Aristotelean approach to business ethics is that we have to get away from 'bottom line thinking' and conceive of business as an essential part of the good life, living well, getting along with others, having a sense of self-respect, and being a part of something one can be proud of. (p. 68).

### **1.3 Essay Background**

Dr. Norris and Dr. Boone facilitate university-level business ethics courses at separate universities. Dr. Norris constructed a questionnaire to determine if students enrolled in his business ethics courses would change their initial perceptions of business ethics upon completion of the course. At the start of each course, students complete the questionnaire, and at the end of the 11-week course, the students using personal journals constructed as a course assignment, complete the same questionnaire. Dr. Norris found that all students developed an increased understanding of business ethics, but noted that only a small percentage of the students indicated a change in perceptions of using personal virtues in decision-making. Dr. Boone applied the four-step ethical awareness process using the Ethical Awareness Inventory tool (EAI). Forty of her students enrolled in undergraduate business courses and members of Doctorate of Management Leadership Foundation (DMLF) completed the self-scoring inventory tool designed by Dr. Williams of The Williams Institute, which is discussed in more details in the next section. Dr. Boone selected this four-step process and tool because she shared similar beliefs with Dr. Williams that (a) ethical awareness is the ability to apply ethical principles in decision-making and (b) the first step in achieving ethical awareness involves understanding your CORE beliefs as well as the processes and principles for making ethical decisions. Williams (2007) specified that the acronym CORE denote character, obligation, results, and equity. It should be noted that no matter what ethical style is revealed, what is critical is that students' core belief is used as a guide in making ethical decisions that is right for the greater good of all involved given any situation.

## **2. ETHICAL AWARENESS INVENTORY (EAI) TOOL**

The Ethical Awareness Inventory tool (EAI) is a series of questions in a self-scoring inventory designed by Dr. Linda Williams (EAI, 2007). The purpose of the tool is to assist individuals in developing a deeper understanding of their own ethical style, the ethical beliefs of others and some of the challenges they may experience when working with others of a different ethical perspective (EAI). Williams (2007) trademarked the formula (Awareness—Articulation—Application = A3<sup>™</sup>) that is used to make good choices where Awareness of the core beliefs in making an ethical decisions is critical to an individual's ability to Articulate (to communicate desired result in ethical decision making) as well as the Application of ethical principles.

The next section discusses a four-step process developed and implemented by the Williams Institute to guide individuals struggling in making ethical decisions—one that will allow individuals to consider a variety aspects that affect their immediate decision and people (Williams, 2007).

Step 1: Identify who will be affected by your decision?

- Who are the people most immediately impacted by my decision?
- Who else will be touched in some way by this decision—those not quite so obvious?
- Who is strongly supporting a position in this decision? Why?
- Who might have a strong opinion about this decision but lacks the power, money, or status to be heard?
- Who is affected in the short-run, and who may be affected a year or more from now?
- What opportunities have all these stakeholders had to be heard? What did they have to say?
- Does my ethical decision making reflect on my family and friends? What do they think?

Step 2: What would be the impact of my decision?

- Have I compared a variety of alternative decisions?

- What have the various stakeholders had to say about how they would be affected by each decision?
- Have I gotten input from all stakeholders? What do I need to do to get input from those I have not heard?
- What evidence exists to support my conclusions regarding the impact of various decisions?
- Have I tailored my fact finding to fit some preconceived result or desired outcome?

Step 3: What ethical perspective is reflected by my decision?

- What is my decision?
- What CORE belief is reflected in each of the various alternative decisions? In my decision?
  - a. Character?
  - b. Obligation?
  - c. Results?
  - d. Equity?
- Are there other factors that have influenced my decision-making?
  - a. Pressure from above?
  - b. Interest groups?
  - c. Profits or costs?
  - d. Personal gain?
  - e. Limited resources?
  - f. Convenience?
  - g. Threats?

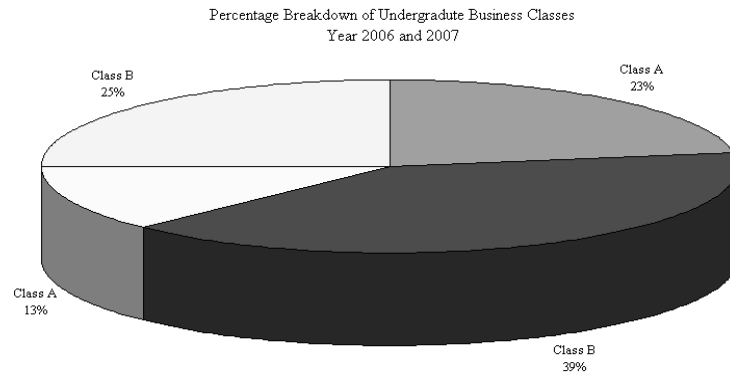
Step 4: Can I justify my decision on ethical grounds?

- Is my decision fair to everyone involved? What is the ethical basis I used to determine its fairness?
- Do I feel uncomfortable or frustrated with my decision? If so, why? If not, why not?
- If I were on the receiving end of this decision, would I feel that I had been treated fairly?
- Does my decision fit my ethical perspective and style?
- Would I feel comfortable having this story appear on the front page of my local newspaper? Would I be able to justify my decision if I were interviewed?
- What ethical justification would I use to explain my decision?
- Would I use this case as an example to teach young people about ethical decision making?
- Have I rationalized my position in answering any of these questions?

Dr. Boone has administered the Ethical Awareness Inventory tool (see Appendix A) multiple times, which was designed by Dr. Linda Williams of The Williams Institute. This tool has enabled her students to identify specific capacities and skills to make moral decisions. The ethics course and workshops also allowed students to discuss and demonstrate their ethical abilities concerning a need for ethical judgment, alternative courses of action, ethical values, and virtues from the perspective of their stakeholders. For the purpose of this essay, 40 students from a private university located in Beachwood, Ohio agreed to complete the EAI tool. The next section will discuss the components of Ethical Awareness Inventory tool and the students' responses relative to their ethical perspective and style.

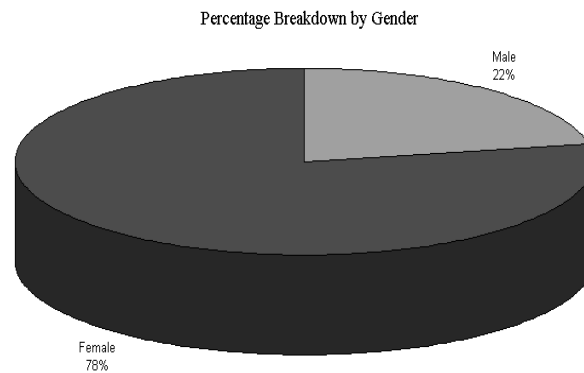
A demographic survey was conducted to provide a percentage breakdown concerning certain characteristics of the student makeup of the four classes who completed the EAI tool. Categorization of self-selected sample of participants was comprised of undergraduate business students enrolled in an ethical business course at a private university located in Beachwood, Ohio and prospective members of the Doctorate of Management Leadership Foundation located in Cleveland, Ohio. This method offered the best practice approach in gathering the demographic data.

Figure 1 depicts the percentage breakdown specific to the four courses comprised of 40 students who completed the Ethics Assessment Inventory, agreed to share their results, and provided feedback while enrolled in the Ethical Leadership course. The first class involved 9 students; second class 16 students; third class 5 students, and the fourth class 10 students.



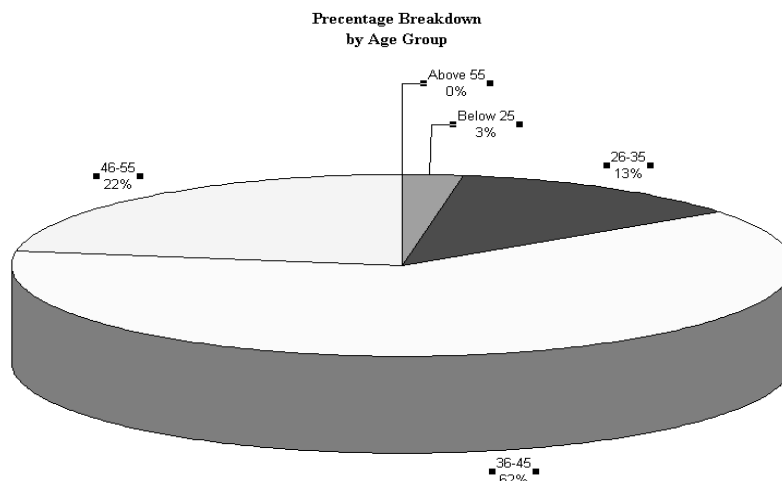
**FIGURE 1: PERCENTAGE BREAKDOWN OF UNDERGRADUATE STUDENTS**

Figure 2 depicts the percentage breakdown relative to the gender of the undergraduate business students. The results revealed that 39 students represented the female gender and 11 represented the male gender.



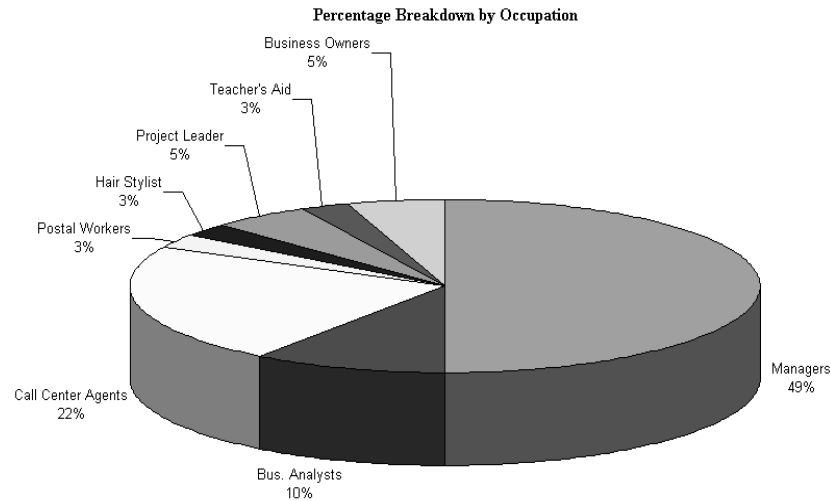
**FIGURE 2: PERCENTAGE BREAKDOWN BY GENDER**

Figure 3 illustrates the percentage breakdown for the 40 undergraduate students where only one student was below the age of 25. Five students between the ages of 26-35; twenty-five students between the ages of 36-45; nine students between the ages of 46-55; and no students were 55 years of age or older.



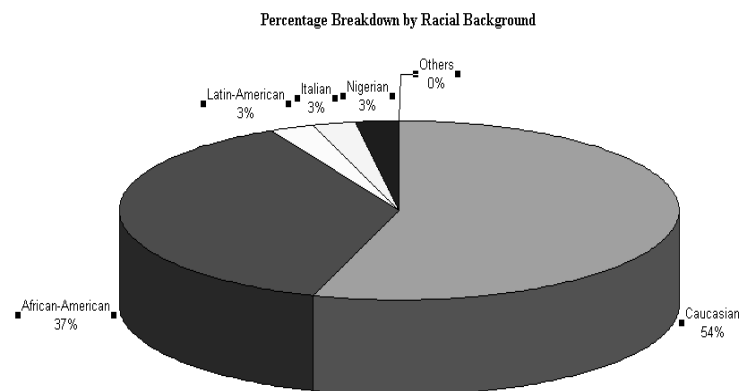
**FIGURE 3: PERCENTAGE BREAKDOWN BY AGE**

Figure 4 represents the occupational roles of the undergraduate students enrolled in the GEN480 course. There were 20 students identified as Managers; 4 students as business analyst; 9 students as call center agents, 1 as a postal worker, 1 as a hair stylist, 2 as project leaders; 1 as a teacher's aid; and 2 as business owners.



**FIGURE 4: OCCUPATION**

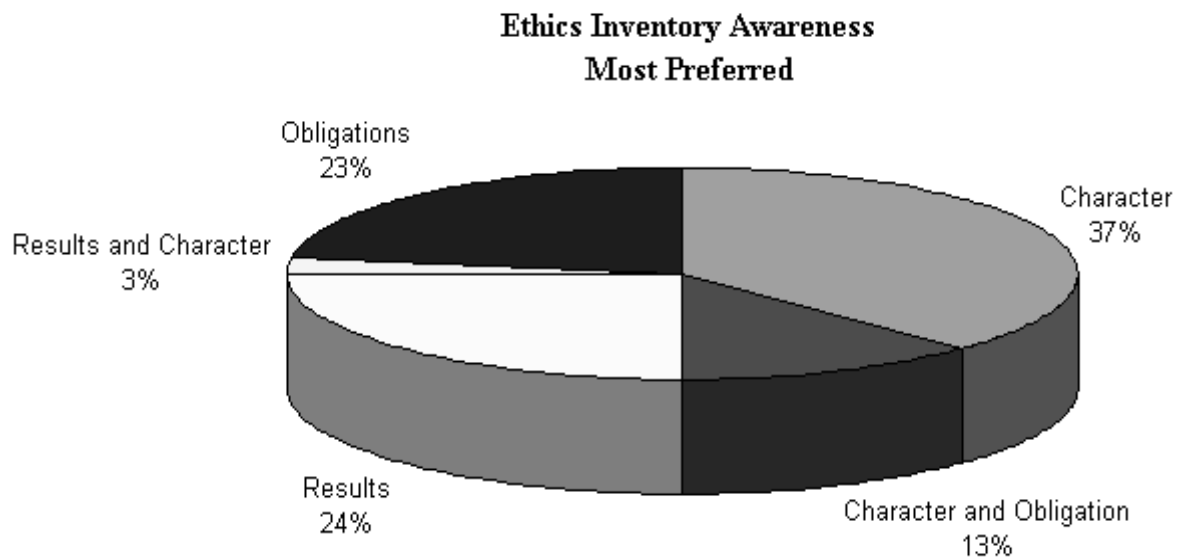
Figure 5 depicts the racial background of the undergraduate business students. There were 22 Caucasian students; 15 African-American students; 1 Latin-American student; 1 Italian student, and 1 Nigerian student.



**FIGURE 5: PERCENTAGE BREAKDOWN OF STUDENTS' RACIAL BACKGROUND**

Figure 6 depicts the ethical perspectives and styles of the 40 undergraduate students. Character of actions was the ethical perspective for 15 students Character and Obligation of action for 5 students; Results of action for 10 students; Results and Character for 1 student; and Obligation for 9 students.





**FIGURE 6: EAI MOST PREFERRED**

## **2. 1 Ethical Awareness Inventory Assessment**

This section discusses the various ethical perspectives and styles based on the responses gathered from the undergraduate business students. The CORE (Character, Obligation, Results, and Equity) styles and the blended style as defined by The Williams Institute and depicted in Figure 6. The purpose of this section is to provide essential information about the 40 undergraduate students' ethical perspectives and styles at the time they completed the assessment.

## **2. 2 The Character Perspective**

Thirty seven percent of the undergraduate business students based their ethical perspective on what is good to be, rather than what is good to do (EAI, 2007). The character perspective results depicted below as stated in the EAI tool suggested that these individuals believe:

Attention to ethics should focus on the achievement of moral excellence. If asked to judge whether an individual's actions are ethical, they should look beyond the actions to the individual's character. Uprightness and integrity is essential. They also look for evidence of virtue in people, including such traits as honor, justice, and benevolence. It is their opinion that mere compliance with rules, no matter how well intentioned, does not make anyone an ethical person without being accompanied by consistent voluntary striving to be a morally good person. This category is most closely aligned in philosophy with virtue theory (Aristotle and Alasdair MacIntyre) (EAI, 2007).

## **2.3 The Character Ethical Style**

The following results of the EAI tool concerning character ethical style for 37% of the undergraduate business students revealed that:

Ethics relies on the ability of individuals to make sound moral judgments. They do not believe that it is enough to comply with some preset standards or principles of right and wrong to find the solution to a complex ethical dilemma. Ethics relies on exemplary character to make the difficult choices. They value such qualities as honesty, wisdom, and integrity, and place greater emphasis on demonstrating these

qualities than on following the rules. They also believe that an individual would be incapable of choosing between conflicting rules or standards of right and wrong without already possessing good character. Their approach to ethics calls for developing practical wisdom within individuals to serve as the basis for ethical decision-making. Their ethical style compels them to strive to be a person of wisdom and integrity (EAI, 2007).

#### **2.4 The Results Ethical Perspective**

Twenty four percent of the undergraduate business students based their ethical perspective on the results or consequences of their actions (EAI, 2007). The results perspective as depicted below and stated in the EAI tool suggested that these individuals believe that:

Conduct should be directed toward promoting the greatest good for the greatest number of persons. In judging whether an individual's actions are ethical, they should look for concrete evidence. It is not enough for them to hear an individual to talk the talk. Results are needed to indicate that people are "walking the walk." In their opinion, what really counts in ethical debates is the "bottom line." Discussions about process and principles are not as important as what is ultimately achieved for the overall good of society. They believe the goal of ethics should be to achieve the greatest possible good for society as a whole. This category is most closely aligned in philosophy with a utilitarian theory of ethics (Jeremy Bentham and John Stuart Mill) (EAI, 2007).

#### **2.5 The Results Ethical Style**

The following results of the EAI tool concerning results ethical style for 24% of the undergraduate business students revealed that: They believe that everyone has a moral right to experience the "good life." This "goodness" can be measured, in part, by the level of satisfaction expressed by the majority of the persons who make up our society. If most people are unhappy, something is morally wrong and needs to be fixed. Their approach to ethics is likely to focus on what could be done to improve the well-being of the greatest number of persons. One approach might be to develop rules of ethical conduct for people to follow, along with corresponding sanctions, in order to achieve what is best for society as a whole. Another quite different approach might be to improve overall satisfaction by creating a more pleasant environment in which people enjoy learning and working together for the betterment of society. With either approach, their ethical style demands that they achieve measurable results.

#### **2.6 The Obligation Ethical Perspective**

Twenty-three percent of the undergraduate business students based their ethical perspective on the obligation perspective and the results are depicted below as stated in the EAI tool suggested that:

These individuals have a *duty* or *obligation* to do what they believe is morally right. The principles that represent what rational persons *ought* morally to do because the ethical conduct appeals to conscience. According to the EAI assessment, in judging whether a person's actions are ethical, these individuals should look to the *intent* behind their actions, rather than focusing on results. From the Obligation perspective, ethical principles must be: (a) appropriate under any circumstances (universalizable); (b) respectful of human dignity; and (c) committed to promoting individual freedom and autonomy. Human beings must never be treated simply as "means" to the accomplishment of some defined "end." (EAI, 2007), the end does *not* justify the means. This category is most closely aligned in philosophy with a deontological theory (Immanuel Kant and John Rawls) (EAI).

#### **2.7 The Obligation Ethical Style**

The following results of the EAI tool concerning obligation ethical style for 23% of the undergraduate business revealed that:

These individuals believe that human beings have intrinsic value where everyone has a right to individual respect. They also cannot support social traditions and policies aimed at "the best interests of society as a whole" if individuals are denied the opportunities to which they are entitled as a human being. This approach to ethics requires that they look within legal and humane limits. People should be allowed to make their own choices. These individuals also believe that fostering personal growth takes precedence

over achieving efficiency through dehumanizing organizational and social structures. These individuals are guided by a desire to be in accord with established standards of right and wrong (EAI, 2007).

## **2.8 Blended Perspectives and Styles**

Thirteen percent of the undergraduate business students were character and obligation perspective, style, and 3% of the students were results and character perspective and style. The Williams Institute (EAI, 2007) mentioned that if individuals' second highest score is within one or two points of their highest score, they might want to consider whether (a) they are experiencing an internal conflict in attempting to function in two distinguishable moral realms, or (b) their ethical style is a blend of two categories. In the first case, they may have found it necessary to adopt a different ethical perspective on the job or in some other role, causing conflict at times with their personal ethical perspective. In the second case, the primary characteristics of their ethical perspective simply may overlap two categories.

Dr. Williams (EAI, 2007) discussed that although all students completing the EAI tool were instructed to answer the questions in accordance with their personal ethical philosophy, it is possible that their personal perspective have been distorted by a perception that they need to circumvent their beliefs on a daily basis. Until these individuals are able to articulate their sincere beliefs and consistently function in accordance with those beliefs, they will continue to experience internal moral conflict. This will create discomfort for them, and it will be difficult to make and justify ethical decisions.

## **2.9 The Equity Ethical Perspective**

This was the least preferred perspective and style where the results according the EAI tool disclosed that: These individuals tend to base their perspective on ethics on a concern for the instability of knowledge, the uncertainty of human judgment, and the lack of individuals who can truly qualify as experts in the discernment of what is right and what is wrong. In their view, pragmatism, practical day-to-day experience, is the only reasonable guide to action. In judging whether an individual's actions are ethical, they tend to stress the practical consequences of their actions as the essential criterion of evaluation in each case. They distrust of any attempt to define universal principles and moral values are based, in part, on a distrust of the motives of the individuals involved. They believe that no principled solution is adequate for all time. As long as decision makers continue to disregard the cultures and lives of minorities, any discussion that suggests a unity of belief is absurd. This category is most closely aligned in philosophy with the postmodern theory of ethics (Michel Foucault and David Harvey) (EAI, 2007).

## **2.10 The Equity Ethical Style**

These individuals believe that there are no absolute standards of right and wrong. With new knowledge and different circumstances, it may be necessary to change one's beliefs periodically. Therefore, their approach to ethics generally tends to challenge all attempts to plan ideal social orders rationally. They tend to distrust institutionalized codes of ethics. The correct choice for a particular situation and a particular time is likely to evolve from a consideration of alternative viewpoints. You reject the use of power or control to suppress opposition to the accepted perspective, embracing broad representation in ethical decision-making. Your ethical style requires a critical analysis of the far-reaching impact of each alternative, not a predetermined response to what appears to be good in the short-run.

Hence, The Williams Institute (EAI, 2007) indicated that most individuals exhibit at least some aspects of all four categories, and the relationship between these categories form individuals' unique ethical style. In this respect, these categories should be viewed as broad characterizations of representative patterns intended to stimulate a deeper understanding of your belief system. The consideration of blended categories takes a person awareness to another level; For example, an individual whose high categories are O and R may be experiencing some internal struggles between his/her moral obligations to individuals, on the one hand while attempting to achieve specific results on the other (EAI, 2007).

Adam Smith in the Theory of Moral Sentiments stated, "A free enterprise system degenerates unless individual business people practice intentional virtue" (as cited in Brown, 1989, p. 46). In the new millennium, personal virtues, integrity, personality, belief, and ideologies of leaders continue to play a significant role in business decision-making and problem solving (Maak & Pless, 2006). The use of personal virtues can lead to conflicts of interest in business. The conflict of interest could emerge

between business-oriented needs, personal needs, and employee needs. The outcome of decisions could be dependent on whether the leader is task, relation, or change oriented. If a leader is task-oriented, the focus is on the organizational needs and objectives (utilitarian). If the leader is relation-oriented, the focus is on addressing the needs of the employees (Kantian). If the leader is change-oriented, the focus is on achieving the desired change that may result in a good balance between the needs of the organization and the people in the organization. Deming (1986/2000) postulated that ineffective leaders who wanted to transform into effective leaders had to take control of their fears. The following section will examine three forms of leadership known as ethical styles of leadership.

### 3. SERVANT LEADERSHIP

Greenleaf (1904–1990) first coined the term servant-leadership in a 1970 essay titled *The Servant as Leader* (Spears & Lawrence, 2002). In the *Servant Leader*, Robert Greenleaf mentioned that a servant leader is servant first and it begins with the natural feeling of wanting to serve others where conscious choice brings an individual to lead. Spears and Lawrence stated, “At its core, servant leadership is a long term, transformational approach to life and work—in essence, a way of being—that has the potential for creating positive change throughout our society” (2002, p. 4). Servant leadership is one of the newer leadership styles emerging in the 20th century with growing popularity in the 21st century. Research shows that the popularity of servant leadership arose in response to the proliferation of documented unethical behavior in organizations. In the last decade, newspaper headlines and 24-hour television news programs have been conveying information on traditional organizations and leaders demonstrating unethical behavior. This included organizations such as the Enron, WorldCom, and Martha Stewart.

In the 1970s, Robert Greenleaf coined the term *Servant Leader* in an essay titled *The Servant as the leader* (Spears & Lawrence, 2002). Servant leadership was initially perceived by individuals to be a leadership style oriented toward nonprofit organizations such as The Red-Cross, Feed the Children, and other disaster-relief or charitable organizations assisting needy people. However, the Toro Company, the Men’s Warehouse, and ServiceMaster identified servant leadership as the primary style used in their organizations. Servant Leaders differ from traditional leaders because they focus their energies on increasing profitability and market share. Servant leaders hold a belief that the strength of the organization lies in the people rather than complex processes and control mechanisms. Servant leaders avoid personal gain and power to focus their attention on empowerment and autonomy to maximize strengths of their followers. Servant leaders serve the people by providing the necessary guidance and resources to accomplish organizational goals and objectives and the needs of the stakeholders. Servant leaders seek to develop an understanding of people and themselves through self-awareness, emotional intelligence, and the development and enhance of people skills through training and experience. Suggesting relationship-oriented leadership has a positive correlation with employee satisfaction while task-oriented leadership has a negative relationship to employee satisfaction. Sergiovanni (as cited in Tucker, 1994) in defining effective leadership, suggested that all successful leaders must first be a servant (subordinate) to generate knowledge of the task and expectations, gain interpersonal skills, and the abilities to influence people.

A problem that may be immediately arising in the minds of leadership theorists is that effective business practices in an organization includes attainable objectives and goal-driven strategies to increase profitability and long-term survival, where servant leadership may perceive a quasi-laissez-faire style of leadership that may be ineffective throughout the 21st century. Wheatley (2004) postulated that servant leaders need courage to withstand traditional practices based on that are based on subjective nature and contrast with scientific management principles. Spears and Lawrence (2002, p. 59) developed a list of servant leadership capacities that are essential for effective leadership during the new millennium:

- Listening: an improvement in understanding and development of problem solving skills.
- Empathy: respect and appreciate of other’s knowledge and contributions.
- Willingness to change, openness to new ideas, philosophies, and embracement of change.
- Reflection and contemplation: self-exploration and personal awareness.
- Collaboration and consensus: establishing an understanding of the difference between competition and majority vote.

#### **4. STEWARDSHIP**

Davis, Schoorman, and Donaldson (1997), in defining the stewardship theory stated, “The model of man is based on a steward whose behavior is ordered such that pro-organizational, collectivistic behaviors have higher utility than individualistic, self-serving behaviors” (p. 24). The tenant of stewardship theory is that stewardship defaults to pro-organizational behaviors rather than behaviors that embrace personal interests. Another tenant of stewardship theory is the collective effort sought in support of organizational objectives (e.g. profitability and long-term survival). As in the agency theory, an assumption of a need-based contract between the managers and lower leaders at the tactical and operational levels with owners/leaders at the strategic level where all levels of management are striving to maximize opportunities for advancement and growth. From this perspective of the agency theory, stewardship is organizationally driven (Davis, Schoorman, & Donaldson, 1997).

Based on the authors’ perceptions of servant leadership, stewardship, and ethics, a visionary or ethical leader should possess the drive, ambition, interest in establishing values and principles-driven organizations. Servant leaders need to possess the knowledge, skills, and ability to implement an effective, continuous improvement program. The leaders should also demonstrate and communicate a desire to develop an organization strong enough to stand the test of time—an organization built to last (Collins & Porras, 2002). In essence, these leaders should be able to influence a political reform of the organization; Block (1996) constructed nine steps to political reform:

Define the Stewardship Contract: this is a strategy, based on shared values, norms, and organizational and stakeholders’ interests.

Renegotiate Control and Responsibility: this step involves establishing dialogue between bosses, subordinates, and staff groups to define the roles, activities, and responsibilities in each group or area.

Fully Inform People: this step involves establishing adequate communication channels to link all areas of the organizations into double feedback loops sending and receiving information relative to market conditions such as products, services, budgets, and internal activities and changes, etc.

Create a Desired Future: this step involves developing shared visions, goals, and objectives across the organization of a future state desired by all members of the organization.

Training: training is essential in increasing performance, skill levels, and long-term sustainability.

Form Improvement Teams: this step involves creating task forces, quality circles, and various teams designed to facilitate and monitor continuous improvement processes.

Change Management Process: Block defined this step as, “. . . where spiritual concerns become manifest in very concrete ways and the idea of stewardship begins to get institutionalized” (p. 217).

Fit Architecture to Purpose: this step involves redesigning the organizational structure to align with the organizational philosophy, climate and culture, and short-term and long-term goals, objectives, and future planning.

Redesign the Reward System: this step involves changing the compensation system by allowing various units to structure their own pay systems. Under this strategy, people are motivated to commit to a structure of their own design facilitating outcomes with pay.

#### **5. TRANSFORMATIONAL LEADERSHIP**

In researching literature on ethical leadership and ethical environments, the transformational leadership style emerged influenced by research conducted by Burns (1978). Burns in describing transformational

leadership stated, “. . . transforming leadership ultimately becomes moral in that it raises the level of human conduct and ethical aspiration of both leader and led, and, thus it has a transforming effect on both” (p. 20). In leadership literature, Burns (1978) received much of the credit for transformational leadership through his proclaimed literature on political leadership. Burns used the term transforming to describe transformational leadership. Burns (1978) in defining transforming leadership stated, “The transforming leader recognizes and exploits an existing need or demand of a potential follower” (p. 4). Burns added, “The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents” (p. 4).

Moral leadership practices have transformed organizations where emphasis has been placed on fair process, empowerment, and redistribution of power, purpose, and wealth. Tichy and Devanna (1986) studied transformational leadership styles of 12 CEOs employed at top organizations. Their purpose was to investigate how leaders transform organizations from one state to another. Tichy and Devanna found that transformational leaders played significant roles as change agents in the transformation process, and the findings indicated leaders managed change under a three-act process: (a) influencing change through recognition of the need for change, (b) creating a vision conveyed in a mission statement, and (c) institutionalizing the changes into the organizational processes and procedures. One of the strengths of transformational leadership practices is the emphasis on follower needs, values, and morale. A weakness is the focus on charismatic leadership, which can have a negative impact, if the leader, misused the charismatic qualities to create harm or death (Northouse, 2004).

## 6. CONCLUSION

In answering the essay question, what leadership style is more appropriate for the ethical needs of the organization and the workers in the 21st century? The conclusion is that stewardship is task-oriented and more focused on hard systems thinking and organizational objectives. These findings align with Block's (1996) statement that stewardship is more political than servant leadership. Moreover, task-oriented leadership is structural and relationship-oriented leadership is behavioral requiring good interpersonal relationships between the leaders and followers. The stewardship theory is very similar to Taylor's (1911/1997) scientific management method involving structural strategies. A literature review of stewardship articles also indicated that stewardship originated from the act of another person temporarily filling in for an absent leader. This description serves as a plausible explanation for the necessity of using structure—to maintain the current levels of productivity.

Servant leadership attempts to realign the organization with the leaders' moral obligations and ethical practices. Servant leaders may favor the needs of the stakeholders and consumers over those of the organization possibly resulting in lower than average profit margins relative to the industry. Conversely, stewardship attempts to balance the powers/groups in the organization equitably based on organizational needs and requirements for optimal performance. However, organizational needs can lead to owner-influenced decisions transforming shared power to isolated power shared by a few leaders. Transformational leadership is a leadership approach by leaders to appeal to the morality and consciousness of followers to conform to ethical issues and collectively strive to meet organizational objectives and goals (Yukl, 2002). However, the uncertainties associated with charismatic leadership leads to unpredictable outcomes.

This essay revealed that stewardship appears to be utilitarian—for the greatest good of the greatest number—while servant leadership seems to be more Kantian—treat people as ends rather than as a means to an end. Transformational leadership appears to be a balanced form of leadership combining the positive aspects of servant leadership and the organizational driven focus of stewardship. A literature review of leadership research indicated that a universal style of leadership does not exist due to the myriad of variables existing in the external and internal environments of organizations. The final answer concerning what leadership style is more appropriate: servant, stewardship, or transformational leadership to address the ethical needs of the workers and the organizations is unanswered. This essay also indicated the significant impact of the underlying personal virtues of the senior leaders in decision-making and organizing, which would determine whether the organization has high or low ethical standards. Hence, this essay indicated that more research is needed to develop an understanding of

leadership ethics to construct a model for a leadership style of ethics capable of balancing organization, stakeholder, and consumer needs to promote good business and good ethics.

## REFERENCES

- Academy of Management Association (2007). Business ethics. Retrieved June 15, 2007 from <http://home.att.net/~coachthee/Archives/BusinessEthics.html>.
- Boatright, John Raymond. (1997). Ethics and the conduct of business (2<sup>nd</sup> ed.).
- Block, Peter. (1996). Stewardship: Choosing service over self-interest. San Francisco: Berrett-Koehler Publishers.
- Brown, David. (1989). To build anew. Journal of Business Ethics, Vol. 46 Retrieved June 20, 2007 from ProQuest database.
- Burns, James. M. (1978). Leadership. New York, NY: Harper and Row, Publishers.
- Collins, James., & Porras, Jerry. I. (2002). Built to last: Successful habits of visionary companies. HarperBusiness Essentials.
- Davis, James. H., Schoorman, F. David., & Donaldson, Lex. (1997, January). "Toward a stewardship theory of management." Academy of management. The Academy of Management Review. Retrieved on September 2, 2004, from ProQuest Academic Research Library Database.
- Deming, William. E. (1986/2000). "Condensation of the 14 points for management." Out of the Crisis. Cambridge, Mass.: MIT Press. Printed in The Jossey-Bass Reader on Educational Leadership. San Francisco: Jossey-Bass.
- Goleman, David. (1998). Working with emotional intelligence. New York: Bantam Books.
- Hosmer, La Rue. (2003). The ethics of management (4th ed.). Boston: McGraw-Hill
- Maak, Thomas. & Pless, Nicola. (2006) Responsible leadership. New York: Routledge
- Moser, Paul. & Vander Nat, A. (1987), Human knowledge, Oxford University Press.
- Nonaka Ikujiro & Takeuchi, Hirotaka. (1995). The knowledge-creating company. Oxford: Oxford University Press.
- Northouse, Peter. G. (2004). Leadership theory and practice (3<sup>rd</sup> ed.). Thousand Oaks, CA: Sage.
- Ruggiero, Vincent. (2004). "Thinking critically about ethical issues." Retrieved May 21, 2007, from <https://ecampus.phoenix.edu/content/eBookLibrary/content/eReader..>
- Spears, Lawrence. C., & Lawrence, M. (Eds.). (2002). Focus on leadership: Servant-leadership for the 21st Century. New York: John Wiley & Sons, Inc.
- Taylor, Frederick. W. (1911/1997). The principles of scientific management. Dover Publications.
- Tichy, Noel M., & Devanna, Mary Anne. (1986). The transformational leader. John Wiley.
- Tucker, Mary. L. (1994). "Stewardship: Choosing service over self-interest". Academy of Management. The Academy of management Review. Vol. 19(3), 592-596. Retrieved on September 2, 2004, from ProQuest Academic Research Library Database.
- Wheatley, Margaret. (2004, July). "Servant leaders: What has to change now?" Executive Excellence. Vol. 21(7), 15-17. Retrieved on September 2, 2004, from EBSCOhost
- Williams, Linda. (2007). "Promoting ethics in the community". Retrieved May 30, 2007 from <http://www.ethics-twi.org/philosophy/philosophy.htm>.
- Wren, Daniel. (1994) The evolution of management thought. New York: Wiley.
- Yukl, Gary. (2002). Leadership in organizations (5<sup>th</sup> ed.). Prentice-Hall Inc.

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**APPENDIX A**  
**SAMPLE OF ETHIC AWARENESS INVENTORY TOOL**

At times the choices will be difficult, but ***you must select only two answers—one*** most in agreement and one least in agreement with your *personal* ethical philosophy. ***This inventory is not intended to measure your organization's position on ethics or the ethical requirements of your job.*** The purpose is to assist you in examining your own beliefs.

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**The best measure for determining whether a person is “a good person” is:**

	<b>MOST</b>		<b>LEAST</b>
• to examine her/his “bottom line”—the results that are achieved.	<input type="radio"/>		<input type="radio"/>
• to examine her/his overall character.	<input type="radio"/>		<input type="radio"/>
• to examine her/his intent to do what is right on a consistent basis.	<input type="radio"/>		<input type="radio"/>
• to examine her/his actions to determine how she/he decides what is “ethical” for each case.	<input type="radio"/>		<input type="radio"/>

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# WHY EVERY ECONOMICS PROGRAM SHOULD HAVE AT LEAST ONE PLURALIST ECONOMICS COURSE

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## ABSTRACT

*This paper makes a case for including at least one pluralist economics course in every economics degree program. The case is grounded on three main reasons. Firstly, and most importantly, it is argued that well-designed pluralist courses are far superior to orthodox economics courses in providing graduates with a skill set of value to individuals, employers and societies. Secondly, economics majors should graduate with knowledge of the current state of their discipline as a whole and the full range of analytical tools available to them. And thirdly, pluralism is necessary to promote the progress of economics as a science.*

**Keywords:** Pluralism in Economics; Graduate Skills; Human Capital Formation; Innovation; Economic Science.

## 1. INTRODUCTION

Controversy and debate are an integral part of economics, and will continue to be so for the foreseeable future. These debates occur between different positions within the same school of thought, and also, on a grander scale, between the alternative frameworks of different schools. In economics, despite the hopes of many textbooks and economists, we have not yet arrived at a body of settled truths upon which foundation an authoritative superstructure can be elaborated in as much detail as desired.

Nowadays the number of competing schools of economic thought is perhaps greater than ever before. There are roughly up to 15 schools (depending on how they are defined), each claiming to say something significant about economics and the economy, and each offering a critique, either full or partial, of mainstream or Neoclassical economics. But while pluralism may be on the rise, it remains very much in a minority position, as against orthodoxy which is firmly entrenched with huge institutional and professional power. The existence of heterodox schools, however, is to be celebrated, and not regarded as an annoying irritant disturbing the work of genuine practitioners of economics. In this paper, I want to make a case for teaching pluralist economics, and to argue that because heterodoxy provides vital inputs into the creation of better economics and better economists, at least one pluralist course should be included in the core of every undergraduate economics program. Pluralism here embraces both orthodoxy (Neoclassical economics) and the various schools of heterodoxy.

The case presented here rests on three (non-exhaustive) arguments: (i) superior skill formation of benefit to individuals, economies and societies, (ii) the state of modern economics, and (iii) the scientific nature of economics. It is only for the first of these that any originality is claimed.

## 2. THE BACKGROUND

The arguments are based on the experience of teaching a highly successful 300 level pluralist economics course in an Australian university. To appreciate the arguments, it will be helpful if the nature of the one semester course is briefly outlined. Eight major schools of modern economic thought are discussed in lectures – Neoclassical economics, Behavioral economics, Institutionalist economics, Post Keynesian economics, Ecological economics, Austrian economics, Radical Political economy and Feminist economics – along with relevant methodological and philosophical remarks. The seminar program, which is of equal importance, has three main components. The first is the use of instructive games, the most important one being a three hour game (Starpower) played in the second week of the course. This explores the foundations, pre-requisites and (not always beneficial) outcomes of exchange, allows students to experience social mobility and the use/abuse of power, and provides opportunities for the expression of leadership and initiative. The second component is presentations to the class. These are done in small groups and are designed to hone critical thinking and develop communication skills; each

group presents a critical analysis of one of the 'ten principles of economics' advanced in Mankiw's well known textbook (see, for example, Mankiw, 2007, ch.1). The third and most significant component is the debates. From the first lecture, all students are required to belong to a particular school of thought. A team representing one school then debates a team representing another school on the topic of why their school is generally better than the other, and how it might nonetheless be modified to include any valuable insights offered by the other school. These are very lively, enjoyable events that encourage deep learning. Both the lectures and seminar activities contribute to skill formation, directly and indirectly.

### **3. SUPERIOR SKILL FORMATION**

The first argument in favor of including a pluralist course is that it is capable of making a greater contribution to desirable human capital formation. In various reports over an extended period, (Australian) employers have expressed concerns over the type of skills possessed by economics and commerce graduates, these concerns also being echoed in various government reports (see Business Council of Australia, 2006; Department of Education, Training and Youth Affairs, 2000). These bodies seek graduates with (i) discipline-specific knowledge, and (ii) a particular bundle of skills and capacities. However, they have complained for some time that graduates are poorly equipped in relation to the second of these. The desired, but neglected, skill set includes the following – appreciation of holistic standpoints, awareness of different viewpoints and approaches, thinking outside the conventional framework, creativity, abstract thinking, communication and presentation skills (oral and written), interpersonal skills, teamwork, leadership and initiative, independent thinking and research, and familiarity with the knowledge economy. The economic argument behind the calls for these skills is uncomplicated. Innovation is key factor in raising productivity and international competitiveness, and innovation depends on particular types of human capital. Education systems are central to human capital formation, so that if the required skill set is to be fostered in graduates, education systems need to address the situation directly by creating environments which encourage innovative capacities and cultures.

Furthermore, the large literature on the complex notion of creativity (one item in the above list) indicates that the factors underlying the development of creativity are very similar to other items in the desired skill set. These factors include the courage to question received wisdom, the capacity to see things in new ways, openness to non-conformity, stimulating milieus, free communication and discussion, willingness to take risks, and playfulness (see, for example, Cropley, 1999).

In addition to having economic payoffs, it is clear that the above skill set also benefits individuals in developing their potentials, and society in having more resources that can be directed towards addressing current issues and problems. Given, then, that the skill set is highly desirable and that education has a key role to play in its development, two questions arise. Why is university education not yet rising to the challenge? And what can be done to remedy this?

My answer to the first question, at least in terms of economics and commerce, is as follows. Little progress has been made because current teaching is heavily focused on content rather than skills, because the taught content is very much focused on mainstream or orthodox thinking, and because orthodoxy is strongly constrained in the range and nature of the skills it can nurture. This is not to say that the issue of graduate skills and attributes has not been addressed (Hansen, 2001), but that the discussion has been rather narrowly conceived (O'Donnell, 2004). My answer to the second question is that pluralism possesses inherent advantages in the area of skill formation and that a well-designed pluralist course easily outperforms a well-designed orthodox course in this context. We should therefore exploit these advantages in constructing undergraduate programs. One way is to offer pluralist courses which immerse students, as fully as possible, in skill-demonstrating and skill-inducing environments, and to do this through a discipline-based course which models these skills, and provides experiential learning of them, within the context of their major program. If the above contentions are true (or at least partly true), this is a powerful reason for including at least one pluralist economics course within the core of every economics program.

Why is pluralism naturally superior to orthodoxy in the formation of the desired skill set? Essentially because it deals with multiple frameworks while orthodoxy deals with only one. This gives pluralism the

necessary parameters to establish an environment in which the skills can be fostered to a much higher degree. By contrast, orthodoxy is quite limited. It can foster some of the skills but often not to the same degree, while the remaining skills lie beyond its reach because of the restriction of working with a single framework. The inherent advantage of pluralism is further strengthened if educational activities with an element of fun are synergistically incorporated into the course. Again, pluralism is able to do this more effectively than orthodoxy.

Take, for example, the first four desired skills listed above, where pluralism turns out to surpass orthodoxy by a very large margin. 'The appreciation of holistic standpoints' is an integral component of pluralism, whereas it is essentially absent from orthodoxy. 'Awareness of different viewpoints and approaches' is likewise strongly fostered by pluralism but can only be weakly promoted by orthodoxy because it restricts itself to differences within a single approach. 'Thinking outside the conventional framework' is strongly modeled by pluralism but again virtually absent from orthodoxy. And 'creativity' is showcased by pluralism far more effectively than it is by orthodoxy. However, for some skills on the list, orthodoxy can perform on equal terms with pluralism. This applies to 'abstract thinking', 'teamwork' and 'knowledge economy skills', for example. But for the remaining skills, a well-designed pluralist course again outperforms orthodoxy although not by as large a margin as with the first four. These skills ('communication and presentation skills', 'interpersonal skills', 'leadership and initiative' and 'independent thinking') can be facilitated to a greater extent by a well-designed pluralist course largely because the activities built into the course have a more fertile and receptive environment in which to sow their seeds. Greater diversity and more interesting challenges create better debates (communication and presentation skills; independent thinking), constructive feedback from the class regarding different viewpoints encourages interpersonal and good conversation skills, while the presentations and the Starpower game allow initiative and leadership to be demonstrated and discussed.

A similar dominance of pluralism over orthodoxy occurs in relation to the cluster of factors enhancing creativity. For each of the seven listed factors (courage to question received wisdom, the capacity to see things in new ways, openness to non-conformity, stimulating milieus, free communication and discussion, willingness to take risks, and playfulness), pluralism is capable of performing very strongly while orthodoxy can only reach moderate to low levels of performance. As regards playfulness, for example, pluralism can include games which are critical of any framework without fear of undermining its own content, and can allow students to play with ideas without fear of contravening predetermined methodological requirements.

Considering the package of skills as a whole, pluralism emerges as having significantly superior capacities. Orthodox courses can certainly foster a minority of the listed skills to the same degree as pluralism but, for the majority of skills, pluralism is far and away the stronger performer.

#### **4. THE STATE OF MODERN ECONOMICS**

Physics majors graduate with a knowledge of Newtonian mechanics, Einstein's relativity theory, quantum mechanics and much else. As a result, their analytical toolbox is filled with a variety of tools suitable for different tasks and different domains of application. As physicists, they graduate with a broad knowledge of the state of modern physics, and would be regarded as quite deficient if they were trained solely in one of these domains.

Should it not be the same with economics? Shouldn't economics majors graduate with a broad knowledge of the state of the economics discipline as it currently stands? My argument is that they should and that they need, as much as physicists or any other major, to know about the current state of their subject as a whole. This means economics majors need exposure to all, or at least a reasonable selection of, the main non-Neoclassical schools of modern economic thought. And the best way to do that is not through a brief or piecemeal treatment inside a module within a standard economics course, but through a standalone pluralist course devoted entirely to discussing all the main schools (including orthodoxy).

The advantages to graduates are several. Firstly, it is a mind-opening and mind-deepening experience, where students' horizons are greatly expanded and their knowledge of economics deepened, including their knowledge of Neoclassical economics. The best way to improve the understanding of any framework (Neoclassicism, for example) is to provide informed comparisons and contrasts with alternative frameworks. Secondly, students emerge with a larger and more varied toolkit for the analysis of problems because each framework provides its own tools of analysis, some of which will be more suitable, or more illuminating, in particular cases than others. And thirdly, if it is always better in any sphere of rational decision making to be fully rather than partially informed, then students need to be aware of the different forms of analyses that are available to them.

## **5. ECONOMICS AS A SCIENCE**

Is economics a science? Most economists would probably answer in the affirmative in one sense or another. For the sake of the present argument, let us assume that economics is a science in the same general sense that other fields are sciences, namely, the application of reasoned argument and empirical investigation to the study of certain phenomena. If this is correct, what implications follow for economics and the teaching of economics?

In broad terms, the history of science presents all sciences as making progress through periods of upheaval and continuity. The period of upheaval is generated by a new way of seeing or interpreting, while the period of continuity seeks to elaborate the new framework and establish its relations with the old until it, too, is overthrown by a new upheaval (for a classic account, see Kuhn, 1962). Science is thus always open-ended and never closed or finished, always seeking innovations and new discoveries to improve our understanding of, and capacities to change, the world. The basic lessons are that no theory or framework can ever claim scientific finality, and that dogmatism is antithetical to science. This is not to be resisted, but something to be accepted and welcomed as an essential part of the scientific enterprise.

What, then, of economics? Its upheavals are well known – Smith's pioneering work of 1776 which broke with Mercantilism, the Marginal Revolution of the 1870s which launched Neoclassical economics, Keynes's revolution of the 1930s which attacked orthodoxy and inaugurated macroeconomics, and the Monetarist counter-revolution of the 1960s followed by Rational Expectations in the 1980s which targeted Keynesianism. Some mainstream economists tend to portray this history as the emergence of a single correct framework for doing economics, with all upheavals being either errors leading to dead-ends, or useful elaborations or qualifications which leave the fundamentally correct framework intact. But whatever view one takes, it is impossible to believe that there will be no future clashes between different schools of thought and that some of these may benefit economics significantly.

Since, as with other sciences, the health of economics is promoted by openness, free discussion, acceptance of alternatives, and the possibility of radical changes, these particular scientific values need to be fully incorporated in the education of graduates. To combat dogmatism and 'fundamentalism', graduates need to emerge with a strong appreciation of the nature of science and the forces driving progress in knowledge. It is not sufficient to adopt a very narrow version of this approach which focuses either on debates and changes within a single framework (typically that of orthodoxy), or on external challenges to this framework which are merely reinterpreted through the lenses provided by the orthodox framework. What is needed is an approach which allows all frameworks to speak with their own voices, so that their challenges can be fully understood in their own terms and not distorted by recasting them from another viewpoint. For this, a pluralist course is an obvious vehicle because it embraces all frameworks and accepts alternative ways of thinking about economic phenomena.

Such proposals often make orthodox economists uncomfortable. Perhaps their doubts may be assuaged by two of their own standard arguments. The first is that in making rational choices, agents need to have full knowledge of all the alternatives available before they can attain their objectives. Because orthodox rational choice theory claims generality, the same reasoning applies to choosing a framework for analyzing any given theoretical or policy problem. Different schools offer different approaches and toolboxes, and the rational decision-maker needs to be able to choose the best framework or best set of tools for the job. To insist that there is only one correct framework or one correct type of tool for every

task is a bit like saying that houses must only be built by carpenters and that carpenters must only use hammers and nails. The second argument concerns the virtues of competition. Competitive markets are usually presented as the best means of allocating resources and achieving socially optimal outcomes, where competition occurs on a level playing field with no bias (or market power) favoring any competitor. If we apply the same principle to the contest of ideas, not just within a single framework but across all frameworks, and allow competition to occur on equal terms and as an ongoing process over time, then all sorts of outcomes are possible. One mode of analysis might emerge as superior for one class of problems or set of conditions and as inferior for others, for example, or greatest insight into a problem may be gained from combining the insights of two or more schools into a more holistic view. In this way, the best outcomes are given an opportunity to emerge and economic science advances.

## 6. CONCLUSION

If we want higher standards of living, we need to increase productivity. If we want this done in ecologically sustainable ways, we need innovation, creativity and leadership in resource use. If we want successful, vibrant, enquiring individuals, we need them to be educated in ways that foster these attributes. And if we want to address major problems at the levels of society and the globe, we need creative constructive people unconstrained by conventional wisdom and willing to develop initiatives. In all cases, well-designed pluralist courses with skill development as a conscious objective provide a superior environment for this kind of human capital formation as compared to orthodox courses.

The suggestion made here is not to replace the standard orthodox economics curriculum with pluralism. Graduates obviously need to be trained in Neoclassical economics in order to understand the ideas most commonly used in workplaces and policy discussion across the world, and to participate in these conversations. The intention is rather to supplement the standard fare with one or more well-designed courses in pluralist economics. Such supplementation will help create superior economics graduates (including those who use the Neoclassical framework), promote scientific progress within economics, and equip students with a skill set that creates value for the individuals themselves, their employers and the societies in which they live.

## REFERENCES

- Business Council of Australia (2006) *New Concepts in Innovation, The Keys to a Growing Australia*, [www.bca.com.au](http://www.bca.com.au)
- Cropley A.J. (1999) 'Education' in Runco and Pritzker (1999) vol.1.
- Department of Education, Training and Youth affairs (2000) *Employer Satisfaction with Graduate Skills*, ACNielsen Research Report, Australian Government.
- Hansen W.L. (2001) 'Expected Proficiencies for Undergraduate Economics Majors', *Journal of Economic Education*, vol. 32, no. 3, Summer, 231-42.
- Kuhn T.S. (1962) *The Structure of Scientific Revolutions*, University of Chicago Press.
- Mankiw, N.G. (2007) *Principles of Economics*, 4<sup>th</sup> edition, Thomson Learning.
- O'Donnell, R.M. (2004) 'What Kind of Economic Graduates Do We Want? A Constructive Critique of Hansen's Proficiencies Approach.' *Australasian Journal of Economics Education*, 1(1). 41 - 60.
- Runco M.A. and Pritzker S.R. (1999) (eds) *Encyclopedia of Creativity*, 2 vols, Academic Press.

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## REFLECTIONS ON CONTENT ANALYSIS OF INDIAN MAGAZINE ADVERTISEMENTS

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### ABSTRACT

*This study used content analysis to compare information cues and appearance of advertisements in popular Indian magazines over a decade, between 1995 and 2005, in India. Four categories of English language magazines consisting of business, entertainment, general interest, and women's were selected based on their popularity and prestige, circulation size, and geographical distribution. A total of 248 magazine advertisements, 113 in 1995 and 135 in 2005 were analyzed. Mean information cues (created by summing the 14 criteria indicated a significant increase in information cue from 1995 ( $2.02 \pm 0.83$ ) to 2005 ( $5.08 \pm 1.74$ ). The majority of the advertisements targeted to domestic products and ads were generally in color for a greater visual appeal. A significant increase in information cue was noted by product category and magazine types with automobile industry and entertainment magazines using the highest number of information cues in 2005.*

### 1. INTRODUCTION

Dramatic changes have taken place in India since 1990 when economic liberalization became the mantra of the government of India. The government policy makers shifted their rigid five year plan to a grand economic development program known as economic liberalization from the ironclad government control. The principle behind this massive shift was to legitimize the market mechanism in India, which has transformed the slow growth planned economy into roaring privatized economy in almost all industrial sectors of the country. In this developmental process, advertising has played a vital role in India by creating demand for goods and services and raising the living standards for millions of Indian consumers. During the past decade a substantial amount of advertising budgets have been utilized on advertisements of capital goods, consumer goods and services and these expenses are directed toward the growing middle class population of India. India has the world's largest middle class, estimated at 300 million consumers, a number almost equal to the population the U.S. The rising influence of this growing middle class and the consequent demand for world class consumer products has necessitated the use of the mainstream media such as newspaper, television and magazines to reach these elite middle class consumers. English language advertising in India is among the most creative in the world. Most television and magazine advertising is glitzy, smart, and tailored for the middle classes. The English language magazine has wide circulations amongst the upper and middle class Indians throughout India. India has a diverse and growing number of newspapers and magazines. Since 1991, the increase of business and financial publications in English language has paralleled the economic reform program.

Advertising has long been a topic of public debate. In evaluating the effectiveness of advertising and finding ways to improve it, it is necessary to content analyze Indian advertisements. The review of literature indicates a number of content analysis studies have been done comparing the U.S. with Australia, Japan, U.K., Saudi Arabia, India as well as other developed and emerging countries. Such studies have considered one time period from which advertisements were drawn and content analyzed. As of date, no comparative content analysis study has juxtaposed the magazine advertisements of two different time periods against each other, in an attempt to account for socio-economic change via consumerism. Rather, it is assumed that adequate knowledge of socio-economic changes have been integrated and depicted in these magazine advertisements. With a rise in globalization, the exponential growth of advertising makes India an ideal model in which to make such culturally salient issues palpable. This necessitates an analysis of the change, with respect to information content of Indian magazine advertisements from the beginning of economic liberalization in 1990 to the current state of thriving economic reform a decade or so later in 2005.

## 2. OBJECTIVES

The study attempts to investigate and compare the information contents of magazine advertisements appearing in a number of the most popular Indian magazines during 1995 and 2005. Specific objectives of this paper include:

1. How informative were Indian magazine advertisements during 1990 and 2005?
2. What advertising appeals were used most often in India in 1990 and 2005?

## 3. METHODOLOGY

Content analysis method has been used widely to investigate how much information is available in various advertisements, so customers may make better purchasing decisions (Al-Deen 1991, Al-Olayan and Karande 2000, Dowling 1980, Harmon, Razzouk and Stern 1983, Hong, Muderrisoglu and Zinkhan 1987, Kassarian 1977, Resnik and Stern 1977, Rice and Lu 1988, Stern, Krugman, and Resnik 1983, Madden, Caballero and Matsukubo 1986, Rajaratnam, Hunt and Madden 1995). Though there are many methods available to conduct content analysis, most studies have used the Resnik and Stern (1977). Resnik and Stern's classification determines the level of advertising information based on the 14 criteria that represent categories of information potentially useful to the consumer in purchase decision making. The criteria that were used in this study include: (1) price, (2) quality, (3) performance, (4) contents or components, (5) availability, (6) special offer, (7) packaging, (8) guarantee, (9) safety, (10) independent research, (11) company sponsored research, (12) new ideas, (13) taste, and (14) nutrition. An advertisement needs to communicate only one of these 14 cues in order to be considered informative. Due to the established baseline and tested reliability of Resnik and Stern method in other studies, the same classification method was used in this study of Indian magazine advertisements. Four categories of English language magazines consisting of business, entertainment, general interest, and women's were selected based on their popularity and prestige, circulation size, and geographical distribution. Table 1 presents the frequency distribution of 248 advertisements from above magazines that were content analyzed to determine the difference with regard to information contents. The content analysis was performed jointly by two trained native experts in the field of marketing.

## 4. RESULTS

A total of 248 magazine advertisements, 113 in 1995 and 135 in 2005 were analyzed for this study. The majority of the magazines examined for this analysis include: women's magazines (31%) in 1995 and entertainment magazine (34%) in 2005. (Table 1). Mean information cues (created by summing the 14 criteria listed above) was  $2.02 \pm 0.83$  and  $5.08 \pm 1.74$  for 1995 and 2005 (Table 2); there was a significant increase in information cue in magazine advertisements over a decade ( $t=17.12$ ,  $p<.001$ ). Although the majority (91%) of the advertisements were in color in 1995, all the advertisements (100%) were in color in 2005 indicating the use of color for a greater visual appeal. The majority of the advertisements were targeted for domestic products (63.7% in 1995 and 56.3% in 2005) rather than for foreign products.

As shown Table 2, in general, there was significant increase in the number of information cues per ad between 1995 and 2005. Magazine ads in 2005 presented an average 5.09 cues versus 2.02 cues in 1995. However, all 1995 and 2005 magazine ads analyzed satisfied at least one criterion for informative content. Analysis of individual cues in both time periods showed that the majority of magazines in 1995 had 1-3 information cues as compared to 1-7 in 2007. Hence advertisements in 2005 registered a substantial increase in information content. Table 3 shows a total of 228 and 687 informational cues were communicated respectively in 1995 and 2005. Quality, performance, availability and contents were most often used cues among sampled ads from 1995. In contrast, the same four cues were found in 2005 ads but ranked differently with quality, availability, performance and contents as the most important cues used in Indian magazine advertisements. This high level of information cues found in Indian advertisements may be attributed to the low socio-economic status of a large percent of the Indian consumers in addition to a conservative attitude that results in the search for detailed information to make their buying decisions. However, guarantee and nutritional value were given low priority for consumer appeal in 1995 and independent research and special offers were given lowest priority among Indian magazine advertisements in 2005.

Further analysis also indicated differences between product categories with regards to number of advertising cues during the two sampled years. As shown in Table 4, the product categories that provided higher information content during 1995 were electronics, automobile, appliance and industrial goods. In contrast, 2005 advertisements indicated automobile, food, appliance, and personal care products have higher percentage of information cues than 1995. Significant improvement in information cues were noted across all product category ( $p < .001$ )

A similar trend in information cues were also noted by type of magazines in a 10 year period. Table 5 shows a comparison of average number of cues per ad by magazine type between 1995 and 2005. Significant increase was noted in all four magazine categories. The range of information cues by magazines in 1995 was much higher than those presented in 2005; sampled magazine ads of 2005 had greater number of cues per ad than 1995; entertainment magazines had the lowest number of information cues (mean=1.68) and Women magazines the highest number of information cues (mean = 2.50) in 1995. A reversing of the trend was noted in 2005 with entertainment magazines providing the highest number of information cues (mean = 5.50) and general interest magazines having the lowest number of information cues (mean = 4.80). In general, advertisements for both domestic and foreign products increased the information cues for consumer appeal over the decade. Although advertisements geared towards foreign products had higher number of information cues in both years, it did not attain statistical significance (1995 mean information cue for foreign product= 2.19 & domestic products = 1.91;  $t=1.72$ ,  $p=.08$ ; 2005 mean information cue for foreign product= 5.27 & domestic products = 4.94;  $p=.287$ ),

**TABLE 1: FREQUENCIES OF MAGAZINE CATEGORIES BY YEAR**

Magazine Categories	1995 (n = 113) (%)	2005 (n = 135) (%)
Business	22.00	22.22
Entertainment	20.40	34.10
General Interest	26.60	27.40
Women	31.00	16.30

**TABLE 2: FREQUENCIES OF INFORMATION CUES APPEARING IN 1995 AND 2005 ADS**

Number of Cues	1995		2005	
	# of Ads	%	# of Ads	%
1	31	27	2	1
2	53	47	8	6
3	27	24	16	12
4	2	2	23	17
5	0	0	29	21
6	0	0	30	22
7	0	0	27	20
Average Number of cues	2.02	5.09		



**TABLE 3: FREQUENCY OF APPEARANCE OF 14 CRITERIA**

<u>1995</u>				<u>2005</u>			
Rank	Criteria	No	%	Rank	Criteria	No	%
1	Quality		70	1	Quality		95
2	Performance		50	2	Availability		74
3	Availability		24	3	Performance		73
3	Contents		24	4	Contents		70
4	Taste		8	5	Package/Shape		49
5	Package/Shape		7	6	Guarantee		39
6	Price		6	7	Safety		26
7	Safety		4	8	Comp.Research		21
7	New Ideas		4	9	New Ideas		15
8	Special Offers		3	10	Price		12
9	Comp.Research		2	11	Taste		10
10	Ind.research		1	11	Nutrition		10
11	Guarantee		0	11	Ind. Research		10
12	Nutrition		0	12	Special Offers		6

**TABLE 4: MEAN VALUES OF INFORMATION CUES BY PRODUCT TYPE IN 1995 AND 2005**

Product Type	1995	2005	P-Value
Appliance	2.07	5.00	<.001
Clothing	1.93	3.45	<.001
Electronics	2.59	2.00	<.001
Food	1.42	5.50	<.001
Industrial Goods	2.12	4.46	<.001
Personal Care	1.80	4.91	<.001
Services	1.82	2.00	<.001
Automobile	2.41	7.50	<.001

**TABLE 5: MEAN VALUES OF INFORMATION CUES BY MAGAZINE TYPE**

Magazine Type	1995	2005	P-Value
Business	2.23	4.97	<.001
Entertainment	1.68	5.50	<.001
General Interest	1.91	4.80	<.001
Women	2.50	5.40	<.001

## REFERENCES

- Al-Olayan, Fahad S., and Kiran Karande, "A Content Analysis of Magazine Advertisements from the United States and the Arab World", *Journal of Advertising*, Vol. 29(3), 2000, 69-83.
- Al-Deen, Hana S. Noor, "Literacy and Information Content of Magazine Advertising: USA Versus Saudi Arabia", *International Journal of Advertising*, Vol. 10, 1991, 251-257.

- Dowling, Graham R., "Information Content in U.S. Australian Television Advertising", *Journal of Marketing*, Vol. 44 (4), 1980, 34-37.
- Harmon, R.R., Nabil Razzouk, and Bruce Stern, "The Information Content of Comparative Magazine Advertisements", *Journal of Advertising*, Vol.12 (4), 1983, 10-19.
- Hong, Jae, W., Aydyn Muderrisoglu and George Zinkhan, "Cultural Differences and Advertising Expression: A Comparative Content Analysis of Japanese and U.S. Magazine Advertising", *Journal of Advertising*, 16 (1), 1987, 55-62.
- Kassarjian, H., "Content Analysis in Consumer Research", *Journal of Consumer Research*, Vol. 4(1), 1977, 8-18.
- Madden, C.S., Caballero, M.J., and Matsukubo S., "Analysis of Information Content in U.S. Japanese Magazine Advertising", *Journal of Advertising*, Vol. 15, (3), 1986, 38-45.
- Rajaratnam, D., James B. Hunt and Charles S. Madden, "Content Analysis of U.S. Indian Magazine Advertising," *Journal of International Consumer Marketing*, Vol. 8(1), 1995, 93-109.
- Resnik, A. and Stern B, "An Analysis of Information Content in Television Advertising", *Journal of Marketing*, Vol. 41(1), 1977, 50-53.
- Rice, Marshall D. and Zaiming Lu, "A Content Analysis of Chinese Magazine Advertisements", *Journal of Advertising*, Vol. 17(4), 1988, 43-48.
- Stern, BruceDean Krugman and Alan Resnik, "Magazine Advertising: An Analysis of it's Information Content", *Journal of Advertising Research*, Vol. 21 (2), 1981, 39-44.

## THE EMPIRICAL INSIGHTS ON THE PROBABILITY OF WINNING: AN EVIDENCE FROM THE NATIONAL BASKETBALL ASSOCIATION (NBA)

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### ABSTRACT

*In the National Basketball Association (NBA), General Managers continually look to find a “winning formula”. This paper examines the key determinants of winning proportion in the National Basketball Association by using ‘General-to-Specific’ regression analysis with NBA season data sets (2003-2006). The empirical findings show that the most successful factor that contributes to winning is having an All-Defensive 1st Team member. Other factors such as the Coach of the Year and having the league’s top rebounder play an important part in winning. Surprisingly, some variables considered vital to winning are in fact insignificant factors towards team success. The highest spending team is not always the best team. In addition, the phrase, “Offense wins games, defense wins championships,” is not supported by the empirical tests. In fact, offense and defense appear to have similar effects on winning with neither one being more important than the other is.*

**Keywords:** General-to-Specific Model Selection, Sports Management, NBA Winning Proportion

### 1. INTRODUCTION

While the National Football League (NFL) and Major League Baseball (MLB) have a revenue sharing system that helps many of the small market franchises in the leagues, because of its absence in the National Basketball Association (NBA), it should mainly rely on ticket sales that relates to other sources of revenue. Simply, winning more games and championships bring higher attendance rates as well as an increase in team revenues from concession and merchandise sales, sponsorships, and others in professional sports. In other words, professional franchises can increase attendance rates through winning more games and it assists in increasing sponsorship, media revenue, and merchandise and concession sales, and then increased revenues are sure to follow.

Even though MLB has a policy like a luxury tax to keep a competitive balance among the teams and to help small market teams, there is still an imbalance in terms of payroll to buy the best and most marketable players in the league. For example, the New York Yankee’s payroll dwarfs all other teams. However, the Yankees have won more World Series titles, 26, than any other team. Due to their past success, the Yankees generate more money than any other team in baseball. To the victors, go the spoils. Many believe those who spend more tend to win more. Our research results will help shed light on that school of thought. Interestingly, the Yankees have not won the World Series since 2000.

As stated earlier, successful teams pave the way to big paydays for owners. This paper focuses on what contributes to winning in the NBA regular season. Many of the NBA’s richest owners have the most successful teams. As will be shown though, high spending does not always lead to high win totals. Given this importance in the winning proportion of professional team sports in general, this paper examines the relationship between the winning proportion and various economic and NBA specific factors.

So what does contribute to a successful team? One could say simply, “It’s obviously the team with the best players.” Is that always true though? As proven each year in the NCAA Tournament, the perceived “best” team does not always win. When teams struggle, many fans blame the coach, not the players for the team’s failures. Is it always the coach’s fault? How much does a coach actually contribute to winning? It seems like each year a new stadium is being built somewhere in professional sports. Does having a new stadium that causes an increase in attendance really matter? If a team sells out at its home games, does it affect their performance and success rate? This paper investigates all of these questions and more. Most importantly, however, we will attempt to find the “winning formula”. It may be impossible to find a surefire route to winning, but some valuable information may be learned along the way. What is

the most important contributing factor to winning? What factors are overrated? What factors are underrated?

The rest of the paper organizes into the following sections: Literature Review, Empirical Framework and Data, Empirical Results and Conclusion.

## 2. LITERATURE REVIEW

Past research on winning in the NBA's regular season is not typically found. In most cases, studies are only conducted to find playoff success. However, teams cannot obtain a playoff seed if not for their success throughout the regular season. In "Blueprint for an NBA Championship Team", Dennis Gallagher (2006) examines the players on each of the last 49 NBA championship teams. Mainly, his examination is a focus on what type of individual players an NBA championship teams has. Gallagher looks at the preceding NBA regular season award winners and league leaders to compare their individual success to their respective team's success in the playoffs that season. The awards include MVP, league scoring leader, All-NBA 1st Team members, All-Defensive 1st Team members, and other individual awards and leaders the NBA honors each year. His findings favor NBA teams with All-NBA 1st Team and All-Defensive 1st Team players. Gallagher's results are given in the form of percentages. For example, 100% of the teams with the current MVP made the playoffs and advanced to the second round. However, Gallagher's research only deals with NBA championship teams and those who make it to the playoffs. Therefore, it ignores contributing factors to success in the regular season. Regular season success and its causes are ignored in past research.

A study performed by Funk, Ridinger and Moorman (2004) shows sports fans display antecedents of involvement that represented four higher order facets of involvement: attraction, self-expression, centrality of lifestyle, and risk. This is an important observation and one that would be of interest to one's managerial understanding of sports consumers. Through the combination of the Funk, Ridinger, and Moorman study and this paper, antecedents of involvement can measure fans that follow winning and non-winning teams. Analysis can now see whether the antecedents vary between winning and non-winning fans. If there is a significant difference in behavior between fans following winning and non-winning teams, managers can apply their team's success to consumer behavior. Through this paper's model, managers can predict sports consumer's behaviors based on our model that can predict win.

## 3. EMPIRICAL FRAMEWORK AND DATA

Following the literature that examines the determinants of winning proportion in NBA, the generic estimation equation for dependent variable, winning proportion (WIN), depicted in Equation (1): is

$$WIN = f(MVP, SIXM, DPOY, TSCOR, TPASS, TREB, TBLK, ROY, SALARY, ASMVP, COY, ATTEN, PEXPER, AGE, ANOT, ADOT, OEFFT, DEFFT) + \varepsilon \quad (1)$$

When the dependent variable, WIN, is a value of .500 in WIN, it would represent a 41-41 regular season record since an NBA season has 82 games. Table 1 defines each of the variables and gives the expected *a priori* sign. The data compiled includes all data from the 2003 season to 2006 season. Therefore, the data is pooled cross-section data including 116 observations. Most of data is from the two websites, [www.databaseBasketball.com](http://www.databaseBasketball.com) and [www.82games.com](http://www.82games.com). Player and team salaries in the NBA are from David DuPree.

The final form of model specifications based upon the general functional form, equation (1), was obtained from 'general-to-specific' specification search, which was popularized particularly by David Hendry (Hendry, 1995; Mizon, 1995; Hendry, 1993; Hendry and Mizon, 1990). Hendry and Krolzig (2001) recommended the use of multiple search paths in the process of moving from a Generalized Unrestricted Model (GUM) to a parsimonious specification. The reason for this recommendation is to avoid the risk of deleting an important variable that should ideally be retained in the final specification along any single search path and to minimize the risk of retaining as proxies for the missing variable with the result that the

final model is overparameterised. In addition, this approach is ideally suited to the analysis in sports-oriented functions because the underlying theory is sufficiently loose to admit a wide range of candidate regressors (Owen and Weatherston, 2002). Therefore, our final form of each team in the generic equation (1) is determined by parsimony, satisfactory performance against diagnostic tests incorporated with Schwarz criterion.

The independent variables that are used for this analysis attempt to cover a variety of possible aspects that may or may not play an important part in winning. In the original model, analysis is done on each variable thought to contribute to team performance. After finalizing the model, some variables conclude there is no effect on winning. In deciding which variables to select, past literature review and researchers discretion is applied.

Many of the independent variables measure individual player performance such as MVP, TSCOR, ADOT, and others. These variables allow analysis of individual performance and its correlation to team success. Other variables like PEXPER, AGE, and OEFFT, look to measure winning from a team perspective. In other words, how does the composition of the team and its efficiency effect winning? Independent variables for which individual players have no control over such as SALARY and ATTEN are also included. By including these variables, analysis looks at the effect owners (SALARY) and fans (ATTEN) have on team success. With this many variables to be used, it is hoped a combination of individual, team, fan, and owner controlled variables will result in a more accurate model which encompasses all possible reasons teams are or are not successful in a winning sense.

#### 4. EMPIRICAL RESULTS

We specify the final model by using various diagnostic test statistics on whether each equation passes the test for first-order serial correlation, functional form misspecification, and non-normality and heteroskedasticity of residuals. Each test statistic was evaluated at the 5% significance level. In addition, we use the Schwarz criterion to select the final model. Table 2 depicts the estimation results on the generic model and the final specified model through the 'general-to-specific' technique. The tests reported constitute residual tests and stability tests on the estimated coefficients, including a Lagrange multiplier (LM) test statistics for first order serial correlation; ARCH, an LM statistics of testing first order autocorrelated squared residuals with the null of no autoregressive conditional heteroscedasticity (Engle, 1982); Jarque-Bera statistic for testing normality; and RESET, the regression specification test proposed by Ramsey (1969), which tests the null of correct specification against the alternative that the residuals are correlated with powers of the fitted values of the regressand.

As might be expected in such a generously parameterized generic model, GUM, many of the coefficients are not statistically significant even though the General Unrestricted Model (GUM) passes the test for first-order serial correlation, functional form misspecification and heteroskedasticity of residuals. *TREB*, *COY*, *ADOT*, *DEFT* and *OEFFT* are the variables with coefficients significant at the 5% level and *SALARY* is statistically significant but almost zero. The signs of the statistically significant coefficients are consistent *a priori* expectations except for *TREB* and *PEXPER* among the significant coefficients.

The final specific model obtained by applying conservative diagnostic tests we report in TABLE 2. The specification of the final models is categorized into three different periods, 2003-2004 season, 2005-2006 season and the entire data set. Not surprisingly, the final form includes fewer variables and all the estimated coefficients are significant at 5% level. The variables selected in the final form for the three different periods include *TREB*, *COY*, *ADOT*, *DEFFT*, and *OEFFT*.

Considering the number of games in an NBA season, 82, each estimated coefficient in the final form can be used to figure out the degree of boosting the winning proportion. The All-Defensive 1st Team member

**TABLE 1: DESCRIPTION OF THE VARIABLES**

Variables	Description	Expected Sign
<i>MVP</i>	Most Valuable Player Dummy variable with 1=Yes 0=No	Positive
<i>SIXM</i>	Sixth Man of the Year Dummy variable with 1=Yes 0=No	Positive
<i>DPOY</i>	Defensive Player of the Year Dummy variable with 1=Yes 0=No	Positive
<i>TSCOR</i>	League's Top Scorer Dummy variable with 1=Yes 0=No	Positive
<i>TPASS</i>	League's Top Assister Dummy variable with 1=Yes 0=No	Positive
<i>TREB</i>	League's Top Rebounder Dummy variable with 1=Yes 0=No	Positive
<i>TBLK</i>	League's Top Shot Blocker Dummy variable with 1=Yes 0=No	Positive
<i>ROY</i>	Rookie of the Year Dummy variable with 1=Yes 0=No	Positive
<i>SALARY</i>	Team Salary	Positive
<i>COY</i>	Coach of the Year Dummy variable with 1=Yes 0=No	Positive
<i>ATTEN</i>	Total Home Attendance	Positive
<i>PEXPER</i>	Average Player Experience	Positive
<i>AGE</i>	Team's Average Age	Negative
<i>ANOT</i>	All-NBA 1st team member Dummy variable with 1=Yes 0=No	Positive
<i>ADOT</i>	All-Defense 1st team member Dummy variable with 1=Yes 0=No	Positive
<i>OEFFT</i>	Offensive Team Efficiency	Positive
<i>DEFFT</i>	Defensive Team Efficiency	Negative

Note: Efficiency is found by the formula  $((\text{points} + \text{rebounds} + \text{steals} + \text{assists} + \text{blocks}) - ((\text{field goals attempted} - \text{field goals made}) + (\text{free throws attempted} - \text{free throws made}) + \text{turnovers}))/\text{games played}$ . An efficiency rating of 100 per game is the basis for calculation in the model. The rating of 100 refers to the NBA average for team efficiency both offensively and defensively. For example, if the OEFFT coefficient is 0.054, win will increase by 0.054 if the OEFFT is 101. Simply put, to find the amount of change in win subtract 100 from the OEFFT or DEFFT used. The difference found multiplied by the OEFFT or DEFFT coefficient found in the final model. Therefore, teams desire a high offensive efficiency, above 100, and a low defensive efficiency rating, below 100.

(*ADOT*) consistently has the largest positive affect on the team winning, implying that the win total was increased by 5.6 games for the 2003-2004 seasons and 6.3 games for the 2005-2006 seasons. Overall, in the final model All-Defensive 1<sup>st</sup> Team Members added 5.8 wins per season. The *COY* coefficient equals 0.016 for the 2003-2004 seasons and increases to 0.084 the following two seasons. Once again, this is a large positive coefficient. The Coach of the Year (*COY*) adds 1.31 wins for the 2003-2004 seasons but it adds almost 7 winning games the following two seasons. In the final model, the Coach of the Year adds 4.26 wins per season. This shows that good coaching, along with good players, does play a large part in team success. The most surprising positive coefficient is *TREB* (Top Rebounder). This coefficient plays a larger role in team success than expected. In fact, in the 2003-04 seasons the league leading rebounder adds 3.11 wins. The following two seasons the league's leading rebounder adds an impressive 7.2 wins. In the final specific model, the league's leading rebounder adds 5.49 wins, the second largest positive coefficient found. Interestingly, the *MVP* (Most Valuable Player) coefficient is found to not significantly impact teams win totals. This suggests the Most Valuable Player award is given to the best player each year, not the player who is most valuable to team success. Also, Rookie of the Year (*ROY*) is not expected to increase the win total significantly in the final forms of model specification. This also suggests the award is given to the top rookie statistically and is not necessarily influenced by

overall team success. It also shows that the NBA Draft does not specifically lead to improved team success in the immediate future.

There is also an interesting finding in the 2004-04 seasons. In these seasons, new variables are found to have a significant impact on winning which are not found to be significant at later dates. In the 2003-04 seasons, both the Sixth Man of the Year award (*SIXM*) and the league's top scorer (*TSCOR*) are found to significantly increase win totals. The Sixth Man of the Year recipient adds 3.03 wins to his team. Surprisingly, the same cannot be said about the league's top scorer. In fact, the model shows the league's top scorer had a negative effect on wins with his team losing 2.46 games per season. This stresses the concept of teams working together rather than relying on an individual star to score all the points.

**TABLE 2: OLS REGRESSION, DEPENDENT VARIABLE IS WIN**

Variable	Coefficient (t-stat)			
	General Unrestricted Model	Final Specific Model		
		2003-2004 season	2005-2006 season	2003-2006 Season
MVP	-0.020 (0.66)			
SIXM	-0.004 (0.19)	0.037 (17.22)		
DPOY	0.020 (0.82)			
TSCOR	0.001 (0.05)	-0.03 (2.54)		
TPASS	-0.011 (0.42)			
TREB	-0.062 (2.70)	0.038 (4.38)	0.09 (2.56)	0.067 (3.1)
TBLK	0.000 (0.04)			
ROY	0.013 (0.63)			
SALARY	0.000 (2.36)			
ASMVP	-0.000 (1.00)			
COY	0.056 (2.25)	0.016 (2.43)	0.084 (2.14)	0.052 (2.45)
ATTEN	0.000 (1.07)			
PEXPER	-0.013 (2.16)			
AGE	0.008 (1.76)			
ANOT	0.017 (1.08)			
ADOT	0.066 (5.00)	-0.068 (6.97)	0.077 (4.43)	0.071 (5.62)
OEFFT	0.027 (19.8)	0.028 (18.2)	0.026 (12.33)	0.028 (24.2)
DEFFT	-0.027 (19.0)	-0.027(21.2)	-0.028 (14.04)	-0.027 (23)
R <sup>2</sup>	0.97	0.95	0.90	0.92
DW	1.61	2.11	2.41	2.10
REST	0.02	0.76	0.51	1.43
NRM	9.05	27.2	0.09	4.38
ARCH LM	0.96	0.15	0.33	0.17
W	1.20	0.42	0.68	0.47

Note: t-statistics in bracket.  $\Delta$  indicates first difference. REST is Regression Specification Error Test proposed by Ramsey (1969). NRM is the Jarque-Bera statistic for testing normality. ARCH LM is a Lagrange multiplier (LM) test for autoregressive conditional heteroskedasticity (ARCH) in the residuals (Engle 1982). W is a test for heteroskedasticity in the residuals from a least squares regression (White, 1980).

The team efficiency rate on defense and offense are roughly similar in their size and consistent with the expected signs. The TABLE 2 shows that "win" will decrease by about 0.027 for each 1-point increase in *DEFFT* per game and "win" will increase by 0.028 for each 1-point increase in *OEFFT* per game. As stated earlier, 100 points per game is the basis for *DEFFT* and *OEFFT*. For example, a team with a 101 *DEFFT* per game can expect "win" to decrease by 0.028. Teams looking to increase their win total by five games would need to decrease their *DEFFT* by 2.185 points per game assuming no change in *OEFFT*. Assuming no change in *DEFFT*, teams wanting to increase their win total by five games would need to

increase their offensive efficiency rating by 2.15 points per game. Statistical testing on the size of *DEFFT* and *OEFFT* shows that offense has a similar impact on “win”.

## 5. CONCLUSION

Given this importance in the winning proportion of professional team sports in general, this paper examines the relationship between the winning proportion and various economic and NBA specific factors. A generic estimation equation is proposed and the estimation is implemented through ‘general-to-specific’ OLS regression in order to minimize the risk of retaining as proxies for the missing variable in the model specification.

Empirical results show that coaching has the largest effect on team success resulting in adding from 3 to 7 wins per season of 82 games. Often times, four or five victories is the difference between making and missing the playoffs. Some variables such as attendance and salary that may have previously been considered important do not show any statistical significance in increasing winning proportion. This refutes the claim that the best teams spend the most money. Although selling out home games may be of importance to owners, it has no effect on the game outcomes.

Individual success is also found to not be as important of a factor towards winning as some may believe. Although the “team” concept will remain to be very important, its value probably lies in a psychological rather than physical sense. Simply put, each team must have a cohesive bond to work together as one, but teams must have great individual talents. Having an All-Defensive 1st Team member and the league’s top rebounder has a positive influence on “win”. However, past data shows the league’s top scorer in some examples has a negative influence on team wins. Teams with an All-Defensive 1st Team member can expect to have the greatest increase in “win” on an individual accolade basis. Many people consider rebounding to be a larger part of defense than offense in the game of basketball. Keeping this in mind and observing the impact All-Defensive 1<sup>st</sup> Team Members have on team success, one can conclude defense is more important to team success than offense. This strengthens the argument that offense wins games, but ultimately, defense wins championships.

## REFERENCES

- Database Basketball, “Awards Index”, April 2006, [DatabaseBasketball.com/Awards](http://DatabaseBasketball.com/Awards).  
Database Basketball, “Leaders Index.” April 2006, [DatabaseBasketball.com/Leaders](http://DatabaseBasketball.com/Leaders).  
Database Basketball, “Players Index.” April 2006, [DatabaseBasketball.com/Players](http://DatabaseBasketball.com/Players).  
DuPree, David. “USA Today Salaries Database”, *USA Today*, April 2006.  
Engle, R. and Granger, C., “Autoregressive Conditional Heteroskedasticity with Estimates of the Variance of U.K. Inflation”, *Econometrica*, 50, 1982, 987-1008.  
Funk, Daniel, Ridinger, Lynn, and Moorman, Anita, “Exploring Origins of Involvement: Understanding the Relationship Between Consumer Motives and Involvement with Professional Sport Teams”, *Leisure Sciences*, 26, 2004, 35-61.  
Gallagher, David. “Blueprint for an NBA Championship Team”, April 2006; [www.82games.com](http://www.82games.com).  
Hendry, D. F., *Econometrics: Alchemy or Science?*, Oxford: Black Well Publishers. 1993.  
Hendry, D. F., *Dynamic Econometrics*, Oxford University Press, 1995.  
Hendry, D.F. and H.M. Krolzig, *Automatic Econometric Model Selection Using PcGets*, Timberlake Consultants Ltd, London, 2001.  
Hendry, D.F. and G.E. Mizon, “Procrustean Econometrics: Or Stretching and Squeezing Data” In: C. Granger (ed.), *Modeling Economic Series: Readings in Econometrics Methodology*, Oxford University Press, 121, 36, 1990.  
Mizon, G. E., “Progressive Modeling of Macroeconomic Time Series: The LSE Methodology”, *EUI Working Paper*, ECO No 95/10, European University Institute, 1995.  
National Basketball Association, “NBA Player Survey Results”, April 2006; [www.nba.com](http://www.nba.com).  
National Basketball Association, “NBA: Stats and Records Index”, April 2006; [www.nba.com](http://www.nba.com).  
Owen, P. D. and C. R. Weatherston, “Uncertainty of Outcome and Super 12 Rugby Union Attendance: Application of a General-to-Specific Modeling Strategy”, *University of Otago Working Paper*, June 2002.



Ramsey, J. B., "Tests for Specification Errors in Classical Linear Least Squares Regression Analysis", *Journal of the Royal Statistical Society, Series B*, 31, 1969, 350-371.  
Sports Illustrated, "Harbingers of Fate." Jan 2006, April 2006; [Sportsillustrated.cnn.com](http://Sportsillustrated.cnn.com).  
White, Halbert, "A Heteroskedasticity-Consistent Covariance Matrix and a Direct Test for Heteroskedasticity", *Econometrica*, 48, 1980, 817-838.

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# EFFECT OF ALCOHOL ON COLLEGE GRADES

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## ABSTRACT

*Using a random sample of ninety students from a Catholic college, variables influencing drinking decisions have been identified. Separate college GPA equations for drinkers and non-drinkers have been estimated correcting for self selection bias. The main result found is: drinking did not affect GPA. And this result is robust to different definitions of “drinker”.*

**Keywords:** Self Selection, Probit, Alcohol Effect

## 1. INTRODUCTION

There are numerous literatures exploring the effect of alcohol use on physical or mental health and also on wages and performances. Researchers have studied the effect of excessive alcohol use on youth motor vehicle fatalities (Cook, P. J. and Tauchen, G., 1984 and Coate, D. and Grossman, M., 1986). Researchers have also found that moderate alcohol use has beneficial physical and psychological effect (Turner, T.B., Bennett, V.L. and Hernandez, H., 1981). It has also been found that drinkers earn higher wages than non-drinkers (Berger, M.C. and Leigh, J.P., 1988).

This article studied the effect of alcohol use on their academic performances. A random sample of ninety students from a Catholic college has been studied for this research. The drinking decision is made endogenous by first estimating probability of drinking decision (a probit model). The probit model identified the variables affecting the drinking decision. The second part is the least squares model estimation correcting for “self selection bias” to study whether drinking affected their overall GPA.

## 2. METHODOLOGY

The reduced form propensity to drink has been estimated first. The propensity to drink equation estimated is

$$drnk^* = Za + v \quad (1)$$

$drnk^*$  is the latent variable measuring the propensity to drink.  $drnk^* \geq 0$  for drinkers and  $drnk^* < 0$  for non-drinkers. Some of the  $Z$  variables are also determinants of GPA. The wage equations estimated are

$$\begin{aligned} GPA &= X_{ND}b_{ND} + e_{ND} \\ GPA &= X_Db_D + e_D \end{aligned} \quad (2)$$

Subscripts  $ND$  refers to non-drinker and  $D$  refers to drinker. At least one of the  $Z$  variables from (1) has to be excluded from the  $X$  variables in (2) in order to identify the set of equations in (2).  $e$  is the error term. The GPA has not been included in the equation (1). The error term  $v$  in (1) and the error term  $e$  in (2) are potentially correlated, linking these three sets of equations. If  $v$  and  $e$  are correlated then the ordinary least squares estimate of the GPA from (2) will be biased because of self selectivity. Self selection for choice to drink might affect their grades. Unobserved variables which affect decision to drink might affect their GPA. So, unless (1) and (2) are not estimated simultaneously, ordinary least squares estimates for  $b_{ND}$  and  $b_D$  will be biased.

This is a model similar to one proposed by Heckman, J.J. (1979), Lee, L.F. (1978) where they treated sample selection bias issue as omitted variable problem. Similar approach was taken by Berger, M.C. and Leigh, J.P. (1988).

If  $f$  and  $F$  are the Normal density and Normal distribution functions respectively, then the GPA for drinkers and non-drinkers can be estimated as follows:

$$E(GPA_{ND} | drnk^* < 0) = X_{ND} b_{ND} + E(e_{ND} | drnk^* < 0) \quad (3)$$

$$E(GPA_D | drnk^* \geq 0) = X_D b_D + E(e_D | drnk^* \geq 0) \quad (4)$$

where,

$$E(e_{ND} | drnk^* < 0) = \left( \frac{\sigma_{ND-v}}{\sigma_v} \right) \left( \frac{-f(drnk^*)}{1-F(drnk^*)} \right) \quad (5)$$

$$E(e_D | drnk^* \geq 0) = \left( \frac{\sigma_{D-v}}{\sigma_v} \right) \left( \frac{-f(drnk^*)}{F(drnk^*)} \right) \quad (6)$$

if  $\sigma_{ND-v}$  and  $\sigma_{D-v}$  are non-zero, the ordinary least squares estimates are unbiased. Equation (1) is estimated by probit with observed drinking decisions, i.e.,  $drnk = 1$  if  $drnk^* \geq 0$  and  $drnk = 0$  if

$drnk^* < 0$ . Then the Mills Ratios are:  $\left( \frac{-f(drnk^*)}{1-F(drnk^*)} \right)$  if  $drnk^* < 0$  and  $\left( \frac{-f(drnk^*)}{F(drnk^*)} \right)$  if  $drnk^* \geq 0$  are estimated and used as another explanatory variable in the regression equation (2) to estimate GPA for drinkers and non-drinkers, this will produce consistent estimates of the coefficients.

### 3. DATA

A random sample 90 students from an upstate New York Catholic college were selected. Freshman students were excluded because they do not have enough courses taken for a meaningful data on their GPA. The following are the variables on which data were collected:

Citation:	If the student violated (any time) college alcohol policy and was cited by an official, it has value 1, else 0.
Arrest:	number of times the student was arrested in the past
College drinks:	Average number of alcoholic beverages consumed per week at college. An alcoholic beverage is defined as 12 fl oz. of 6-10 proof beer, 4 fl oz. of 16-24 proof wine, or, 1.5 fl oz. of 80 proof liquor.
College GPA:	Cumulative college grade point average when the interview was done.
Divorce:	whether the parents are divorced, 1 = if married, 0 = otherwise.
Exp_Sus:	Number of times expelled or suspended from high school.
Family wealth:	Regardless of marital status, total combined wealth of both biological parents.
Father_drink:	The average number of alcoholic beverages consumed per week by biological father.
Father_edu:	The number of years of post high school education completed by biological father.
Fr_age:	Age at the beginning of the freshman year of the college.
Gender:	male = 1, female = 0
HS_drinks:	Average number of alcoholic beverages consumed per week during high school.
HS_GPA:	Cumulative high school grade point average.
Mom_drink:	The average number of alcoholic beverages consumed per week by the biological mother.
Mom_edu:	The number of years of post high school education completed by biological mother.
Parent_sal:	The average combined annual income of biological parents.
SAT:	Naturalized scholastic aptitude test score as a percentage of total points (out of 1600 or 2400)

Using this data, the following results were obtained.

### 4. RESULTS

First the probit equation is estimated. On an average if a students took five or more drinks per week, he/she is designated as a drinker ( = 1, otherwise 0). Explanatory variables chosen are freshman age of the student, whether they were cited for violating college alcohol policy, their past high school GPA, scores on SAT, number of times expelled or suspended from high school, number of times they were arrested before, whether biological parents are married (div = 1, else 0), average number of alcoholic drinks consumed by father, also, separately by mother, number of years of post high school education by father and also, separately by mother, parents' combined salary, number of alcoholic drinks consumed while in high school and family wealth (assets minus liabilities). The results are as follows:

**TABLE-1: PROBIT ESTIMATES FOR DRINKING DECISION**

<b>Independent variables</b>	<b>coefficient</b>	<b>z-statistics</b>
Constant	-4.867	-0.466
Fr_age	0.250	0.547
Citation	<b>2.702</b>	<b>2.596</b>
HS_GPA	-1.287	-1.573
SAT	5.902	1.083
Exp_Sus	<b>-2.382</b>	<b>-1.650</b>
Arrest	4.241	0.000
Divorce	<b>-1.469</b>	<b>-1.643</b>
Father_drink	-0.023	-0.429
Mom_drink	0.076	0.669
Father_edu	0.074	0.569
Mom_edu	0.053	0.373
Parent_sal	<b>6.44E-06</b>	<b>1.862</b>
HS_drinks	<b>0.591</b>	<b>3.409</b>
Family wealth	<b>-9.83E-07</b>	<b>-2.378</b>
McFadden R-squared	0.634	
N	90	

Bold numbers indicate that the corresponding variables are significant at 10% level of significance. Number of past citations for violating college alcohol policy came to be significant. If the student had record of past suspension, it had negative impact on probability of drinking, effectively saying that the student learned the lesson. If the parents are not divorced, it had negative impact on drinking decision. Intuitively it makes sense. If the student had history of drinking during high school, it affected college drinking decision positively. If the high school GPA were higher, it affected college drinking decision negatively at relatively high level of significance. All these results are intuitive. However, I found an interesting result: high parents' salary positively affects drinking decision whereas high family wealth negatively affects drinking decision. If we assume that the wealth creation perhaps needs more discipline from parents, and it takes generations to create wealth, then perhaps those parents will try to instill good discipline in their kids. There by less drinking habits for students from wealthier families.

Mills ratios were calculated from this probit equation and used as explanatory variable for estimating the least squares equations (2) for drinkers and non-drinkers. In order to identify the least squares equation, the variable "citation" was omitted. Intuitively, the effect of drinking would influence these least squares estimates through the mills ratio. So, by eliminating citation variable would not affect these estimates.

For drinkers, only the SAT scores influenced their college GPA significantly. For non-drinkers, number of suspensions seemed to affect their GPA positively. Perhaps this is an effect of learning curve: past punishments have worked better for non-drinkers. Another interesting result for non-drinkers is, older they are lower their GPA is. However, mills ratio was not significant for any group: the drinking decision did not affect their GPA, neither for drinkers, nor for non-drinkers. The average GPA for non-drinkers (3.27) came to be slightly more than that of drinkers (3.09).

The result that drinking has no influence on their GPA is surprising. I tried to change the definition of drinking and checked its influence on the GPA. I created few other dummy variables such as: D\_8 (more

than 8 average drinks per week), D\_20 (more than 20 average drinks per week) and D\_30 (more than 30 average drinks per week) and have used these dummies in the regression to check if anyone has any influence on GPA. I ran this regression for all 90 students. Partial regression estimates are given below in Table 3.

<b>TABLE-2: LEAST SQUARES ESTIMATES FOR GPA</b>				
	<b>Drinkers</b>		<b>Non-drinkers</b>	
<b>Independent variables</b>	<b>coefficient</b>	<b>t-statistic</b>	<b>coefficient</b>	<b>t-statistic</b>
Constant	-0.024	-0.016	6.835	2.223
Fr_age	0.043	0.742	<b>-0.387</b>	<b>-2.941</b>
HS_GPA	0.161	0.928	0.422	1.240
SAT	<b>2.864</b>	<b>2.595</b>	-0.669	-0.390
Exp_Sus	0.147	0.787	<b>0.757</b>	<b>1.813</b>
Arrest	-0.083	-0.319	0.041	0.412
Divorce	-0.046	-0.316	0.075	0.238
Father_drink	0.004	0.376	-0.007	-0.199
Mom_drink	-0.016	-0.787	0.024	0.314
Father_edu	0.036	1.362	-0.038	-0.700
Mom_edu	-0.043	-1.411	0.019	0.412
Parent_sal	-2.45E-07	-0.582	6.89E-07	0.327
HS_drinks	-0.018	-0.937	0.012	0.151
Family wealth	1.50E-08	0.311	-1.16E-08	-0.042
Mills	-0.443	-1.365	0.605	0.918
R-squared	0.372		0.548	
n	51		28	
Mean of dep. Variable	3.09		3.27	

<b>TABLE-3: PARTIAL REGRESSION WITH DRINKING DUMMIES</b>		
<b>Independent variable</b>	<b>Coefficient</b>	<b>t-Statistic</b>
D_4	-0.099	-0.787
D_8	-0.079	-0.595
D_20	-0.035	-0.169
D_30	-0.245	-0.962

We see that none of the drinking dummies are significant. I can conclude that no matter how we define a drinker, drinking has no effect on GPA's.

## 5. CONCLUSIONS

A group of randomly selected undergraduate students were studied to identify variables affecting their drinking behavior. A probit equation was estimated identifying variables affecting it. I checked whether their decision to drink had influenced their college GPA. I found that drinking choice did not influence their grades. This result is robust to changes in definition of drinker status.

Most of the results were as expected. Higher the number of citation for violating alcohol policies, higher was their propensity to drink. If the high school GPA was higher, perhaps they were more disciplined, lower was the propensity to drink. Past suspensions made their propensity to drink less. Perhaps punishments had worked. Kids from broken families had higher propensity to drink. Larger the family wealth, lower was the propensity to drink. May be wealth is accumulated effect of good habits and

parents perhaps instilled that habit in their kids. One interesting result: higher the combined salary for parents, higher was the propensity to drink. In order to draw conclusion from this, I need further study. Can it be the reason that because both parents were working and earning higher salaries, making them spend less time at home with kids. That perhaps made kids pick up bad habits and there by higher propensity to drink.

The mills ratio calculated from the probit equation did not affect the regression to estimate the GPA. So I can conclude from the available data that the drinking behavior did not affect college GPA. Perhaps their drinking behavior was under control. Most come from catholic background, may be that has something to do with it. For drinkers, SAT was the only variable that affected the college GPA. And for the non-drinkers, earlier they joined college, better were their college grades. Past suspensions influenced college GPA positively.

The main result is: the drinking behavior did not affect college GPA. And this result is robust to any definition of drinking. I need to do further research to check if this result changes for non-catholic colleges.

## REFERENCES

- Cook, P. J. and Tauchen, G., "The Effect of Minimum Drinking Age Legislation on Youthful Auto Fatalities", Journal of Legal Studies, Volume 13, 1984, 169-190.
- Coate, D. and Grossman, M., "Effect of Alcoholic Beverage Prices and Legal Drinking Ages on Youth Alcohol Use", NBER Working Paper No. 1852, 1986
- Turner, T.B., Bennett, V.L. and Hernandez, H., "The Beneficial Side of Moderate Alcohol Use", Johns Hopkins Medical Journal, Volume 148, 1981, 53-63.
- Berger, M.C. and Leigh, J.P., "The Effect of Alcohol Use on Wages", Applied Economics, Volume 20, 1988, 1343-1351.
- Heckman, J.J., "Sample Selection Bias as a Specification Error", Econometrica, Volume 47, 1979, 153-161.
- Lee, L.F., "Unionism and Wage Rates: A Simultaneous Equations Model with Qualitative and Limited Dependent Variables", International Economic Review, Volume 19, 1978, 415-443.

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## U.S. OFFSHORE OUTSOURCING WITH REFERENCE TO INDIA: A CRITICAL EXAMINATION

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### ABSTRACT

*Offshore outsourcing in manufacturing and services has created a great deal of controversy among economists and policy makers. The opponents of offshoring raise the fear of job loss by American skilled as well as unskilled labor, erosion of wages and benefits, loss of employment security, and the possibility of structural unemployment in the long run. On the other hand, the supporters of offshoring view this phenomenon as a positive development as it leads to further specialization of labor, lower costs in production, and expansion in global trade. To this group outsourcing promises improved wages, a higher standard of living, lower cost of goods to consumers, without any adverse long-term economic effect. India with its abundant pool of skilled labor has become a magnet for global outsourcing. However, India needs to liberalize its economy further by reducing tariffs on a wide range of products and removing limits on foreign ownership of its businesses. This paper examines the issue of offshore outsourcing with special reference to India.*

**Keywords:** Outsourcing, Offshoring, India, Globalization, China.

### 1. INTRODUCTION

Offshore outsourcing in manufacturing and services has created a great deal of controversy among economists and policy makers. The opponents of offshoring raise the fear of job loss by American skilled as well as unskilled labor, erosion of wages and benefits, loss of employment security, and the possibility of structural unemployment in the long run. On the other hand, the supporters of offshoring view this phenomenon as a positive development as it leads to further specialization of labor, lower costs in production, and expansion in global trade. To this group outsourcing promises improved wages, a higher standard of living, lower cost of goods to consumers, without any adverse long-term economic effect. This paper examines the issue of offshore outsourcing with special reference to India.

### 2. OUTSOURCING VS. OFFSHORING

Outsourcing is when a business organization buys services or products from a foreign supplier or manufacturer, or when a business pays another company to provide services that the business might otherwise have provided itself. Offshoring, on the other hand, is the practice of hiring an external source to perform some or all of the business functions in a country other than the one where the product or service will be sold or consumed. Both outsourcing and offshoring are a response to expanding international trade due to globalization. Companies engage in these practices in order to cut costs and to increase profits (Fiona Torrance, 2006). Opponents argue that offshoring sends work overseas, thereby reducing employment domestically. The people who favor the trend argue that it is a fact of life and the end beneficiaries are the consumers. David W. Drezner of the *New York Times* is one such advocate when he argues that “outsourcing of jobs to other countries reduces labor costs in America and therefore leads to increased productivity and profits, which, again, should lead to capital investment, expansion, and hiring more American workers (David W. Drezner, 2004).” The origin of outsourcing dates back to the 1970’s when IBM developed the IT industry in India. Needless to say, the rapid development of internet and the global link that internet provides has been a main impetus for the growth of outsourcing. The general criteria for a job suitable for offshoring are:

- The job does not require direct customer interaction
- The job is easy to set up
- The job has high information content and can be transmitted over the internet
- There is a big wage difference between the original country and the offshore country
- The job is repeatable

In a global business environment companies are diligently examining which approach, i.e. in-sourcing, outsourcing, or offshore outsourcing delivers the lowest possible cost. Offshore outsourcing is the practice of contracting for work outside one's national borders. One can say that offshore outsourcing is an advanced stage of economic globalization and it has, today, become an accepted business practice. The main reason for this widespread growth and expansion of outsourcing is the rapid expansion of internet and telecommunication technology that has minimized or virtually removed geographical distances. Ever-increasing efficiencies delivered by computer makes it possible for firms to deliver a much lower finished cost beyond their geographical locations (Janice Koch). But cutting cost is not the sole factor. There is a declining pool of highly skilled labor which is compounded by an aging workforce in North America and especially in Western Europe. Moreover, the United States is producing fewer math and science graduates, while at the same time restricting the entry of skilled workers who could compensate for the shortcoming. On the other hand, there is a growing pool of highly skilled labor in other parts of the world, India being an example in this case, that companies can have access to through offshore outsourcing (Janice Koch, 2005).

In terms of profit, offshore outsourcing is meant to take advantage of lower cost, faster delivery to the market, more efficient utilization of resources through economies of scale, and the removal of time-zone differences that makes it possible to provide services based on a 24-hour shifts. Estimates of cost savings from offshore outsourcing range anywhere from more optimistic predictions of 45 to 55 percent, to more conservative estimates of 25 to 45 percent (Janice Koch, 2005). The evidence of gains from offshore outsourcing, based on a cost-benefit analysis, is available from work by the McKinsey Global Institute. According to this study, gains to the United States for every dollar of work offshored to India constitute a net increase in U.S. income of 12 to 14 cents per dollar. They also did a similar survey of effect on India and concluded that India gains a total of 33 cents for every dollar of U.S. outsourcing (Gregory N. Mankiw & Phillip Swagel, 2005).

There are, however, studies that challenge the benefits from outsourcing and argue that reports such as the one by McKinsey take a micro approach and are based on the example of firms that have already been offshoring in India. They conclude that, looking at the macro system, one cannot expect the average firm to gain 12 to 14 cents per dollar from offshoring. It is also argued that while offshoring of white collar work may provide benefit to individual firms, if it becomes widespread enough it could lead to rapid productivity gains elsewhere in sectors in which U.S. is a prime exporter. Eventually this would result in deteriorating terms of trade for U.S., causing actual income losses for this country in the long run (Josh Biven, 2005).

While much of the talk about outsourcing has been about U.S. companies, which account for about 50 percent of offshore business activity worldwide, including 70 percent of India's market, the offshoring trend is by no means limited to North America. The United Kingdom represents the world's second biggest, and Europe's largest country, in terms of offshore activity. Japan as well as Korea also are offshoring to China. Moreover, Western European companies have found Eastern Europe, with its multilingual, low-cost, and educated work force, an attractive place to outsource (Janice Koch, 2005).

### **3. OFFSHORE OUTSOURCING: THREATS AND OPPORTUNITIES**

Offshoring by its nature reduces costs which in turn benefits both the firm and the consumer. But, on the other hand, outsourcing takes jobs, both skilled and unskilled, away from the domestic economy. Outsourcing, therefore, presents both threats as well as opportunities.

Considering international offshoring, two trends have emerged, both of which merit attention. One is the rise of manufacturing exports from low-cost countries such as China and India. The other is a new phenomenon, by which countries can trade in services, and therefore those with a high-cost service component move their service needs to low-cost service, rich-resource based service providers. Each trend needs to be examined separately.



What makes this situation particularly significant is the dramatic rise in manufacturing exports from low-cost countries, especially China. This export surge has already had a large impact on America's least-skilled workers in industries such as garment manufacturer. However, these developments do not raise any public policy issues that have not already been discussed in the context of conventional import competition. In other words, it is impacting occupations that have always been made vulnerable by the expansion of international trade (Daniel Trefler, 2005). Outsourcing involves real pain for the workers and families who face displacement. Trying to prevent this displacement could lead to pressure for economic protectionism and a net welfare loss from trade. In contrast with the situation of unskilled labor, improved technology and telecommunication make it less expensive to employ skilled labor overseas – such as computer programmers, medical technicians, accountants. This has a forward linkage effect in the country engaged in offshoring which in turn increases domestic demand for more skilled labor. Another words domestic skilled labor is a complement to foreign skilled labor. The problem is more with unskilled displaced labor, because foreign unskilled labor is a substitute for local sources. Increased dislocation from unskilled labor outsourcing requires policies aimed at adjustment assistance, and creation of a viable economic environment with strong growth and robust job creation potential (Gregory N. Mankiw & Phillip Swagel, 2005).

The other trend, which is a new one, is the emergence of trade in services industries. The labor employed in such industry is usually highly skilled and white collar (like computer programmers, accountants, medical technicians, etc.). In countries like India which has a rich pool of skilled white collar workers, the offshoring in service industries leads to a loss of high-paid jobs in the United States. This trend calls for a whole set of new policy debates. One argument with regard to the expansion and spread of services sector offshoring is that countries like China and India can develop a comparative advantage in knowledge-intensive goods and services, eventually leaving the U.S. to produce low-intensive knowledge goods and services. In the long-run the U.S. could possibly become an exporter of low-intensive knowledge while importing high-intensive knowledge in goods and services. However, the counter argument to this view is that countries like India and China, by expanding the range of services that they provide, would eventually enter into services that depend on constant new innovation. In the new institution-and-growth view, innovation cannot occur without having in place the proper institutions that protect property rights, that provide a fully functioning legal framework for viable economic transactions, and institutions that provide a well-functioning equity and debt markets and that balance the need of inside innovations against those of the outside innovations (Daniel Trefler, 2005). One can argue that the quality of Chinese and Indian growth- enhancing institutions can improve and make them competitive with those of United States and Europe. However, institutions tend to develop very slowly over a long period of time, sometimes a century or more. Many embedded political and social obstacles have to be dismantled or substantially altered. As one author maintains, there are five weaknesses in Indian and Chinese institutions that retard the improvement of innovation-intensive sector. These are: 1) the role of government, and particularly state-owned enterprises and corrupt officials, preventing efficient allocation of resources such as capital; 2) a weak financial system that leaves firms under-resourced; 3) a social safety net that leads to labor market inflexibility; 4) a lack of an endogenous capability to innovate, in part because entrepreneurs are hemmed in by the rent-seeking behavior of bureaucrats, and 5) a one-party state in China and a corrupt alliance between bureaucrats and politicians in India that retard the development of a local entrepreneurial class (Daniel Trefler, 2005).

#### **4. INDIA AND THE GLOBAL SUPPLY OF LABOR FOR OFFSHORE INVESTMENT**

The off-shoring of service jobs from high-wage countries to low-wage countries is accelerating and will have an important impact on labor markets in the newly emerging economies. There are a number of important issues to be examined. Chief among them are: What is the potential supply of labor in low-wage countries, and what makes a candidate suitable for employment in an offshore company? Also how is talent spread across emerging markets? We will examine these and other relevant issues with special emphasis on India.

Based on workforce size alone, the pool available in low-wage countries is enormous. In 2003 a sample of 28 low-wage countries indicated that the supply of labor, those working or looking for work, was 1.8 billion people. However, we have to look beyond sheer numbers. Agriculture is still the largest employer

of labor in low-wage countries. India and China respectively employ 60 percent and 44 percent of their labor force in agriculture. The pool of available labor also shrinks when we consider those who have a college degree. While in developed countries roughly twenty percent of the labor force has a college degree, in developing economies only 7 percent of the work force has completed university training. In addition, some job categories in which labor could be resourced globally require special knowledge which further reduces the pool of labor available to offshore companies. As an example, in India, only 4 percent of total university-educated workforce has an engineering degree, compared to 20 percent in Germany and 33 percent in China (Diana Farrell et al, 2005).

Despite all these limitations and taking all the factors into account, the potential supply of labor for offshoring in emerging markets is still quite large. In a sample of 28 low-wage countries, there were approximately 33 million young professionals (university graduates with up to seven years of experience). This compares with 15 million young professionals in a sample of eight high-wage countries, with 7.7 million in the U.S. alone. Including support staff, as well as doctors, nurses and others, the figure rises to 392.8 million potential workers in low-wage countries, compared to 181.3 million in the sample of 8 high-wage countries (Diana Farrell, et al, 2005).

The estimated 392.8 million available potential workers is what is called “the theoretical maximum” labor supply available in the low-wage countries. However, the following three important factors reduce the potential labor supply for offshore companies:

- a) **Limited suitability-** Interviews with human resource managers in multinational corporations reveal that on average only 13 percent of university graduates in low-wage countries are suitable to work in a multinational company. Suitability varies according to occupations. For example, for generalist category, which includes call-center employees and administrative support staff, it requires very good language skills and has the lowest suitability rates. Suitability also varies by country. Candidates from Eastern Europe have the highest suitability rates across all occupations. Human resource experts have indicated that they have no problem employing half of the engineering graduates from Czech universities as compared to only 25 percent from India, and only 10 percent from China and Russia (Diana Farrell, et al, 2005).
- b) **Language proficiency-** A recurring problem across all low-wage countries is the lack of English language proficiency, particularly for generalists who need to work closely with the home office and customers. The language barrier is especially acute in China and Brazil. But even in India, where English is the official language and the medium of instruction at the universities, not every graduate has good enough English to work for offshore companies. Graduates from Southern India in particular suffer from accent issues (Diana Farrell, et al, 2005).
- c) **Educational System-** The quality of a country’s educational system also affects the suitability of offshore talent. Eastern European job candidates seem to match the educational quality of those in Western Europe and the United States. Russian and Chinese graduates are held back by the theoretical nature of their education, although they are praised for grasping new concepts very quickly. In India, graduates from the top schools rank excellently but there is a steep decline beyond top-tier schools. This is one reason that average suitability rate for Indian engineers is only 25 percent. High emigration rates further reduce the availability of high-quality supply of suitable graduates from India’s top schools (Diana Farrell, et al, 2005).

The foundation of modern higher education in India was laid by the British colonial regime in the mid-19<sup>th</sup> century. Thomas Babington MacCaulay, a master of English prose and literature, was appointed to the Supreme Council of India in 1833. While there he laid the foundations for two of the most important institutions which would radically change the country: The Indian Penal Code and the education system. The educational system that he set up was meant to train Indians for staff positions in the offices of the government and many civil institutions. Until independence, higher education in India was the preserve of the elite class (Vijay Bhat).

Independence, political freedom, and India’s newly established democratic system resulted in a substantial rise in the demand for higher education. Over the more than half a century since independence, while the country’s population increased three-fold, higher education enrollment rose 105

times. Until about 1980, expansion of higher education in India, with a few exceptions, was still dominated by a colonial mentality; to obtain a degree - or several – became an end in itself. Higher education was neither job-oriented nor research-oriented. It was a liberal arts education with little connection to the economic and social requirements of society. Notable exceptions were the Indian Institute of Technology(IIT) and Regional Engineering Colleges, later renamed as National Institute of Technology, for engineering education, and the Indian Institute of Management(IIM). IIT and IIM were set up with the help of foreign guest faculty from advanced countries. These institutions introduced a whole new academic culture to India's educational system (Pawan Agarwal).

Around 1980 higher education in India changed track from a government-driven growth pattern to one primarily based on private initiative. In the 1980's with economic growth, there was a demand for higher education relevant to the needs of business and industry. It became evident that there was a huge capacity gap in the provision of professional higher education. As a result a large number of professional institutions in engineering, medicine, management, and teacher education have surfaced in the private sector over the last two decades. In overall terms, prior to 1980 the growth was primarily in government or in government-aided institutions. In the post- 1980 era the number of public institutions - both official and government aided institutions - has increased only marginally, while the number of private institutions has increased substantially (Pawan Agarwal).

Since liberalization began in India in 1991, the annual GDP growth has doubled ranging around 7 percent annually. This expansion has been continuous despite volatile oil prices, and the recent slowdown in U.S. economic growth. The average change in consumer prices stands at around 4.4 percent, and that of GDP deflator has been 4 percent for the past 6 years (see Table 1). Prospects for sustained and robust expansion is good if reform momentum is maintained. India appears to be at the beginning phase of a long-run take-off that began with the liberalization and structural reforms in the 1990's. The coming sharp rise in working age population will be able to support growth. Continued growth at around 7.5 percent annually could double the per capita real income in 13 years, and even faster growth could be achieved with more decisive reforms (IMF Country Report, 2007).

Table 1							
	India: Macroeconomic Data Percentage Change						
	2001/02	2002/03	2003/04	2004/05	2005/06	2006/07	Average
Real GDP Growth Rate (at factor cost)	5.8	3.8	8.5	7.5	8.4	8.2	7.0
Prices							
Consumer Prices	4.3	4.0	3.9	3.8	4.4	6.0	4.4
GDP Deflator	2.8	3.6	4.1	4.2	4.1	5.3	4.0
Nominal GDP (2005/06): \$798 Billion Population (2005/06): 1.11 Billion GDP Per Capita(2005/06): \$716							
<b>Source:</b> International Monetary Fund Country Report, February 2007							

Integration of the labor market globally due to technological changes that have removed physical barriers between countries offers enormous opportunities for India. Also the young profile of its workforce provides a distinct advantage. A report of the High Level Strategy Group indicates that by 2020 India could possibly generate (directly or indirectly) job opportunities for 10 to 24 million people by providing an increasing array of services to advanced economies that currently face shortages of skilled labor. An additional 10 to 48 million jobs could be created by providing countries overseas with services in the fields of medicine, tourism and education. The emerging global market for knowledge provides many opportunities for India beyond its borders and domestic economy (*Report of the Higher Level Strategic Group, 2003*).

Moreover, India with its large population, currently estimated at 1.2 billion, and extensive capacity to train skilled labor can send its skilled labor for work abroad. Out-migration of skilled labor, formerly deplored as "brain drain," is now seen as an opportunity rather than a threat. In a globalized economy countries compete for skilled labor by creating attractive conditions. All in all, the outlook for India in the new globalized economy appears promising. India could become a magnet which can absorb the demand for high skilled labor, as well as a place where multinational corporations would be eager to invest capital. In return, India can benefit by providing high value added services to the rest of the world.

## **5. THE GOVERNMENT ROLE IN SUPPORT OF OFF-SHORING IN INDIA**

So far offshoring has been largely the domain of the private sector, and to some extent the lack of government presence has been the secret of its success. Private sector investment has created a whole range of infrastructure for offshore investors in the form of technically suitable air- conditioned offices, apartment buildings, shopping malls and other amenities in offshore centers. It is now up to the government to match private efforts by making public investment in airports, roads, ports, and utilities – improvements which are necessary in order to keep the momentum going. The government and private sector should work hand in hand if this offshoring is going to remain India's engine of growth for the years to come (Diana Farrel, et al, 2005 and Outsourcing to India, 2005).

The other challenge that the government of India faces is how to extend the success of IT and outsourcing industries to the broader scope of the economy. To achieve that, foreign investment and global competition must be allowed to reach a wide range of sectors in the economy, including some in which government now plays a significant role. India has broadly cut import duties and increased foreign-ownership limits over the past ten years, but still large parts of the economy are protected by high tariffs and restrictions on foreign direct investment. India's value of trade as a percentage of GDP is much lower than that of China as well as elsewhere in South Asia. India's average import duties as a percentage of total goods is also much higher than that of other countries in South Asia and China. Also foreign ownership restriction is higher in India compared to other developing countries. As an example, foreign direct investment amounts to just 0.7 percent of India's GDP, compared to 4.2 percent in China and 3.2 percent in Brazil. Imports total less than \$70 billion as compared to China's which stands at more than \$400 billion (Diana Farrell and Adil S Zainulbhai, 2004).

Due to its available skilled labor at competitive wages India has become a magnet for IT outsourcing as well as business processing operation (BPO). Despite some obstacles, all signs point to future growth. Nevertheless, India needs to liberalize its economy further by reducing tariffs on a wide range of products and removing limits on foreign ownership of its businesses. It further needs to invest heavily in its economic infrastructure by providing a better transportation and communications system. In this respect it is far behind China. Moreover, it needs to overhaul and upgrade its educational system and make it much more broad-based with a better quality. In a globalized economy national boundaries are removed, and knowledge is in demand. India has a good potential to meet that demand.

Off-shoring is a new phenomenon in today's world order. It is a byproduct of improved technology, communications, and networking. This new technology has removed physical barriers between countries no matter how far apart from each other. The U.S. as the world's largest economy and most technologically advanced country can take advantage of this new global market. India is a good candidate to provide the low- cost skilled labor for America's expanding industries. Public policy debate in this country should not oppose off-shoring. Instead, it should adapt to new realities of the global economy.

## REFERENCE

- Agarwal Pawan, "Higher education and the labor market in India," Indian Council for Research on International economic relations (ICRIER), New Delhi, India.
- AIMA (2003), Report of the Higher Level Strategic Group – India's New Approach to year 2020, All India Development Association (AIMA), New Delhi.
- Drezner David W., "Where did all the jobs go?" Nowhere," The New York Times September 29, 2004.
- Bhat, Vijay, India as a offshoring destination: a historical perspective," Offshore Express.com.
- Biven, Josh, "Truth and consequences of offshoring. Recent studies overstate the benefits and ignore the cost to American workers," The Economic Policy Institute, briefing paper # 155, 2005.
- Farrell, Diana, Kaka Noshir, and Stürze Sascha, "Ensuring India's offshoring future," The McKinsey Quarterly, 2005.
- Farrell, Diana, Laboissiere Martha, Rosenfeld Jaeson, Sturze Sasche, Umezawa Fusaya, "The emerging global market: Part II- the supply of offshore talent in services," McKinsey Global Institute, June 2005.
- Farrell, Diana and Zainulbhai Adil S, "A richer future for India," The McKinsey Quarterly, 2004.
- International Monetary Fund Country Report, No. 07/63, February 2007.
- Koch, Janice, "Thinking offshoring through," The Conference Board, No. 136, February 2005.
- Mankiw, Gregory N. & Phillip Swagel, "The politics and economics of offshore outsourcing," American Enterprise Institute for Public Policy Research, *working paper* #122, December 7, 2005.
- Srinivasan S., "India Controls 44 percent of Outsourcing," Associate Press Financial Wire, June 2, 2005.
- "Outsourcing to India: Crouching Tiger Set to Pounce," Deutsche Bank Research, October 25, 2005.
- Torrance, Fiona, "The ethics of In-house vs. outsourcing," Insight Business, published by USC's Center for Management Communication, [WWW.marshallinsight.com](http://WWW.marshallinsight.com), 2006.
- Trefler, Daniel, "Offshoring: threats and opportunities," A paper prepared for the Brookings Forum 2005. "The offshoring of services: issues and implications," May 12-13, 2005, Washington, D.C.

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# ARCHAEOLOGICAL EXCAVATING IN VIRTUAL VILLAGES: A PRIMER ON DISCOVERY OF ARTIFACTS FROM A DIGITAL CULTURE

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## ABSTRACT

*Although there have been few accounts of individuals in classical and medieval periods digging holes to study the past, the first serious archeological “digs” took place in England around the 18<sup>th</sup> to early 19<sup>th</sup> centuries. Excavations were part of a maturing pursuit for knowledge of ancient times. Motives for those in the quest to uncover objects varied from prestige, to gaining a deeper knowledge of the past cultures and civilizations. Fast forwarding to the future; archaeologists may be clamoring to discover the culture of virtual villages that have surfaced in the early 21<sup>st</sup> century as well as the containment vaults and computer hardware, in which the virtual world is now stored. These scientists may emerge from the ranks of geeks, nerds, or even computer hackers. They may team with dedicated academics curious of as to how human kind took the leap from face-to-face communication to the trust, comfort, and friendships of a virtual society. This paper will outline a foundational understanding of technical and computer archaeology and its disciplines unveil the challenges facing the virtual explorer and the common computer user alike.*

**Keywords:** Digital Villages, Social Networking Archaeology, Anthropology, Computer Forensics

## 1. INTRODUCTION

Archaeology in some academic curricula is a sub-discipline of anthropology (Renfrew, 1980). Anthropology is seen as the holistic study of who we are as human beings in the physical world amidst cultural diversity. Anthropology studies the biological, social, and cultural construct of a period of time, geographic area, or culture (Just & Monaghan, 2000). Archaeology dates back to the 15<sup>th</sup> century and is frequently described as the study of the chronology of events and cultural traditions through the recovery, documentation and analysis of material remains. When exploring the virtual digital periods, there is no fundamental difference (Hirst, 2007) although the complexity of the documentation and recovery increases multi-fold.

## 2. BACKGROUND

In fundamental terms, archaeology can be illustrated as the recovery of tangible objects and anthropology, the interpretations, as it relates to the cultural aspects of the discovery (LeBlance, Redman & Watson, 1971). According to Steibing (1994):

The archaeologist attempts to deduce facts about bygone societies and events from the physical clues they have left behind. Tools, pottery, houses, temples, art, campfires, roads, and any other remains that show the results of human activity (including such unromantic items as garbage heaps), as well as the skeletal vestiges of humans themselves, all have stories to tell (p. 22).

The archaeologist interprets the story of people from physical objects. Simply put, “archaeology is the study of mankind's past through the recovery and analysis of its material remains” (Stiebing, 1994, p. 22).

To understand life in the 21<sup>st</sup> century, future researchers may need the skills of a computer forensic technician to extract the contents from iPods, Blackberrys, mini-camcorders, and other digital devices. The understanding and potential extraction of what is becoming a virtual society will demand an understanding of computer containment vaults and techniques for removing data from operational as well as non-operational computer systems and storage devices.

Archaeologists in the 21<sup>st</sup> century will develop data about the history of society using a set of tools including, but in no way limited to: the trowel, library card, backhoe, scanning electron microscope, tape recorder, special chemicals, and radiocarbon dating (Boszhardt, Rowe, Southon, & Steelman, 2001).

Anthropologists analyzing the 21<sup>st</sup> century will use digital mining techniques, computers, software programs and electronic instrumentation.

### **3. DIGITAL ARCHAEOLOGY: PICK AND SHOVEL NOT REQUIRED**

A Google™ or Yahoo™ search for “digital Archaeology” will most likely explain how to perform reconstructive imaging of a “dig” in Botai located on the Iman-Burluk River, a tributary of the Shim, in Kokshetav, Oblast or a title like “Digging without the Dirt: Online Excavations” (Lynch & Poggie, 1974). Khalid Baheyeldin (2004) defined the archeological discipline as it relates to today as including the use of digital media and digital information to get a clearer picture of the society that uses them. The findings or artifacts from the 21<sup>st</sup> century could be emails, newsgroup and forum postings, databases, digital pictures and/or videos. Baheyeldin furthers his thought by asking how people several centuries or millennia from now will uncover enough information about us to form a complete picture of what was going on in the 21<sup>st</sup> century. With the inception and growth of the digital world, our past is not only being buried under rock and rubble, it is being stored and replicated in digital containment vaults like network servers, personal computers, digital cameras, Personal Data Assistants, and cellular telephones.

In the 21<sup>st</sup> century the digital legacy can be replicated and virtually stored in hundreds of locations around the world on multiple media (Ponschock, 2007). Less isolated than archeological finding of the past, the archaeologist of the future may search for pieces of information or cookies on a server in Bangladesh, a personal computer in Pittsburg, and numerous other containment vaults. The current archaeologist pieces together past cultures by interpreting their findings and formulating theories based on the artifacts discovered. The location of the “find” historically has been near the point of origination. For example, Native Americans carved, pecked, chipped, and abraded messages/pictures as etchings called petroglyphs into rocks or resident walls of a cave giving us clues and insights into their actions and their behaviors (Austin, 2005). The location of the rock or cave did not change from the time it was created unless it was transported to another location. However, the discovery of a video in the future may be found a continent away from its origination point.

Upcoming archaeologists will hear and see people from the past. Digital containment vaults will have not only the written words the petroglyphs did, their stories will contain pictures, videos and e-mail expressing the emotions of their authors and/or readers. While present archaeologists have to speculate how buildings were constructed and the tools that were used, the digital age stores and collects the actual building process for historians to view and analyze. These containment vaults may be part of virtual villages like MYSpace™, YouTube™, iVillage™, Friendster™, Facebook™, and Xanga™, or personal Blogs on every imaginable subject and discipline, or on a digital camera in a garage in up-state New York (Pickavet, 2003).

The archaeologist analyzing the 21<sup>st</sup> century digital age will also be required to separate factual findings from fantasy since virtual reality towns or worlds exist in the cyber space (Garrett, 2006) without any tangible physical presence because virtual villages or townships are not represented by geography, social class or financial accounting. Instead, their cyber position is defined purely by curiosity (Luthra, 2006). The legacy of 100 million subscribers are being buried in the form of personal likes, dislikes, dreams, and possibly “dirty laundry” in land fills of virtual villages or virtual communities like MYSpace. Laurie Anderson musician/artist wrote “Technology is the campfire around which we gather” (Intel Brochure, 2004, p. 2). The 100,000,000 members of MYSpace (Cashmore, 2006) and many similar internet virtual socialization network communities, communicate as individuals do in the physical world and some of the artifacts may have been intentionally placed for future discovery to prolong the legacy. In fact, Jessica Vascellaro (2007) wrote about a 92 year old housebound individual who wanted to show the world his piano skills through YouTube so it could become modern time capsule.

The digital age may also be leaving personal individual information of our human remains through the veri-chip™. The veri-chip™ is about the size of a grain or two of rice and can be micro-implanted under the skin where it can be then read by a “transponder”; a barcode type reader, or tracking device. Although facing privacy barriers (Albrecht & McIntyre, 2004), this device could have widespread

acceptance, allowing the tracking of an individual's entire medical history and whereabouts for storage and future recovery.

#### **4. BROWSER**

From simple discovery to large scale research projects, the Internet browser is also potentially a great mining tool. Although the Internet was introduced before the graphic user interface (GUI) portal, now referred to as the browser; the paradigm shift (Kuhn, 1996) to a GUI made the Internet more navigable. Access to the Internet created a drastic paradigm shift from the way banking, marketing, and advertising had been conducted. Some form of browser will provide a digital tool for future excavations. Along with the Internet's wide appeal and tremendous utility, personal and private data is left behind as was evidenced in an AOL privacy scandal, "21 million search queries also have exposed an innumerable number of life stories ranging from the mundane to the illicit and bizarre" (McCullagh, 2006, p. 1).

#### **5. SEARCH ENGINE**

A browser has limited utility without something powerful enough to retrieve information. In just 17 years since 1990 when the first rather crude program called Archie assisted with the retrieval of information from the internet, data mining has grown into almost instantaneous recovery capabilities from mining search engines like Google, Yahoo, Excite, and others. It is now common for someone to say have you "googled" it when looking for an answer. Archie, an early introduction to internet search capabilities, looked at a list of File Transfer Protocol (FTP) archives created by a basic command in the UNIX operating system providing a searchable database of filenames. Archie did not look into the files contents. In 1991, Mark McCahill and a team at the University of Minnesota advanced Archie's earlier introduction. Their new search engine provided a simple way to navigate distributed information resources on the Internet which allowed for enhanced and deeper discovery into digital files by indexing plain text documents. Many of these same text files evolved as websites with the creation of the World Wide Web. Each search engine now uses its own proprietary methodology that presents results to user inquiries. Speed and the number of returned matches now determine the popularity of search engines as well as their long-term viability.

Digging into computer files and networks is frequently referred to as computer forensics. Although the word forensics has been defined as "to bring to court" (US-CERT, 2005, p.1) in 2007 it is also used to describe the process of retrieving data or information from a computer device. US-CERT, a United States government organization defines the forensic discipline as one that incorporates both constructs of law and computer science to collect and analyze data from computers systems, networks wireless communications, and storage devices in a way that is admissible as evidence in a court of law (Potaczala, 2001). As forensic evidence, the data may have been deleted or the device may have been removed from its original operational unit.

We submit, in the future, digital artifacts discovered and documented using forensic disciplines and methodologies will be viewed as acceptable in research communities. In fact, the meticulous protocols required in forensic digital discovery mirrors that of an archeological "dig" and tomorrow's archaeologist will need to possess the expert computer data detection and retrieval skills. The log is the documentation of the "chain of custody" in the archaeologists' discovery (Potaczala, 2001). Present day logs used by forensic digital examiners represent step-by-step records of not only the findings; they also include the methodology used in the retrieval. Digital computer artifacts often exist in many formats, with earlier versions still accessible in multiple digital containment vaults (i.e. hard drives, memory chips, etc). Knowing the possibility of their existence, even alternate formats of the same data can be discovered through the scrutiny of a practiced digital forensic excavator.

#### **6. FUTURE DIGITAL EXCAVATION**

The future archaeologist will face many new obstacles. The archaeologist of the 20<sup>th</sup> and 21<sup>st</sup> centuries had to dig through layers of rock rubble or even garbage. The archaeologist looking into the digital era will be facing several different layers of obstacles like: computer hardware, data encryption, varied operating



systems, password protections, rapidly changing storage types and standards, transported recorded language, abbreviations/codes, etc. The storage of virtual artifacts while containing great insights of the culture and behaviors of the inhabitants of the 21<sup>st</sup> century will not be without challenges ensuring the authentication and protection of digital artifacts.

The computer forensic archaeologist will need to follow principles, practices and methodologies that will stand up to scrutiny and analysis of others. Three steps should be meticulously followed:

1. Do not alter or change the digital artifact;
2. Authenticate and log the recovery;
3. Do not modify the find during the analysis (Davis, 2004)

Tools other than the pick and shovel will be used in future explorations. Most of these devices have not been invented. Based on what we currently know, some of the digital tools may be browsers, search engines, and software programs like EnCase™ or ILook™ Investigator. If this artifact is from an UNIX™ based computer, Sleuth Kit™ and HashDig™ may be two computer software utilities used to uncover digital substantiation (Davis, 2004).

There will also be three additional layers of complexity in digital finds. The first is password protection. A simple Microsoft Word™ document may be password protected. The author may have also encrypted the document. If the scientist is forensically extracting the data they may also need to understand machine level bit configurations; the zeros and ones or American Standard Code for Information Interchange (ASCII) representations. Formats used to record the data are often media dependent. The format varies by operating systems and may be media specific, i.e. diskette versus USB memory stick (Potaczala, 2001).

## **7. DIGITAL ARTIFACTS**

The purpose of mining is to uncover something of value. Gold miners looked for the chance of discovering a rich cavern of the precious mineral and “striking it rich”. Archaeologists in turn search for clues that will assist in a better understanding of a prior civilization or culture. The discovered objects are artifacts; objects made by the residents of that era, for example: a tool or ornament, a clay tablet, or even a book. These findings have enormous cultural interest and impact on our understanding of societies and their methods of operation.

Digital miners are also seeking to uncover artifacts. The technological, digital age, will provide the archaeologist and anthropologist in centuries to come two avenues of discovery. The most visible of these artifacts will be tangible objects like cell phones, digital cameras, laptop computers, and digital network components, servers, routers, and a myriad of other apparatus. The tangible artifacts will provide researchers tremendous historical value in understanding the conveniences and communication devices used in this era. The digital containment vaults embedded deep within each of these will open vast windows into the culture and civilization of the 21<sup>st</sup> century. Memory chips in discarded cell phones contain text messages, addresses, and pictures of the past. Hard drives can contain video, e-mail messages, and memos of mergers and acquisitions. Digital cameras can show family back yard parties and world travels. ComputerWorld™ reported that in 2007 there were 500 million stored obsolete computers (Pratt, 2007), which they defined as an archeological “Gold Mine”.

Future archaeologists face different issues from those of their predecessors. The location of their find may not have anything to do with the continent on which it was uncovered. The context in which the message was found may be critical to the understanding of its utility and meaning. There may be many identical copies of the same artifact and understanding their nuances may require finesse. Digital artifacts differ in many aspects. An artifact of the past, let's say a piece of pottery can only be in one place at one time. A petroglyph can only be written once. The exact message, picture, story, account of an event in the virtual digital world can be copied many times over and surface in a setting that may distort or confuse its original meaning. The interpretation of archaeological finds has been the challenge for the researcher since the first dig. Meaning is mined in the context in which the artifact was created. For example if a

teenager is text messaging a friend and their parent is watching; POS (**P**arent **O**ver **S**houlder) could be entered to alert the other party to filter what is typed. LOL can mean lots of luck, lots of love, or laughing out loud depending on the context in which it was entered. Just as today's researcher must decipher ancient hieroglyphics, the excavator of the future will need to understand many digital and language nuances.

## 8. IN THE EYE OF THE BEHOLDER

When archaeologists break through the technical layers and decipher the digital artifacts in the future, the past will have the opportunity to reveal itself as never before. JPG files will show pictures of the 21<sup>st</sup> century. MPG files will show the researcher actual video of the past, while MP3 files will give sounds and music of the times. The excavation of virtual villages and associated "blogs" will enlighten the researcher with discussions and opinions. "Blogs" or web logs are digital debates or commentaries that will bring the past to life for the researcher. The "Blogs" will need to be interpreted with caution; the same vault of artifacts that shows the actual past may represent fantasy or distorted versions of reality. For example, the MYSPACE™ accounting of an event can be factual or make believe. The researcher may also find digital information the author believed was destroyed by deleting the entry, e-mail, or document. Deleting from normal resident access does not delete all digital copies or originals that can be uncovered through forensic digital evaluation. E-mail SPAM, may also lead the voyager down an incorrect anthropological trail of discovery. The researcher will need to triangulate their findings to determine accuracy based upon historical known facts and other images that may be available to substantiate their findings as they learn about the future by excavating and understanding digital records of the past.

## 9. CONCLUSION

The virtual villages and towns where cyber dwellers of the 21<sup>st</sup> century reside will be the excavation sites of the future. Upcoming archaeologists and anthropologists will critique the society, the people, and communities by what they discover has been recorded in sound, video, and text as it exists in today's digital society.

## REFERENCES

- Albrecht K., & McIntyre, L. (2005). *Spychips: How major corporations and government plan to track your every move with RFID*. Nashville, TN: Nelson Current.
- Austin, D., (2005). The Stahl Site Petroglyphs: New Observations and Comments. Retrieved June 2, 2007, from [http://www.petroglyphs.us/article\\_stahl\\_site\\_petroglyphs.htm](http://www.petroglyphs.us/article_stahl_site_petroglyphs.htm)
- Baheyeldin, K., (2004). Introduction to digital archeology. Retrieved May, 9, 2007, from <http://baheyeldin.com/technology/digital-archeology.html>
- Boszhardt, R. F., Rowe, M. W., Southon, J. R., & Steelman, K. L., (2001). Radiocarbon Age Determination of a Rock Painting at Arnold/Tainter Cave, Wisconsin. *Midcontinental Journal of Archaeology*, 26 (1), 121.
- Cashmore, P. (2006, August, 9). *MySpace hits 100 million accounts: Mashable social networking 2.0*. Retrieved November 9, 2006, from <http://mashable.com/2006/08/09/myspace-hits-100-million-accounts/>
- Davis, C. W. (2004). Software for efficient file elimination in computer forensics investigations (Master Thesis, College of Engineering and Mineral Resources, 2004). (UMI No. 1423966).
- El-Laithy, S. M. H. (2002). Literacy practices and language ideologies of an Egyptian American Muslim youth group: An exploratory ethnographic study. Hofstra University, (UMI 3046287).
- Exploring the potteries, (2006) Retrieved May, 9, 2007, from [http://www.exploringthepotteries.org.uk/Nof\\_website1/local\\_history\\_static\\_exhibitions/arch\\_tech/pages/planning\\_development.htm](http://www.exploringthepotteries.org.uk/Nof_website1/local_history_static_exhibitions/arch_tech/pages/planning_development.htm)
- Garrett, J. J., (2006). MySpace:Design anarchy that works retrieved June 1,2007 from [http://www.businessweek.com/innovate/content/dec2005/id20051230\\_570094.htm](http://www.businessweek.com/innovate/content/dec2005/id20051230_570094.htm)
- Kuhn, T.S. (1996). *Structure of scientific revolutions*. Chicago: University of Chicago Press.
- Hirst, K.K., (2007). History of Archaeology – part 1. Retrieved June 26, 2007 from <http://archaeology.about.com/cs/educationalresour/a/history1.htm>

- Intel Brochure (2004). *Wired for Wireless*. Retrieved from [http://download.intel.com/technology/comms/wireless/WfW\\_overview.pdf](http://download.intel.com/technology/comms/wireless/WfW_overview.pdf)
- Just, P. & Monaghan, J., (2000). *Social and cultural Anthropology: A very short introduction*. Oxford, England: Oxford University Press.
- LeBlance, S. A., Redman, C. L., & Watson, P. J. (1971). *Explanation in Archaeology: An Explicitly Scientific Approach*. New York, Columbia University Press.
- Luthra, N., (2006). The "Real" and the "Virtual" in public space (Master Thesis, University of New York at Buffalo, 2006) (UMI 1431955).
- Lynch, R. N., (1974) *Rethinking modernization; Anthropological perspectives*. Westport, Connecticut: Greenwood Press.
- McCullagh, D., (2006). AOL's disturbing glimpse into users' lives Retrieved June 24, 2007 from [http://news.com.com/AOL+offers+glimpse+into+users+lives/2100-1030\\_3-6103098.html](http://news.com.com/AOL+offers+glimpse+into+users+lives/2100-1030_3-6103098.html).
- Pratt, M. K., (2007). Tech trash: Still stinking up the landscape Retrieved June 22, 2007, from <http://www.computerworld.com/action/article.do?command=viewArticleBasic&articleId=284601>
- Ponschock, R. L. (2007). Computer technology, digital transactions, and legal discover: A phenomenological study of possible paradoxes (Doctoral dissertation, Capella University, 2007) (UMI No. 3246872).
- Potaczala, M., (2001). Computer forensics. Retrieved June 10, 2007 from <http://chantry.acs.ucf.edu/~mikep/cf/CHS5937-TermPaper.pdf>
- Pickavet, C. (2006) Balancing the business of MySpace. Retrieved May 15, 2007 from <http://www.internetnews.com/feedback.php/http://www.internetnews.com/ec-news/article.php/3582941>
- Renfrew, C., (1980, July). The great tradition versus the Great Divide: Archaeology as anthropology? *American Journal of Archaeology*, 84 (3), 287-298.
- Stiebing, W. H., (1994). *Uncovering the Past: A History of Archaeology*. New York: Oxford University Press
- US-CERT (2005). Computer Forensics. Retrieved May 15, 2007 from [http://www.us-cert.gov/reading\\_room/forensics.pdf](http://www.us-cert.gov/reading_room/forensics.pdf)
- Vascellaro, J. E., (2007) *Grandma has a story to tell ... on YouTube*. Retrieved June 10, 2007 from <http://content.hamptonroads.com/story.cfm?story=125014&ran=57567>

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# GRAPHIC PRESENTATION PATTERNS OF THE SHARES IN THE UNCLASSIFIED ROMANIAN GROUPS

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## ABSTRACT

*The manifestation of the groups of firms in the Romanian economy is in an early stage. The empirical ways of manifestation of the shares in the Romanian groups determined us to try within this paper to present a new method of evaluating a group of firms, based on two indicators, the first one called “**the degree of the group stability considering the economic evolution**” and the other one called “**the evaluation of the increase potential of the group**”. The indicators’ calculus and graphic representation allow us a visualization of the activity distribution in a group and its increase potential, by taking into consideration the main field of activity of the mother company, which could help us draw a conclusion as concerning the distribution of the economic risk corresponding to the field in which the group acts. We would like to illustrate the above-mentioned theory with the example of ROMVEST, a group of companies from Cluj-Napoca, Romania.*

**Keywords:** groups of enterprises, shares, the degree of the group stability considering the economic evolution, the evaluation of the increase potential of the group, group of companies, contractual control, contractual connections, financial connections, personal connections, turnover

## 1. INTRODUCTION

We believe that, except the foreign groups of companies interested in the “famous privatization” offered by the Romanian Government, which exists according to some elaborated strategies, the Romanian groups of enterprises are, still, in an empirical stage of manifestation, although the phenomenon is perceived as benefic. For now, there is no distinction between the contractual connections (share association) and those of funds (groups of companies).

We would like to illustrate this aspect with the example of a group of companies from Cluj-Napoca, named ROMVEST. Initially, ROMVEST was composed of three different companies controlled by independent stockholders. The three companies were juridical identified as limited companies and acted on three different sectors of activity: computers (hardware and software), constructions and financial consulting. Later, the companies are organized in a group structure according to a share association contract, which foresees the conjunction of economic efforts in order to attract the clients and to consolidate the status of each company on the market, according to their field of activity. The three companies are identified as follows [1]:

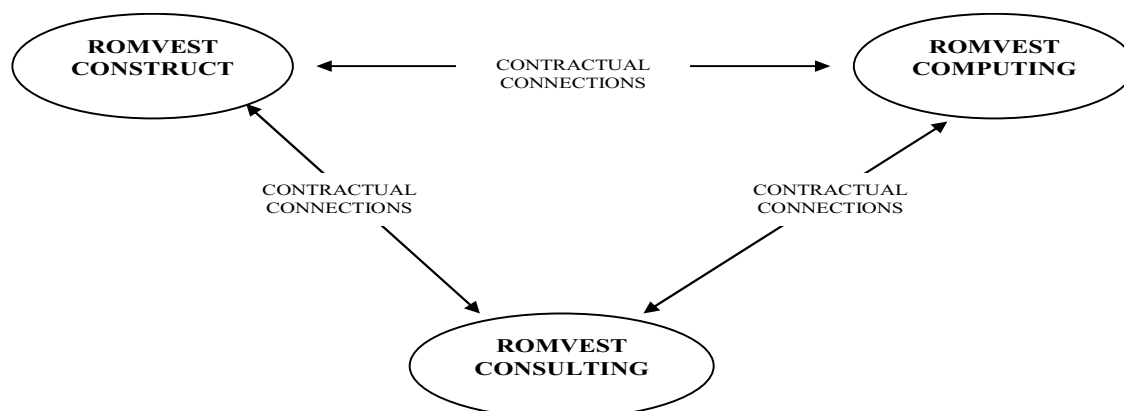
- a. ROMVEST COMPUTING Cluj-Napoca
- b. ROMVEST CONSTRUCT Cluj-Napoca
- c. ROMVEST CONSULTING Cluj-Napoca

According to a generally accepted definition, **the contractual control** is present when the mother-company establishes the financial and operational policies of the filial, according to a contract or some clauses. Thus, the enterprise could be a minority stockholder or associate of another enterprise, and could exclusively control the latter. Therewith, in certain juridical structures such as the commandite, the group could exert the control even if it formally holds more than half of the voting rights [2].

The contractual connections are based on the existence of a contract signed by one or more partners, establishing the way the partnership functions and the reports between the partners.

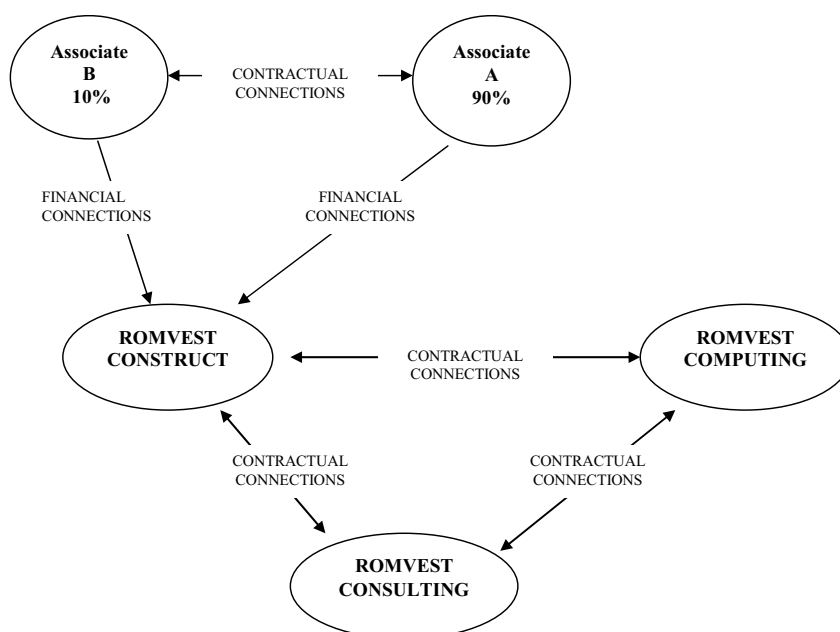
According to the above-mentioned definitions, we may state the fact that the group of companies ROMVEST deals with contractual connections, which clearly define the ways the companies support each other in order to stand out and to assert their authority on the market.

The first insert presents the initial situation (phaze I) within the group of companies ROMVEST, which is going to be used as an example throughout the entire paper.



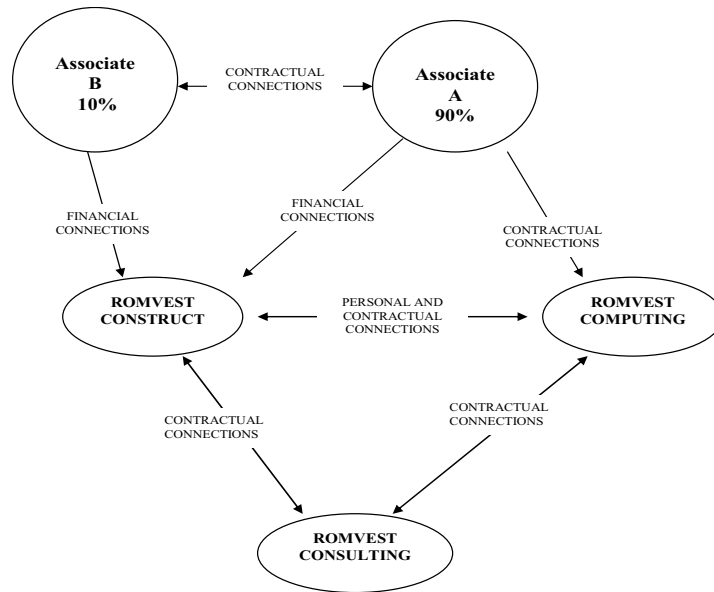
**Insert no. 1. ROMVEST Group – phaze I**

After direct negotiations with another group of companies, the trading company ROMVEST CONSTRUCT Cluj-Napoca was taken over by other two associates. The associates accepted to keep the company within the ROMVEST group, respecting the existent contractual understanding between its members. Under these circumstances, the relationships within the group were:



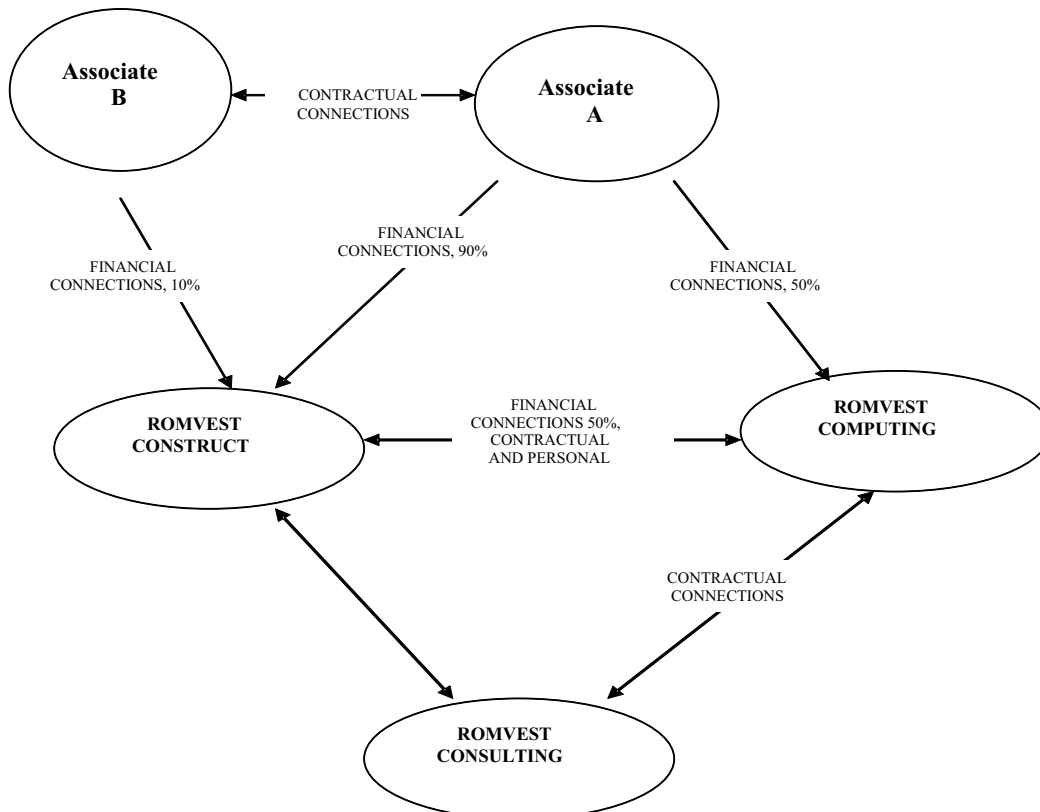
**Insert no. 2. ROMVEST Group – phaze II**

After other several direct negotiations, the associate A of ROMVEST CONSTRUCT managed to hire for ROMVEST CONSTRUCT the same managers being members in the administration of ROMVEST COMPUTING. In this way, the associate A wanted to prepare the taking-over of this company (ROMVEST COMPUTING ) in the very near future. Under these circumstances, the relationships within the group were:



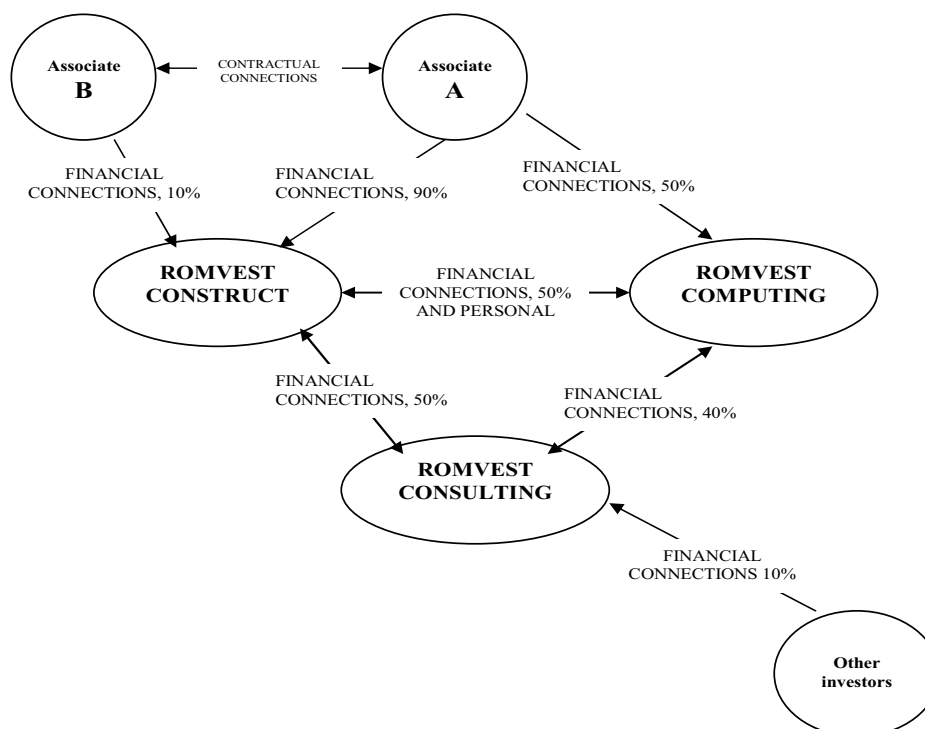
**Insert no. 3. ROMVEST Group - phase III**

After the acceptance of the new administration, the expected taking-over emerged: associate A and ROMVEST CONSTRUCT took-over the ROMVEST COMPUTING company. According to the additional document signed together with the company contract and the company's status, each of the associates managed to hold 50% of the latter. Under these circumstances, the relationships within the group were:



**Insert no. 2.4. ROMVEST Group – phase IV**

In the end, ROMVEST CONSULTING was taken-over from its initial owner, the third independent person, by ROMVEST CONSTRUCT and ROMVEST COMPUTING WITH 50% and respectively 40%. Under these circumstances the relationships within the group were:



**Insert no. 5. ROMVEST Group- phase V**

It is to be noticed from the above mentioned example that the connections established between two or more trading companies are complex; they cannot be reduced to just one type of connection. Therewith, the economic reality shows us the concentration tendency of the funds, although it pleads and supports the small and medium size enterprises. Once the funds are concentrated, it is necessary to complete and present consolidated financial reports, which should reflect as clear as possible the relational situation between the economic entities that act on the market as one entity.

A group of companies such as “ROMVEST”, the one described above, is called an “unclassified group of enterprises”, because it is a complex combination of contractual and financial connections controlled by a group of persons who act according to a personal interest. Therefore, if the interest of the person or the group that controls “the business” does not impose, these kinds of unclassified groups of enterprises do not belong anymore to the accounting referential which imposes the consolidation of annual accounts. In these cases, an alternative to the consolidated financial situations could be a graphic analysis, based on an indicator called **the degree of the group stability considering the economic evolution**. The indicator’s calculus and graphic representation allows us a visualization of the activity distribution in a group, by taking into consideration the main field of activity of the mother company, which could help us draw a conclusion as concerning the distribution of the economic risk corresponding to the field in which the group acts.

In this context, when putting together the concept of **the degree of the group stability considering the economic evolution**, the next premises are considered:

- Trading companies purchase other companies, by holding parts of the issuer’s funds, in order to develop their activity, namely in order to increase their turnover, considering the idea that there are certain given limits in what concerns the relationship between the profit and the turnover in different fields;

- A table is drawn considering a few parameters: the turnover, the medium share held by each category of shares and the profit assured by each field of activity where we own shareholdings
- The data presented in the table as concerning the turnover are the following:
  - a) The turnover of the mother company;
  - b) The turnover of the companies where we own horizontal shareholdings;
  - c) The turnover of the companies where we hold vertical shareholdings;
  - d) The turnover of the companies where we hold shareholdings in other fields;
  - e) *In addition, the table will include, on a separate column, the share of the mother company reported to the share within each category.*
- Insert no. 2.1. presents the following data concerning the share:
  - a) The share of the mother company, considered to be 100 %;
  - b) The share of the companies where we own horizontal shareholdings;
  - c) The share of the companies where we hold vertical shareholdings;
  - d) The share of the companies where we hold shareholdings in other fields.
- Insert no. 2.1. shows the following data concerning the profit:
  - a) The profit of the mother company, considered to be 100 %;
  - b) The profit of the companies where we hold horizontal shareholdings;
  - c) The profit of the companies where we hold vertical shareholdings;
  - d) The profit of the companies where we hold shareholdings in other fields;
  - e) *The table will also include, on a separate column, the share of the mother company reported to the share within each category.*
- We will use in order to draw the chart, on the axis xoy, the following four elements: the proper turnover, the horizontal turnover, the vertical turnover and the turnover in other fields.

In order to represent in a graphic manner **the degree of the group stability considering the economic evolution** by using figures, the paper will present a fictional example.

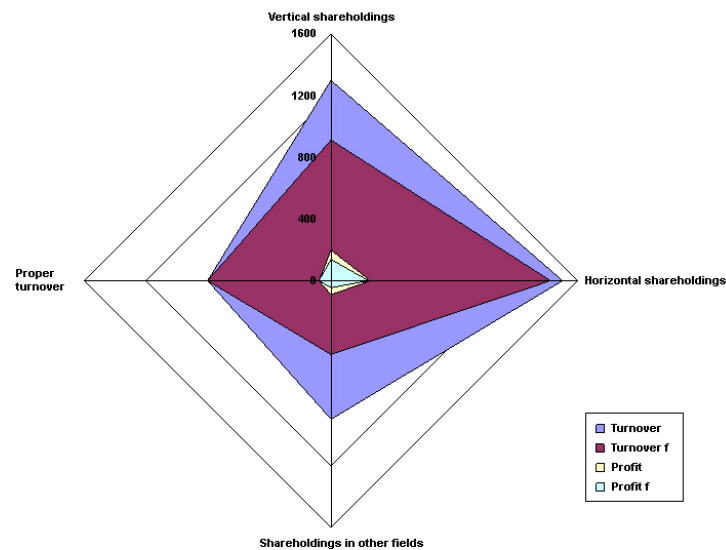
Let us suppose that company A holds horizontal shareholdings in companies that have a turnover of 1500um, vertical shareholdings in companies that have a turnover of 1300um, and shareholdings in other fields in companies that have a turnover of 900 um; the proper turnover is of 800 um.

**Insert no. 1.**

TYPES OF SHAREHOLDINGS	Turnover (um)	Turnover According to the Share	PROFIT (um)	Profit According to the Share	Share
0	1	2	3	4	5
Vertical Shareholdings	1300	910	195	137	70%
Horizontal Shareholdings	1500	1425	255	242	95%
Shareholdings in Other Fields	900	477	90	48	53%
Proper Turnover	800	800	80	80	100%
<b>Sd "The Degree of the Group stability Considering the Economic Evolution"</b>	<b>2530000</b>	<b>1543038</b>	<b>47737.5</b>	<b>29679.23</b>	



These data could be graphically represented as follows:



Insert No. 2.6 The Chart for Sd 'The Degree of the Group Stability Considering the Economic Evolution'

The degree of the group stability considering the economic evolution can be calculated for: the turnover at the level of the group, the afferent turnover of the shareholdings held by the mother company, the profit at the level of the group, and the afferent profit of the shareholdings held by the mother company. The calculus formula for the degree of the group stability considering the economic evolution of the turnover at the level of the group is:

$Sd T = 1/2 * (T + Th) * (Tv + Tf)$  where:

T = Proper Turnover, Th = Horizontal Turnover, Tv = Vertical Turnover, Tf = Turnover in Other Fields

For the calculus of the other parameters we use the data in the columns 2, 3 and 4. From the chart, we can acknowledge the fact that company A has a very developed network of subsidiaries. It controls the activity both vertically and from the field of activity, fact that ensures it a consolidated status on the market. We may also notice that the risk concerning the proper activity is distributed when the turnover is also distributed towards other activities.

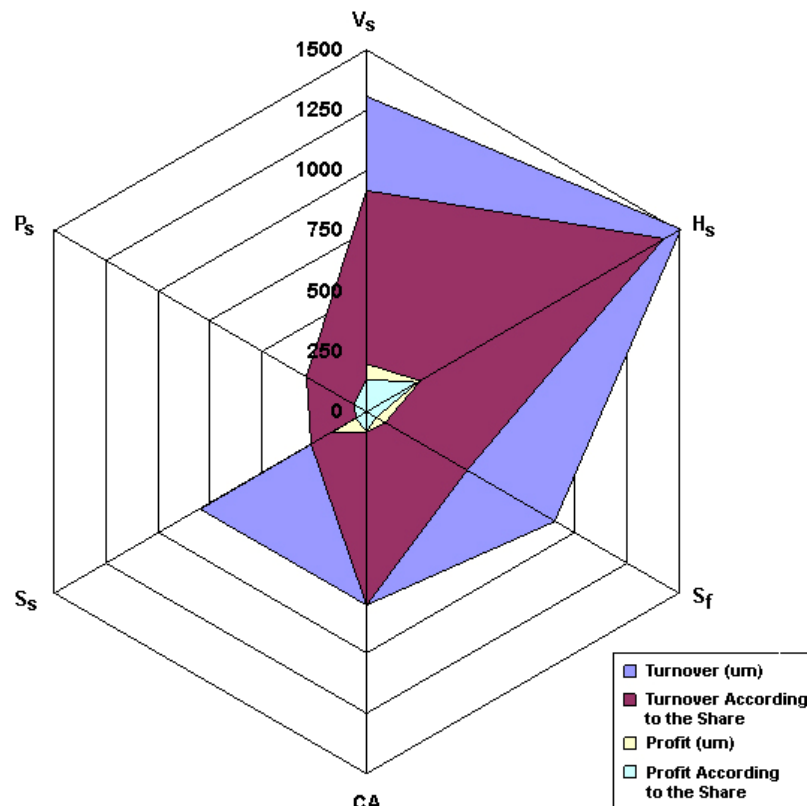
Corresponding to the elaboration of the "shares outside the group" in "strategic share deeds" and in "share interests", we believe that within the "strategic share deeds" there should be included the share deeds held at the units where the share increase is important. Within the "share interests" there should be included the share deeds held at the units that do not represent an interest in what concerns the activity, rather than to obtain dividends regularly, according to the specific performances of the respective units.

In these circumstances, we also propose to insert an indicator which evaluates the increase capacity of the group by reporting the degree of the group stability considering the economic evolution to other two parameters: strategic share deeds and present shareholdings. We will call it in the following paragraphs the evaluation of the increase potential of the group.

Let us suppose that company A presented above also disposes of strategic shareholdings in companies which have a turnover of 800 um, and of present shareholdings, which will ensure the company a share of 15 % after the exertion of the right of conversion into stocks. The afferent turnover of the present shareholdings was considered to be 0, in order to avoid the germination of a share from the turnover, considering the fact that present shareholdings are financial derivatives held at companies where share deeds are already being held.

TYPES OF SHAREHOLDINGS	0	Turnover r (um)	Turnover According to the Share	PROFIT (um)	Profit According g to the Share	SHARE
	1	2	3	4	5	6
Vertical Shareholdings	Vs	1300	910	195	137	70%
Horizontal Shareholdings	Hs	1500	1425	255	242	95%
Shareholdings in Other Fields	Sf	900	477	90	48	53%
Proper Turnover	TO	800	800	80	80	100%
Strategic Shareholdings	Ss	800	264	160	53	33%
Present Shareholdings		0	285	0	57	15%
<b>Ep "The Evaluation of the Increase Potential of the Group"</b>		<b>2015450</b>	<b>1255922</b>	<b>40081.94</b>	<b>27443.23</b>	

These data could be graphically represented according to the indicator "The Evaluation of the Increase Potential of the Group" as follows:



Insert No 2.7. The Chart for Ep 'The Evaluation of the Increase Potential of the Group'

The evaluation of the increase potential of the group ( $E_p$ ) is calculated as a sum of six areas of triangles where two sides and the angle between them are known, according to the formula:

$$E_p = \frac{1}{2} \sin 60^\circ \sum_{i=1, i=6, i+1=0}^6 (A_i * A_{i+1})$$

According to the chart, one can observe the increase potential of the share held by the company A, by the redistribution of the turnover corresponding to the share from the present shareholdings into strategic shareholdings or shareholdings within the group.

One can also appreciate the increase potential of the group by the redistribution of the afferent turnover of the strategic shareholdings; once increased at 50 %, the share will become shareholdings within the group.

## REFERENCES

- Pop I. A., *THE ACCOUNTING INFORMATIVE FLOW CONCERNING SHARES AND FINANCIAL INVESTMENTS*, Ed. Alma Mater, Cluj - Napoca, 2006.
- Petris R., Istrate C., Budugan D., Georgescu I., *Ghid practic pentru înțelegerea și aplicarea Standardelor Internaționale de Contabilitate Situații financiare consolidate și contabilitatea investițiilor financiare*, Ed. CECCAR, București, 2004, p. 28.

# THE EFFECTS OF TEAMWORK OF AUDITORS ON ORGANIZATIONAL COMMITMENT AND PERFORMANCE: EVIDENCE IN THAILAND

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## ABSTRACT

*The tradition ways in which someone works are changing because of global competition and technological advances. While many researches on teamwork are increasing, many questions remain regarding what is required to ensure the effectiveness of teamwork on organizational commitments and performance. The purpose of this paper is to (1) investigate teamwork of auditors can increase organizational commitment (2) to investigate teamwork can increase performance (3) to study the relationship between organizational commitment and performance. The results of a survey find that levels of teamwork and trust of auditors in Thailand are associated with levels of organizational commitment and performance and organizational commitment is likely to have a positive influence on performance.*

**Keywords:** Teamwork; Organizational Commitment, Performance.

## 1. INTRODUCTION

The tradition ways in which someone works are changing because of global competition and technological advances. The question of how to improve process or treatment for the best of organizations' performance has been a challenge for many decades. They have many tools for management such as planning programming and budgeting systems, management by objectives, zero-based budgeting and other tools in the hopes of improving performance but they does not interest employees. Other reasons is that in task is simple, management can use standard operating procedures and not necessary for require discussion of work methods or coordination of members but more complex and dynamic environments are effect to complex tasks which is asked more alternatives, important one is teams. Someone address that their success in todays is complete by fast, flexible, and knowledge-based which these characteristics is development by employing teams (Cohen, 1993; Lawler, 1993; Mohrman & Mohrman, 1993). Scott and Tiessen (1999) find that as complexity increase organizations increasingly rely on teams. Thus present employees are increasingly likely to work in effective teams at many points in their careers. Many companies are more likely to have an employment force spanning the world and the face-to-face aspect of teams is most likely always yearningly or desirable. With the increased use of teamwork in firm, academic research in management and social sciences has concentrated on many topics relating to teamwork. And while many researches on teamwork are increasing, many questions remain regarding what is needed to ensure the effectiveness of teamwork, other firms (Manufacturing and service) and employee characteristic. Thus, this paper interest is to study teamwork with focus on auditors in Thailand.

Organizational commitment is commonly accepted to involvement the best outcome of firms. Prior studies indicate that it is positive correlation with job involvement, job satisfaction and good financial performance but negatively correlation with absenteeism, turnover and fail financial performance. Even so mixed findings exist as to the relationship between organizational commitment and performance. Researchers have address that have positive correlation between organizational commitment and performance in studies of manufacturing (e.g., Bashaw and Grant, 1994; Benkhoff, 1977) but that relationship has been found to be nonsignificant in the service firms such as insurance (e.g., Leong et al., 1994). Such mixed prior results within a phenomenon that is seemingly forward warrant for further straight study. Thus, this paper investigates relationship between organizational commitment and performance of auditors in Thailand. The purpose of this paper is to (1) investigate teamwork can increase organizational commitment (2) to investigate teamwork can increase performance (3) to study the relationship between organizational commitment and performance.

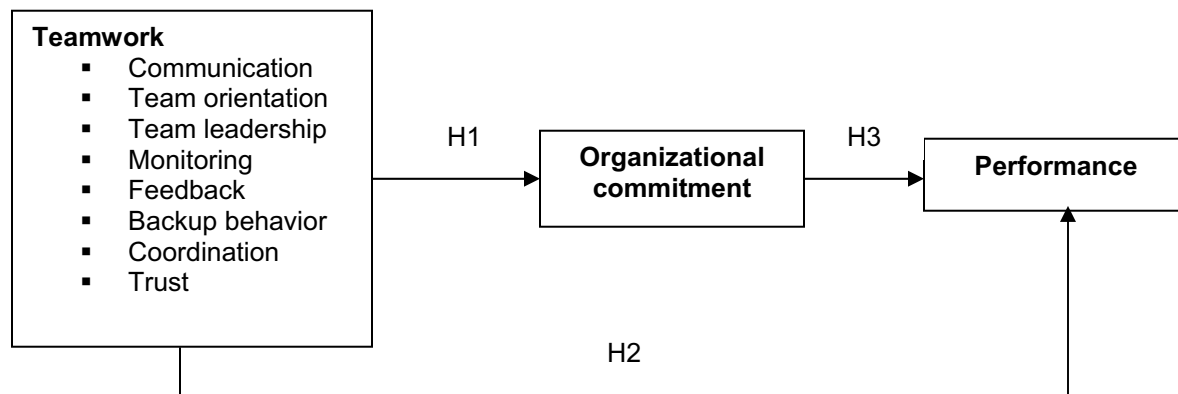
The remainder of this paper is organized as follows. Section 2 presents the literature review. The following section presents research method, including the data collection and measurement of constructs.

The results are presented, followed by discussions of the results. The next section presents contribution and future research and finally section presents conclusion.

## 2. LITERATURE REVIEW

To study the issue of teamwork in a virtual auditing environment which trust, models and hypotheses were develop based on work on organizational commitment research stream on performance. Thus, conceptual model of this paper presents the relationship among teamwork, organizational commitment and performance, as shown in Figure 1.

**FIGURE 1**  
**MODEL OF TEAMWORK, ORGANIZATIONAL COMMITMENT AND PERFORMANCE**



### 2.1 Teamwork

Teamwork has been considered significant contributors to companies' success (Black, 1995; Narisetti, 1995). Effective teamwork requires cooperation and sharing among individual employees. The model of teamwork used in this paper views from the perspective of team skills which includes that communication, team orientation, team leadership, monitoring, feedback, backup behavior, and coordination (Dickinson et al., 1992). In addition to trust included in this paper because of it is essential element in group interaction (Gambetta, 1988). Teamwork is defined as small groups of inter dependent individuals that take responsibility for their organizational outcomes (Sundstrom et al., 1982). It consists of communication, team orientation, team leadership, monitoring, feedback, backup behavior, and coordination (Dickinson et al., 1992).

Communication refers to the linking and exchange mechanism among all member of teamwork. It is the basis for development of teamwork skills such as questioning to clarify uncertainties, active brainstorm, and member decision makings. Formal and informal communication helps to reinforce employee feelings of organizational identification and maybe reduce the uncertainty and mistake understands in task. The quality communication relationships may create a work climate that encourages organizational commitment. Scott et al. (1999) address that adequate communication assist to diminish workplace uncertainty and increase outcome of firms. Teamwork tends to seek new information to achieve goals of member (Grunig J., 1969).

Team orientation is defined as the situation that all members of team have attitudes toward one another and the team task. It reflects acceptance of team norms, level of group cohesiveness, and importance of team membership. Moreover, teamwork affects to effective collaboration and shared decision making. Ellemers et al., (1998) find that team-oriented affective organizational commitment.

Team leadership refers to providing direction, structure, and support for other team members by formal or informal authority over others. Leader should be intellectual stimulation, reasoning, rationality and evidence (McColl-Kennedy, Anderson, 2005), vision and sense of mission. The best leadership style in teamwork effect to satisfaction, worker no absenteeism and performance outcomes (Barling et al., 1996)

Monitoring refers to observation, keep, remark and awareness of activities and performance of other members of team. This mechanism represents instruments of communication between managers and subordinates or other members of team. To complete of team organizational commitment and team performance is required vigilance. Thus, the monitoring of leader is able to view and recognize the outcome (Militello et al., 1999).

Feedback consists of giving, seeking, and receiving of information. Giving feedback refers to providing information regarding other team members' performance, then seeking feedback refers to requesting input or guidance regarding performance and receiving feedback refers to accepting positive and negative information about outcomes. Most empirical research indicator that feedback is positive relationship with organization commitment and performance (Rasker, Post and Schraagen, 2000). Backup behavior involves assisting the performance of members in team. The skills of backup behavior can help members to have an understanding in other members' task and are willing and can provide and seek assistance when needed (Fletcher and Major, 2006). Backup behavior is defined as a degree of task interchangeability among team members.

Coordination refers to the team members executing their activities in a timely and integrated manner. The team members and apply communication skills to be able collaborative work, implement appropriate corrective actions and the achievement of team tasks (Donnellon, 1996). The success of teamwork in auditors enable adapts their skills to fit new roles and responsibilities relation with collective activity (Dee and Henkin, 2001). It shows that the performance of some team members affects the performance of other team members.

Summary, teamwork in this paper is defined as cooperative behaviors of team members to achieve desired goals and is characterized by a number of behavioral indicators such as communication, team orientation, team leadership, monitoring, feedback, backup behavior, and coordination.

Team transactions characterized by interpersonal trust promote an environment in which individuals feel free to express their ideas, engage in problem solving, and resolve differences of opinion (French and Bell, 1984). Trust in teams and teamwork in auditors is affected by levels of interpersonal trust that are linked, in turn, to social (Bryk and Schneider, 2002). Work relationships characterized by trust may strengthen cooperation, reduce conflicts, and increase organizational commitment (Morgan and Hunt, 1994; Tschannen-Moran and Hoy, 2000). Thus, trust refer to the level of confidence that team members show in interpersonal relations.

Organizational benefits from teamwork can decrease turnover and increase organization commitment, workplace productivity, improvements to service quality (Gladstein, 1984, Guzzo and Dickson, 1996). Anonymous (1993) find that teamwork styles of supervision are significantly associated with high levels of organizational commitment. Welsch et al., (1981) study 5 categories that can increase organizational commitment and result that teamwork is positively related to organizational commitment. Thus, teamwork is likely to have a positive relationship with organizational commitment. This paper investigates potential associations between teamwork and organizational commitment. Therefore,

Hypothesis 1: Higher levels of teamwork and trust are associated with higher levels of organizational commitment.

Hypothesis 2: Teamwork and trust should correlate positively with performance.

## **2.2 Organizational Commitment**

The definition of commitment has changed over time to reflect research findings. Originally, the most popular definition of commitment was offered by Mowday, Porter, and Streers (1982) and referred only to organizational commitment as the psychological identification that an individual feels toward his or her employing organization and involvement in the organization characterized by (1) internalization of the values and goals of the organization; (2) determination to work extra hard on behalf of the organization; and (3) a strong yearn to remain a member of the organization.

Meyer and Allen (1991) defined as three components of organizational commitment consist of affective, normative and continuance commitment. The firstly component is affective commitment, which refers to an employee's "emotional attachment to, identification with, and involvement in an organization" (Meyer & Allen, 1991, p.67). The secondly component is normative commitment, which refers to an employee's feelings of obligation to remain in his or her organization. Finally component is continuance commitment, which refers to an employee's perceptions of the costs associated with leaving an organization. These costs can either be work-related (e.g., wasted time and effort acquiring non-transferable skills) or nonwork-related (e.g., relocation costs).

Powell, L. (2000) suggests that organizational commitment to teamwork does affect satisfaction and performance. Organizational commitment has been shown to be positively related to performance (Angle and Perry, 1986). Mitchell J. and Steven H. 2001 find that organization commitment was positively related to performance. Many researches used an objective measure of performance. Reflective of the general trend in prior researches, this paper offers the following:

Hypothesis 3: The organizational commitment should correlate positively with performance.

### 3. RESEARCH METHODS

#### 3.1 Sample

For this paper, auditors in Thailand were selected as the sample. A mail survey was used for data collection. The questionnaire was sent to 500 auditors in Bangkok, Thailand. With regard to the questionnaire mailing, 40 surveys were undeliverable because the auditors had moved to unknown locations. Deducting the undeliverables from the original 500 mailed, the valid mailing was 460 surveys, from which 110 responses were received and completed and usable. The effective response rate was approximately 24%. According to Aaker, Kumar and Day (2001), the response rate for a mail survey, without an appropriate follow-up procedure, is less than 20%. Thus, the response rate of this paper is considered acceptable.

#### 3.2 Variables

This paper uses teamwork items from Roenstien (1994) which have seven teamwork components that are communication, team orientation, team leadership, monitoring, feedback, backup behavior, and coordination. Each skill was measured by three survey items. As previously noted, this paper proposes one additional factor of teamwork; namely, trust that measure the affectiveness and cognition-based trust which was used to assess levels of interpersonal trust from 11 items; this paper selected four items with the highest factor-loadings of McAllister's (1995). The organization commitment items were taken directly from Allen and Meyer (1990) and modified by Meyer et al. (1993) commitment scale. Finally, eight items of performance was adopted from Zhang, QY (2001).

**TABLE 1**  
**RELIABILITY ANALYSIS AND VALIDITY ANALYSIS**

<b>Variables</b>	<b>Cronbach Alpha</b>	<b>Factor loadings</b>
Communication	0.77	0.72-0.89
Team orientation	0.83	0.82-0.92
Team leadership	0.86	0.74-0.84
Monitoring	0.85	0.86-0.92
Feedback	0.88	0.89-0.91
Backup behavior	0.83	0.84-0.93
Coordination	0.89	0.88-0.94
Trust	0.79	0.65-0.85
Organizational commitment	0.88	0.66-0.88
Performance	0.87	0.53-0.86

### 3.3 Method

Factor analysis was firstly utilized to investigate the underlying relationships of a large number of items and to determine whether they can be reduced to a smaller set of factors. This paper also used factor analysis to test the construct validity, and that every factor loadings are greater than the 0.40, was adopted by Nunnally and Berstein (1994). In the scale reliability, Cronbach alpha coefficients are greater than 0.70 (Nunnally and Berstein, 1994). The scales of all measures appear to produce internally consistent results; thus, these measures are deemed appropriate for further analysis because they express an accepted validity and reliability in this paper. Table1 shows the results for both factor loadings and Cronbach alpha for multiple-item scales used in this paper.

The ordinary least squares (OLS) regression analysis is used to test the hypothesized relationships and estimate factors affecting organizational commitment and performance. Because both dependent and independent variables in this paper were neither nominal data nor categorical data, OLS is an appropriate method for examining the hypothesized relationships (Aulakh, Kotabe and Teegen, 2000). In this paper, the model of the aforementioned relationships is as follows:

$$\begin{aligned} \text{Organizational Commitment} = & \beta_0 + \beta_1 \text{Communication} + \beta_2 \text{Team orientation} + \\ & \beta_3 \text{Team leadership} + \beta_4 \text{Monitoring} + \beta_5 \text{Feedback} + \\ & \beta_6 \text{Backup behavior} + \beta_7 \text{Coordination} + \beta_8 \text{Trust} + \\ & \beta_9 \text{Employee} + \varepsilon \end{aligned} \quad (1)$$

$$\text{Organizational Commitment} = \beta_0 + \beta_1 \text{Teamwork} + \beta_2 \text{Employee} + \varepsilon \quad (2)$$

$$\text{Performance} = \beta_0 + \beta_1 \text{Organizational Commitment} + \beta_2 \text{Employee} + \varepsilon \quad (3)$$

$$\begin{aligned} \text{Performance} = & \beta_0 + \beta_1 \text{Communication} + \beta_2 \text{Team orientation} + \beta_3 \text{Team leadership} + \\ & \beta_4 \text{Monitoring} + \beta_5 \text{Feedback} + \beta_6 \text{Backup behavior} + \beta_7 \text{Coordination} + \\ & \beta_8 \text{Trust} + \beta_9 \text{Employee} + \varepsilon \end{aligned} \quad (4)$$

$$\text{Performance} = \beta_0 + \beta_1 \text{Teamwork} + \beta_2 \text{Employee} + \varepsilon \quad (5)$$

## 4. RESULTS AND DISCUSSION

Demographic data showed that a majority characteristics of samples are male 63.6%, age (36-40 year old) is 41%, education (higher bachelor's degree) is 68.2%, position (partner) is 54.5%, number of employee (<30) is 77.3% and services are 100% (audit) and 72.7% (consult). Table 2 shows the descriptive statistics and correlation matrix for all variables. With respect to potential problems relating to multicollinearity, variance inflation factors (VIF) were used to provide information on extent to which non-orthogonality among independent variables inflates standard errors. The VIFs below the cut-off value of 10 recommended by Neter, Wasserman and Kutner (1985), meaning that the independent variables are not correlated with each other. Therefore, there are no substantial multicollinearity problems encountered in this paper.

Table 3 presents the results of OLS regression analysis of the relationships among teamwork, organizational commitment and performance. In order to examine the relationship between teamwork and organizational commitment, OLS regression equations were estimated. The firstly equation regressed each of the teamwork subscales (communication, team orientation, team leadership, monitoring, feedback, backup behavior, and coordination) and trust on organizational commitment. They accounted for 48 percent of the variance in organizational commitment. The model indicated that some of the teamwork subscales- team orientation ( $\beta_2 = 0.55$ ,  $p < 0.01$ ), monitoring ( $\beta_4 = 0.40$ ,  $p > 0.05$ ), backup behavior ( $\beta_6 = 0.51$ ,  $p > 0.01$ ), coordination ( $\beta_7 = -0.57$ ,  $p < 0.01$ ) and trust ( $\beta_8 = 0.41$ ,  $p < 0.04$ ) - were significant predictors of organizational commitment. Auditors' higher levels of team orientation, monitoring, backup behavior, coordination and trust also perceived higher levels of organizational commitment. No surprise, prior research teamwork subscales are partially significant such as Park and Henkin, B. (2005) which support team orientation, team leadership and backup behavior. The secondly equation regressed



the total teamwork scale on organizational commitment which showed that teamwork was a significant predictor of organizational commitment ( $\beta_1 = 0.61$ ,  $p < 0.01$ ), and accounted for 39 percent of the variance in organizational commitment. The thirdly equation regressed each of the teamwork subscales (communication, team orientation, team leadership, monitoring, feedback, backup behavior, and coordination) and trust on performance. They accounted for 77 percent of the variance in performance. The model indicated that some of the teamwork subscales- communication ( $\beta_1 = 0.29$ ,  $p < 0.04$ ), team orientation ( $\beta_2 = 0.75$ ,  $p < 0.01$ ), team leadership ( $\beta_3 = -0.97$ ,  $p < 0.01$ ), monitoring ( $\beta_4 = 0.53$ ,  $p < 0.01$ ), backup behavior ( $\beta_6 = -0.53$ ,  $p < 0.01$ ), and trust ( $\beta_8 = 0.69$ ,  $p < 0.01$ ) - were significant predictors of organizational commitment. Auditors' higher levels of communication, team orientation, team leadership, monitoring, backup behavior, and trust also perceived higher levels of performance. The fourthly equation regressed the total teamwork scale on performance which showed that teamwork was a significant predictor of performance ( $\beta_1 = 0.75$ ,  $p < 0.01$ ), and accounted for 57 percent of the variance in performance. Thus, Hypothesis 1 and 2 are partially supported. Finally the equation regresses organizational commitment on performance. It accounted for 40 percent of the variance in performance and showed that organizational commitment was a significant predictor of performance ( $\beta_1 = 0.64$ ,  $p < 0.01$ ). Thus, Hypothesis 3 is supported.

**TABLE 2**  
**DESCRIPTIVE STATISTICS AND CORRELATION MATRIX OF RESEARCH VARIABLES**

Variables	CM	TO	TL	MO	FB	BB	CO	TR	OC	PE	EM
Mean	4.39	4.41	4.27	4.32	3.95	4.12	4.36	4.24	4.17	4.03	1.64
Standard deviation	0.56	0.61	0.63	0.58	0.74	0.58	0.57	0.59	0.52	0.50	1.19
Communication (CM)											
Team orientation (TO)	0.84**										
Team leadership (TL)	0.82**	0.80**									
Monitoring (MO)	0.87**	0.79**	0.77**								
Feedback (FB)	0.60**	0.61**	0.44**	0.46**							
Backup behavior (BB)	0.73**	0.70**	0.52**	0.72**	0.72**						
Coordination (CO)	0.73**	0.80**	0.53**	0.76**	0.67**	0.81**					
Trust (TR)	0.81**	0.71**	0.69**	0.67**	0.72**	0.84**	0.65**				
Organizational commitment (OC)	0.62**	0.65**	0.55**	0.61**	0.38**	0.51**	0.54**	0.45**			
Performance (PE)	0.74**	0.73**	0.46**	0.65**	0.61**	0.65**	0.69**	0.69**	0.64**	0.64**	
Employee (EM)	-0.01	-0.13	-0.03	-0.10	-0.21*	-0.00	-0.27**	-0.00	-0.15	-0.08	

\*\*  $p < 0.05$

In summary, levels of teamwork and trust of auditors are associated with levels of organizational commitment and performance and organizational commitment is likely to have a positive influence on performance.

## 5. CONTRIBUTIONS AND FUTURE RESEARCH

### 5.1 Theoretical Contributions and Future Directions for Research

This paper is an insight into providing a clearer understanding of teamwork of auditors that has a significant influence on companies needing to sustain performance. Not only that no other research has identified and tested mediators which may explain more correlation between teamwork and performance. This paper provides important theoretical contributions expand on previous knowledge and literature of teamwork, organization commitment and performance. This paper attempts to integrate the teamwork, organization commitment and performance in the same model. Therefore as this paper add organization commitment in model. The study provides important contributions expanding on previous researches specifically in auditors and study in Thailand.

**TABLE 3**  
**RESULTS OF OLS REGRESSION ANALYSIS**

Independent Variables	1	2	Models 3	4	5
Communication	0.26 (0.19)		0.29** (0.12)		
Team orientation	0.55*** (0.15)		0.75*** (0.10)		
Team leadership	-0.11 (0.14)		-0.97*** (0.09)		
Monitoring	0.40* (0.19)		0.53*** (0.12)		
Feedback	0.00 (0.08)		0.11 (0.05)		
Backup behavior	0.51** (0.18)		-0.53*** (0.11)		
Coordination	-0.57*** (0.19)		-0.12 (0.12)		
Trust	0.41** (0.17)		0.69*** (0.10)		
Teamwork		0.61*** (0.07)		0.75*** (0.06)	
Commitment					0.64*** (0.07)
Employee	-0.28*** (0.04)	-0.10 (0.03)	-0.07 (0.02)	-0.02 (0.02)	0.01 (0.03)
Adjusted R <sup>2</sup>	0.48	0.39	0.77	0.57	0.40

\* p < 0.10

\*\* p < 0.05

\*\*\* p < 0.01

## 5.2 Managerial Contributions

This paper offers to intend to the relationship among teamwork, organizational commitment and performance in auditors. Future researches should extend the inquiry to other firms, and consideration of the heterogeneity factor in team composition. Finally, research may study the influence of demographic variables on the relationship between teamwork of auditors and organizational commitment, which may help support results of research about teamwork.

## 6. CONCLUSION

This paper is designed to investigate the relationship among teamwork, organizational commitment and performance in auditors in Thailand. Study findings that teamwork subscales of auditor (team orientation, monitoring, backup behavior, coordination and trust) are a significant predictor of organizational commitment. And teamwork of auditors is a significant predictor of organizational commitment. Those auditors showing higher levels of teamwork behaviors perceived higher levels of organizational commitment. Moreover, this paper indicates that teamwork subscales of auditor (communication, team orientation, team leadership, monitoring, backup behavior and trust) are a significant predictor of performance. And teamwork of auditor is a significant predictor of performance. Those auditors showing higher levels of teamwork behaviors perceived higher levels of performance. In addition to study the relationship between organizational commitment and performance, which indicated that it is a strong significant for auditors.

## REFERENCES

- Aaker, David A., Kumar, V. and Day, George S., Marketing Research, New York: John Wiley and Sons, 2001.
- Allen, N.J. and Meyer, J.P., "The measurement and antecedents of affective, continuance and normative commitment to the organization", Journal of Occupational Psychology, Vol. 63, 1990, 1-18.
- Angle, H. and Perry, J., "Dual commitment and labor-management relationship climates", Academy of Management Journal, Vol. 29(1), 1986, 31-50.
- Anonymous., "Survey highlights importance of employee participation", Industrial relations Review and Report, Vol. 540, 1993, 2-4.
- Barling J., Weber T., Kelloway EK., "Effects of transformational leadership training and attitudinal and fiscal outcomes: a field experiment", Journal of Applied Psychology, Vol. 81, 1996, 827-832.
- Bashaw ER, Grant SE., "Impact of job formalization and administrative control on attitudes of industrial salespersons distinctive nature of work commitments: their relationship with personal characteristics, job performance and propensity to leave", Journal Personal Sell Sales Management, Vol. 14, 1994, 41-67.
- Bishow and Laurie., Communication attachment: A path model analysis of participation events which influence organizational commitment and burnout in human services staff and volunteers, University of Oregon, 247 pages, 1982, AAT 8301761.
- Black, J.S., Bonuses Increasingly Emphasize Teamwork over Personal Effort, Los Angeles Times, Dec. 10, D2, 1995.
- Bryk,A. and Schneider, B., Trust in Schools: A core Resource for Improvement, Russell Sage Foundation, New York, NY, 2002.
- Bullock, R.J., "Participation and Pay", Group & Organization Studies, Vol. 8(1), 1983, 127-137.
- Cohen, S. G., "New approaches to teams and teamwork", Organizations and Society, Vol. 13, 1993, 225-233.
- Dee J. and Henkin A., Smart School Teams: Strengthening Skills for Collaboration, University Press of America, Lanham, MD., 2001.
- Dickinson, T., McIntyre, R., Ruggeberg, B., Yanushefski, A., Hamill, L. and Vick, A., A Conceptual Framework for Developing Team process Measures of Decision-making Performance (Final Report), Naval Training Systems center, Human Factors Division, Orlando, FL., 1992.
- Donnellon A., Team Talk: The Power of Language in Team Dynamics, Harvard Business School Press, Boston, MA., 1996.
- Ellemers N., Gilder D., and Heuvel H., "Career-oriented versus team-oriented commitment and behavior at work", Journal of Applied Psychology, Vol. 83(5), 1998, 717.
- Fletcher D. T. and Major A. D., "The Effects of Communication Modality on Performance and Self-Ratings of Teamwork Components", Journal of Computer-Mediated Communication, Vol. 11(2), 2006, 9-26.
- French, W. and Bell, C., Organizational Development: Behavioral Science Interventions for Organizational Movement, Prentice-Hall, Englewood Cliffs, NJ., 1984.
- Gambetta, D., "Can we trust trust?", in Gambetta, D. (Ed.), Trust: Making and Breaking Cooperative Relations, Basil Blackwell, New York, NY: 213-237., 1988.
- Gladstein, D., "Group in context: a model of task group effectiveness", Administrative Science Quarterly, Vol. 29(4), 1984, 499-517.
- Grunig J., "Information and decision making in economic development", Journalism Quart, Vol. 46, 1969, 565-575.
- Guzzo, R. and Dickson, M., "Teams in organizations: recent research on performance and effectiveness", Annual Review of Psychology, Vol. 47(1), 1996, 307-338.
- Lawler, E. E., "Creating the high-involvement organization", Organizations and Society, 1993, 172-193.
- Leong SM, Randall DM, Cote JA., "Exploring the organizational commitment-performance linkage in marketing: a study of life insurance sales-people", Journal of Business Research, Vol. 29, 1994, 57-63.
- McColl-Kennedy R. Janet and Anderson D. Ronald., "Subordinate-manager gender combination and perceived leadership style influence on emotions, self-esteem and organizational commitment", Journal of Business Research, Vol. 58, 2005, 115-125.

- Meyer, J.P., Allen, N.J. and Smith, C.A., "Commitment to Organizations and Occupations: Extension and Test of a Three-Component Conceptualization", *Journal of Applied Psychology*, Vol. 78(4), 1993, 538-551.
- Militello L.G., Kyne M.M., Klein G., Gethchell K., and Thordsen M., "A synthesized model of team performance", *International Journal of Cognitive Ergonomics*, Vol. 3(2), 1999, 131-158.
- Mitchel j. Neubert and Steven H. Cady., "Program commitment: A Multi-Study Longitudinal Field Investigation of Its Impact and Antecedents", *Personnel Psychology*, Vol. 54(2), 2001, 421-448.
- Morgan, R. and Hunt, S., "The commitment-trust theory of relationship marketing", *Journal of Marketing*, Vol. 58(3), 1994, 20-38.
- Nariseti., "Teams become commonplace in U.S. companies", *The Wall Street Journal*, Vol. 28, 1995, A1.
- Neter, John, William Wasserman & Michael H. Kutner., *Applied Linear Statistical Models: Regression, Analysis of Variance, and Experimental Designs*, 2<sup>nd</sup> Edition, Homewood: Richard D., 1985.
- Nunnally, Jum C. and Bernstein, Tra H., *Psychometric Theory*, New York, NY: McGraw-Hill., 1994.
- Powell, L., *Antecedents and outcomes of team commitment in a global, virtual environment*, Indiana University., 2000.
- Rasker P. C., Post W.M., and Schraagen J. M. C., "Effects of two types of intra-team feedback on developing a share mental model in command and control teams", *Ergonomics*, Vol. 43(8), 2000, 1167-1189.
- Scott, W. T. and Tiessen, P., "Performance measurement and managerial teams", *Accounting, Organizations and society*, Vol. 24, 1999, 263-265.
- Sundstom, E., K.P.De Meuse and D. Futrell., "Work Teams: Application and Effectiveness", *American Psychology*, Vol. 33, 1982, 1-39.
- Tschannen-Moran,M. and Hoy, W., "A multidisciplinary analysis of the nature, meaning, and measurement of trust", *Review of Educational Research*, Vol. 70(4), 2000, 547-593.
- Welsch, Harold P., LaVan, and Helen., "Inter-Relationships Between Organizational Commitment and Job Characteristics, Job Satisfaction, Professional Behavior, and Organizational Climate", *Human Relations. New York*, Vol. 34(12), 1981, 1079-1090.
- Zhang, QY., *Technology infusion enabled value chain flexibility: A learning and capability-based perspective*, Doctoral dissertation, University of Toledo, Toledo, OH., 2001.

# ANALYZING IMPACT OF STRATEGIC PLANNING ON THE QUALITY OF HEALTH CARE BENEFIT PLAN OFFERINGS IN SMALL AND MEDIUM ENTERPRISES

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## ABSTRACT

*Health care costs are skyrocketing every year, and many Americans are finding it difficult to cope with rising costs of health care. The ability to maximize the benefits of health care plan offerings is a major challenge for small and medium enterprises (SMEs). Strategic Planning has been considered by health care researchers as an important factor in the maximization of benefits of health care plan outcomes (Parmenter, 2004; Wynia, 2004). This paper attempts to bridge a gap in the health care literature dealing with corporate health care plan selection in SMEs. Several studies have tested the impact of planning on financial performance (Bracker and Pearson, 1986; Hopkins and Hopkins, 1997; Robinson, 1983; Rhyne, 1986). Review of the literature did not reveal any research dealing with the impact of strategic planning on the quality of health care benefit plan offerings in SMEs. Also, the literature search did not indicate any studies analyzing influence of power and personality of CEOs on the Strategic Formation Process and Quality of Health Care Benefit Plans offered by SMEs. Our study attempts to fill this gap by examining the impact of strategic planning on the quality of healthcare benefit plan outcomes, and by evaluating the impact of CEOs on the Strategic Planning and Health Care Benefit Plan Selection in small and medium corporations/enterprises. Our research also considers involvement of outside agency to enhance the quality of health care benefit plans offered by SMEs.*

**Keywords:** Health Benefit Outcomes, CEO Locus of Control, Strategic Planning, Small to Medium Enterprises.

## 1. INTRODUCTION

The cornerstones of a health care delivery system are cost, access, and quality (Al-Assaf, 1993). The health care insurance industry is composed of public and private sectors. Well educated and affluent people have access to private health insurance, usually provided by an employer or purchased in conjunction with Medicare (Mirowsky and Ross, 2000). Most non-elderly Americans receive their health insurance coverage through the workplace. Workplace plans cover two-thirds of non-elderly Americans and pay most of working family health care expenses and one-quarter of national health care spending (O'Brien, 2003). It is obvious that business plays a critical role in the accessibility and cost, and to some degree the quality of health care available to a large percentage of Americans. Strategic planning on the part of corporations may provide a better health care to their employees in a cost effective manner.

Hambrick and Mason (1984) define strategy choice as inclusive of choices made formally and informally, indecision as well as decision, major administrative choices as well as the domain and competitive choices termed as "strategy." These decisions have a large behavioral component. They reflect the decision-makers values. The personality and power of individuals and team makeup will influence the success of the outcomes. Therefore, strategic planning success is influenced by not only the strategic planning process but also by the personality of key personnel personality traits governing the process.

The strategic process is explored in the literature in the form of strategic decision-making (Eisenhardt, 1989; Sharfman & Dean, 1997), strategy implementation (Bryson & Bromiley, 1993; Nutt, 1989), and strategic planning (Bracker & Pearson, 1986; Hopkins & Hopkins, 1997). Typically, strategic planning has been measured as level of formality (Fredrickson, 1984; Rhyne, 1986). Other research has linked strategic planning formality to effectiveness of decision making (Schwenk and Shrader, 1993; Robinson, 1983; Hopkins & Hopkins, 1997). Some of the empirical studies in strategic planning formality have primarily been examining small firm planning and its impact on outcomes that are financial in nature (Bracker and Pearson, 1986; Begley and Boyd, 1986). The key personnel that have a large degree of influence on the decision making are often leaders in the organization or the specific project such as the

CEO, project leader, or champion. Past research has linked CEO personality to the degree of formality of strategic planning (Miller, Kets de Vries, and Toulouse, 1982; Miller and Toulouse, 1986; McCarthy, 2003).

In health care decisions of larger firms, involvement of outside agency has been suggested as useful to increase quality of healthcare benefit options (Wynia, 2004; Parmenter, 2004). This is consistent with past literature that links the importance of boundary spanning in strategic decision making and information exchange (Spekman, 1979; Tushman and Scanlan, 1981; Jemison, 1984). Jemison considers three boundary spanning roles used as information acquisition and control; domain determination and interface; and physical input control in three different industries. The use of outsiders in the decision making in health care decision should lead to more information acquisition to improve decision quality. According to Eisenhardt (1989) p. 548, "faster, higher quality decision making occurs in teams that use more, not less, information." Therefore outsider involvement both direct and through boundary spanning activities should lead to more useful information that is available for improving decision quality.

Review of literature did not reveal any study dealing with the impact of strategic planning on the quality of health care benefit plan offerings in SMEs. Our study attempts to bridge this gap by examining the influence of strategic planning on the quality of healthcare benefit plans offered by small and medium corporations. Our research also considers the influence of CEO Locus of Control on the strategic planning and the involvement of outside agency to enhance the quality of health care benefit plans offered by SMEs. To explore this gap in the health care literature, we are raising the following research questions: 1) Does the power and personality of CEO Locus of Control (Internal) influence strategic planning in SMEs? 2) How does strategic planning impact on the healthcare benefit plan quality in SMEs? 3) How does the CEO Locus of Control (Internal) impact on the healthcare benefit plan quality outcomes in SMEs? 4) Does the involvement of outside agency in planning moderate the relationship between health care benefits plan quality and strategic formation process?

Most Americans face skyrocketing health care costs in their daily life. Workers, while seeking employment in SMEs, consider the quality of health care benefits offered as a major consideration. The issue of health care benefit offerings is quite important for the employers as well as the employees. Thus, our topic of analyzing impact of strategic planning on the quality of health care benefit outcomes in SMEs is very timely and important. Our study is designed to explore the impact of strategic planning on the quality of health care benefit outcomes in small and medium size enterprises, and to provide insights about influence of the power and personality of CEO on the strategic planning and the quality of health care benefit plan outcomes in SMEs.

## **2.0 LITERATURE REVIEW**

### **2.1 Health Care Benefit Outcomes: Access, Quality, and Cost**

Most Americans consider the U.S. health care system to be the best in the world because of the access to highly specialized services and advanced medical technologies. The focus of quality is on outputs to the systems such as clinical procedures, tests, prescriptions, doctor visits, and hospital stays. When one reviews the health outcomes, The United States health care system does not fare as well. According to the World Health Organization, the United States health care system was ranked 37<sup>th</sup> for quality, and number one for the costs.

Access to healthcare can be defined as the ability to obtain needed, affordable, convenient, acceptable, and effective personal health services in a timely manner. In the United States, both low socioeconomic status and minority group membership are associated with lower overall health care usage and access. According to the National Health Interview Survey (NHIS, 2004), a leading data source used to monitor access trends, nonwhite persons under 65, were 5% to 22% less likely than their white counterparts to be insured. They also note that racial/ethnic minorities are less likely than their white counterparts to have a specific source of ongoing care. Blacks and Hispanics tend to have hospital based health care versus office based health care.

Quality can be viewed from micro- and macro-perspectives. The micro-level items are small area variations, medical errors, patient satisfaction, quality of life, and health outcomes. The macro level items include cost, access, and population health. According to Carpenter (2004), there is little agreement about what is meant by "health care quality." It is also to be noted that quality is perceived differently by the stakeholders. The National Committee for Quality Assurance (NCQA) is a non-profit organization that was founded in 1990 with the mission to improve health care quality. According to NCQA, a consensus approach is needed among large employers, policy makers, doctors, and patients to ensure appropriate health care plans for the employees. Such a comprehensive approach is necessary to minimize the risk of employers offering health care benefit plans which may be of poor quality, and also not cost effective. Employers may consider quality as the provision of services that employees need. However, employees may also consider the ease of access, and cost of these services as important factors (Carpenter, 2004).

Health care costs in the United States are the highest in the world. Health care spending spiraled upward at double-digit rates during the 1970s. In the 1980s, the rate of increase in health care cost was not very high. In the 1990s the growth rate was in single digits. Between 1993 and 2000 the lowest recent growth rate of 5.7% was experienced. However, this trend was reversed in 2001 with an increase of 8.7% in health care costs. These figures are from the national perspective including both public and private sectors. Small business has consistently had increases of health care costs in double digits. The employers have transferred higher percentages of the health insurance premiums to their employees. The drivers for the increase in health care costs are: aging baby boomers, advanced technology, legislative initiatives, managed care saturation, litigious society, poor quality of health care system, expansion of extensive insurance coverage and the widespread application of costly medical technologies. (Parmenter, 2004; Maxwell, Briscoe, and Temin, 2000).

## **2.2 Health Insurance, Employers, and Employees:**

American workers desire health insurance to ensure access to medical care and to protect against the astronomical cost of serious illnesses. The workers need for insurance is reflected in its importance while selecting the employer. Workers report that insurance provided was a very important factor or the most important factor in selection of their employer (Duchon et al, 2000; Salisbury and Ostuw, 2000; O'Brien, 2003).

The health insurance provides benefits for both the employee and employer. According to O'Brien(2003), the benefits to the employer include: the ability to attract high quality employees, the ability to keep employees and lower turnover cost, the ability to enhance employees perception of company image, increase productivity, the ability to allow for increased productivity from the lowered downtime due to illness; and the ability of the corporation to be a good corporate citizen.

## **2.3 Strategic Planning and the SMEs**

Several studies have suggested that strategic planning is a key component to improving health care plan offerings. Wynia (2004) suggests that as it pertains to healthcare quality in the deployment of health care decision, the stakeholders should ensure that the process be transparent, participatory, equitable and consistent, sensitive to value, and compassionate. It is also recommended that a team should use a filtering process which includes defining benefits from a menu, creating a health promotion plan, implementing an accountable health care plan with a Health Savings Account (HSA), and coaching intensive health care (Parmenter, 2004). Employing these techniques would require more formalized planning than most SMEs utilize.

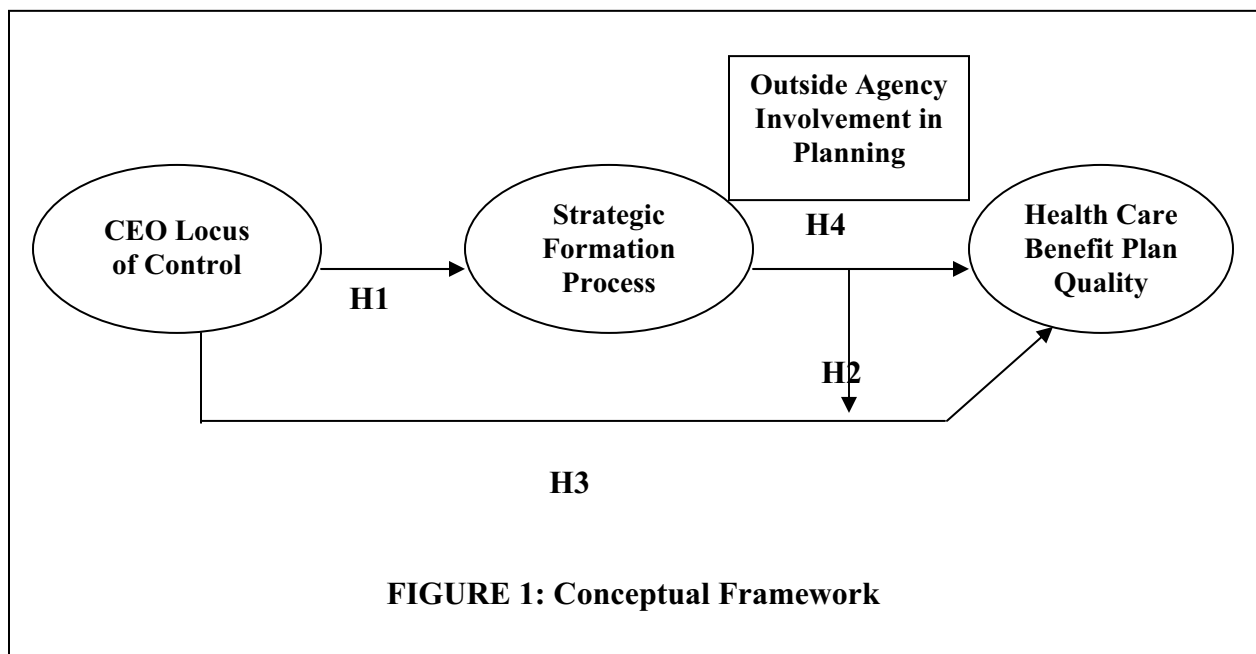
McCarthy(2003) proposes a view of strategic planning that better encompasses the prospective and operational tendencies of the entrepreneurial firm. McCarthy (2003) reviews the proposal of Mintzberg and Waters (1985) continuum of strategies from "pure deliberate" to "pure emergent" where strategies can be devised and implemented according to or without a plan. The planning school from Ansoff (1965) and Chandler (1992) look at strategy as a formal plan. Although the planning model is the recommended model for small businesses (Berry, 1998), the impact of the Chief Executive Officer (CEO) style of planning in smaller firms has a tremendous impact (Miller and Toulouse, 1986). The entrepreneurial field scholars (Allison et al,2000; Bhidé, 1994; Brothers et al., 1998; Kets de Vries, 1990) found that entrepreneurs act more on instinct, intuition, and impulse than any thing else. McCarthy (2003)

formulated a conceptual model including the impact of CEO personality/power and life cycle stage/crisis level on the strategic formation process. Given the continuum of the company development and environment and CEO characteristics, the formality of the planning style will evolve.

### 3. MODEL AND HYPOTHESIS DEVELOPMENT

Chief Executive Officers in small firms are extremely powerful. Some researchers have indicated that the personality of the CEO will have an impact on the planning in small firms. The power and personality combination has been researched as locus of control factor. The work of Rotter (1966) has long been considered the seminal research in the area of locus of control. Rotter's research was based on generalized expectancies for control of reinforcement. Locus of control refers to a person's general belief about what determines the outcomes of their efforts. The range is from very 'internal' to very 'external'. People with strong internal control believe that outcomes lie ultimately within themselves. Success or failures are due to their own efforts. Externals believe that outcomes in life are controlled by luck, chance, or powerful others. Externals see outcomes as not under their control. Research in the area of CEO personality has linked the relationship between strategy and structure in small organizations (Miller, Kets de Vries and Toulouse, 1982).

To explore simultaneously relationships among CEO Locus of Control, Strategic Planning, Outside Agency Involvement and Health Care Benefit Outcomes, we have developed a conceptual model (see figure 1). The model presents a path diagram indicating theorized relationships among CEO Locus of Control, Strategic Formation Process, Quality of Health Care Benefit Plan Offerings, and involvement of Outside Agency. Based on our previous discussion of the health care literature, we have formulated the following hypotheses. These hypotheses are also indicated on the path diagram (See figure 1).



H1: CEO Locus of Control (Internal) has a negative influence on strategic planning in SMEs.

H2: Strategic planning has positive impact on the quality of the health care benefit plans in SMEs.

H3: CEO Locus of Control will have a negative impact on the quality of the health care benefit plans in SMEs.

H4: The involvement of outside agency in planning moderates the relationship between strategic formation process and the quality of the health care benefit plans in SMEs.



These hypotheses will be tested separately for the small and medium corporations.

### **3.1 Methodology**

#### **3.1.1 Data Collection**

A measuring instrument has been developed to collect data. Development of the questionnaire is grounded in the literature and refined through the approach of a focus group consisting of CEOs and faculty members. The questionnaire consists of two parts. First part is to be completed by CEO, and the second part to be completed by the operations/human resource manager. Sampling frame consists of CEOs with their mailing addresses, and will soon be obtained from the Chamber of Commerce of a large city in the Southern United States. We are in the data collection phase, which will be completed in six week.

#### **3.1.2 Data Analysis**

SPSS will be used to analyze data. Descriptive statistics and correlation matrix will be obtained for all items. To check for internal consistency and reliability, Cronbach's alpha, convergent and discriminant validity, and uni-dimensionality measures will be obtained for all the constructs. After the measurement model is deemed acceptable, we will test the structural model by Structural Equations Modeling (SEM) technique to evaluate the postulated hypotheses in the study. Goodness of fit indices including overall goodness of fit (GFI, RMSR), incremental fit indices (NFI, CFI, TLI, RNI), and parsimony fit indices (PR, PGFI, PNFI) will be computed to assess the fit of the structural model.

#### **3.1.3 Measurement**

*CEO Personality/CEO Locus of Control:* The measurement for CEO locus of control is modeled after Powell (1992). Powell's instrument was based on Rotter(1966) E-I scales. It includes five six point items on a six point Likert scale.

*Strategic Planning:* The measurement for strategic planning is based on Miller (1987). The sub categories that determine strategic planning are goal setting, analysis, and scanning. Three other measures were added to focus on the health care market and outsider involvement. Each of the items are on a six point Likert Scale. Overall Planning is computed.

*Quality of Health Care Benefit Plan Offerings:* The measurement of quality of health care benefit plan offerings is based on the National Committee for Quality Health (NCQA) Health Plan Report Card. The NCQA's Health Plan Report Card is based on an evaluation of clinical quality, member satisfaction and a comprehensive assessment of key systems and processes. The report accesses the quality of over 680 health plans. The respondents to the survey are given a list of the plans and asked to select the plans that are offered to the employees. If multiple plans are offered by a firm, the plan with the highest score will be assigned for that firm.

*Outside Involvement:* The measurement of outsider involvement is based on Jemison (1984) two factor scale for information acquisition- others.

*Control Variables:* The control variables in our study are: firm minority status, firm age, firm size, firm revenues, corporate life cycle, and Health care plan robustness. The firm minority status is whether the firm is African American, Hispanic, or female owned and managed. The age of the firm is based on the incorporation date. The firm size is based on the number of employees. The firm revenues are based on total sales income.

*Research Findings Expectation:* Our study is expected to provide some very interesting results. Our research findings may provide useful insights about the impact of Strategic Planning on the quality of health care benefit plans offered by SMEs. The study will also make incremental contribution to the health care benefit plan selection literature by explaining how the power and personality of CEO influences strategic planning and health care benefit plan outcomes. Results of outside agency's involvement in planning as a moderating factor may be interesting as well. Finally, our research findings

may have managerial implications for the CEOs and Operations Managers of the SMEs when they are trying to determine how to select the health care benefit plan offerings for their employees.

## REFERENCES

- Al-Assaf, A. (1993) "Introduction and Historical Background." In *The Textbook of Total Quality Management*, pp. 3-12.
- Ansoff, I. (1965) *Corporate Strategy*, McGraw-Hill, New York, NY.
- Berry, M. (1998) "Strategic Planning in Small High-Tech Companies," *Long Range Planning*, 31, pp. 455-466.
- Begley, T. and Boyd, D. (1986) "Executive and Corporate Correlates of Financial Performance in Smaller Firms," *Journal of Small Business Management*, pp.8-30.
- Bhide, A (1994) "How Entrepreneurs Craft Strategies that Work," *Harvard Business Review*, 72:2, pp. 150-162.
- Bracker, J. and Pearson, J. (1986) "Planning and Financial Performance of Small, Mature Firms," *Strategic Management Journal*, 7, pp. 502-522.
- Bryson, J. and Bromiley P. (1993) "Critical Factors Affecting the Planning and Implementation of Major Products," *Strategic Management Journal*, 14, pp. 319-337.
- Carpenter, C. (2004) "Buying Quality Health Care," *Journal of Financial Service Professionals*, pp. 22-24.
- Chandler, A. (1992) *Strategy and Structure*, MIT Press, Cambridge, MA.
- Duchon, L. et al (2000) "Listening to Workers: Findings from the Commonwealth Fund 1999 National Survey of Workers' Health Insurance", The Commonwealth Fund, New York, NY.
- Eisenhardt, K. M. (1989) "Making Fast Strategic Decisions in High-Velocity Environments," *Academy of Management Journal*, 32, pp. 543-576.
- Fredrickson, J. W. (1984). "The Competitiveness of Strategic Decision Processes: Extension, Observations, Future Directions," *Academy of Management Journal*, 27, pp. 445-466.
- Gabel, J., Sasso, A., and Rice, T. (2003) "Consumer-Driven Health Plans: Are More than Talk Now?" *Health Affairs*, W395.
- Hambrick, D. and Mason, P. (1984) "Upper Echelons: The Organization as a Reflection of its Top Management," *Academy of Management Review*, 9:2, pp. 193-206.
- Hopkins, W. and Hopkins, S. (1997) "Strategic Planning-Financial Performance Relationships in Banks: A Causal Examination," *Strategic Management Journal*, 18, pp. 635-652.
- Jemison, D. (1984) "The Importance of Boundary Spanning Roles in Strategic Decision Making," *Journal of Management Studies*, 21:2, pp. 131- 152.
- Maxwell, J., Briscoe, F., and Temin, P. (2000) "Corporate Health Care Purchasing and the Revised Social Contract with Workers," *Business and Society*, 39:3, pp. 281-303.
- McCarthy, B. (2003) "The Impact of the Entrepreneur's Personality on the Strategy-Formation and Planning Process in SMEs," *Irish Journal of Management*, 24:1, pp. 154-172.
- McCarthy, B. (2003) "Strategy is personality-driven, strategy is crisis-driven: insights from entrepreneurial firms," *Management Decision*, 42:1, pp. 327-339.
- Miller, D. (1987) "Strategy Making and Structure Analysis and Implications for Performance," *Academy of Management Journal*, 30:1, pp. 7-32.
- Miller, D., Kets de Vries, M and Toulouse, J. (1982) "Top Executive Locus of Control and Its Relationship to Strategy-Making, Structure, and Environment," *Academy of Management Journal*, 25:2, pp.237-253.
- Miller, D. and Toulouse, J. (1986) "Chief Executive Personality and Corporate Strategy Structure in Small Firms," *Management Science*, 32:11, pp. 1389-1409.
- Mintzberg, H. and Walters, J. (1985) "Of Strategies, Deliberate and Emergent," *Strategic Management Journal*, 6, pp. 257-72.
- Mirowsky, J. and Ross, C. (2000) "Does Medical Insurance Contribute to Socioeconomic Differentials in Health," *The Milbank Quarterly*, 78:2, pp. 291-321.
- Natt, R. (2005) "HSAs: Small Business still Can offer an Attractive employee Benefits Program, Despite Rising Health Care Costs," *Employee Benefit Plan Review*, 59:10, pp. 15-17.
- Nutt, P. C. (1989) "Selecting Tactics to Implement Strategic Plans" *Strategic Management Journal*, 10,145-161.

- O'Brien, E. (2003) "Employers' Benefits from Worker's Health Insurance," *The Milbank Quarterly*, 18:1, pp. 5-43.
- Parmenter, E. (2004) "Health Care Benefit Crisis: Cost Drivers and Strategic Solutions," *Journal of Financial Service Professionals*, pp. 63-78.
- Powell, T. (1992) "Strategic Planning as Competitive Advantage," *Strategic Management Journal*, 13:7, pp. 551-559.
- Rhyne, L. (1986) "The Relationship of Strategic Planning to Financial Performance," *Strategic Management Journal*, 7:5, pp. 423-437.
- Robinson, R. (1983) "The Impact of Formalized Strategic Planning on Financial Performance in Small Organizations," *Strategic Management Journal*, 4, pp.197-207.
- Robinson, R. (1982) "The Importance of "Outsiders" in Small Firm Strategic Planning," *Academy of Management Journal*, 25:1, pp. 80-93.
- Rotter, J. (1966) "Generalized Expectancies for Internal versus External Control of Reinforcement," *Psychological Monographs: General and Applied*, 80,609.
- Ruiz, G. (2005) "Smaller Firms in Vanguard of Flex Practices," *Workforce Management*, 84:13, pg. 10.
- Schwenk, C. and Shrader, C. (1993) "Effects of Formal Strategic Planning on Financial Performance in Small Firms: A Meta-Analysis," *Entrepreneurship Theory and Practice*, pp.53-64.
- Sharfman, M. and Dean, J. (1997) "Flexibility in Strategic Decision Making: Informational and Ideological Perspectives," *Journal of Management Studies*, 34, pp. 191-217.
- Spekman, R. (1979) "Influence and Information: An Exploratory Investigation of Boundary Role Person's Basis of Power," *Academy of Management Journal*, 22, pp. 104-17.
- Tushman, M. and Scanlan, T. (1981) "Boundary Spanning Individuals, Their Role and in Information transfer and their antecedents," *Academy of Management Journal*, 24, pp. 289-305.

## GLOBAL CAREERS: WHERE IN THE WORLD DO CSU MBA STUDENTS WANT TO GO AND WHY?

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### ABSTRACT

*This study explores MBA student's intent to pursue international careers and the factors that influence their decision. We identified key variables that contribute to MBA student's career aspirations such as gender, age, marital status and language skills. Our findings indicate that while gender is not a limiting factor, respondents with family obligations are less likely to pursue an international career. MBA students who are under the age of 35, speak more than one language, are single, and with no children are more likely to aspire to international careers. The results of our survey suggest that CSU MBA students are interested in international careers. The results are based on the responses of seventy-six CSUEB MBA students, approximately 12% of the program, who are currently enrolled in the MBA program. Voted among Princeton Review's 2007 edition of "282 Best Business Schools", California State University, East Bay has received favorable attention for its rigorously acclaimed MBA program. The program attracts nearly 650 full-time students annually from around the world, making it one of the most diverse MBA programs within Northern California*

### 1. INTRODUCTION

In a world of emerging markets and continued globalization, the growing need for international experience remains at the forefront of the minds of MBA students today. Many companies today operate on a global scale; as such they require MBA students to be able to work in diverse cultures and teams. The strategic push of large firms into global emerging markets to increase market share fuels the demand for global managers. In the following pages we review research on global careers from both employees' as well as employer's perspective that discuss the growing global management opportunities, reasons why graduate students choose to pursue Global careers, and the reasons why some MBA graduates shy away from working in a foreign country. There is a growing trend in the business-school students to seek employment opportunities in the East. A recent Wall Street Journal article (White, 2005) mentions a career fair for International jobs held by seven top U.S. business schools attracted 337 applications for 48 jobs in Asia. It's interesting to note that the participants who were surveyed too expressed similar sentiments as outlined by Amanda and Myra (2006) where intrinsic job factors outweighed extrinsic rewards sought by MBA graduates. Bruce and Nailin (2004), surveyed 145 business students on their career aspirations and found that majority desired an overseas assignment at some point in their career. They found that multilingual students with foreign friends tended to have a strong interest in international careers. Another key observation was that women were as receptive to international careers as men. The same fact was established by Nancy Adler in several of her research papers focused on global careers and aspirations of MBAs (2001).

### 2. LITERATURE REVIEW

A review of the literature identifies some demographic factors that impact MBA career aspirations and their desire to pursue an international career.

Gender and the Global MBA Career. Several studies conducted by Nancy Adler between 1984-1993 evaluated the gender differences in terms of job satisfaction and opportunity in international careers. In 1984, Adler found that men viewed women as being unqualified to be expatriates. Adler's study found that most companies hesitate to send women abroad for a variety of reasons. More than half the companies surveyed believe that women would face prejudice in other countries. However, in surveying expatriate women themselves, female executives are more likely to be accepted than indigenous women

[Adler, 1993]. Adlers' study also found that women who have MBAs are equally interested in pursuing an international assignment as men with MBAs. Furthermore, there are also quite a few circumstances that make international assignments less attractive, per Collier, Jones, McGowan (2006). Most MBA graduates who leave their international assignment do so because their spouse or children are unhappy, family obligation then take precedence over the international career. Repatriation is also challenging because of potential organizational changes, loss of appearance to the home company, and technology changes. Due to family obligations and repatriation, many companies may have difficulty finding people who are qualified and willing to work international jobs [Black, 1991]. In a Russia based study, Collier, Jones, and McGowan (2006) also examined gender disparity in international assignments or careers to find that respondents had an overall unfavorable attitude towards pursuing international careers. Of the 29 respondents, 16 whom had children were less favorable than the 13 who had no children. Nine respondents had spouses with careers and showed a lesser interest in an international career than 6 respondents who showed more interest while indicating they have a spouse with no career.

Age and the Global MBA Career. Simpson, Sturgers, Woods, and Altman (2005), analyze how gender and age play a significant role in the careers of MBA graduates. Their study focused on the career benefits for the MBA graduates in United States, UK, and, Canada. It emphasized and presents the intrinsic and extrinsic benefits of the MBA from both gender and age point of view. The research revealed that the career benefits for MBA graduates differ within age categories – under and over 35. Moreover, age was a major contributing factor which affects the intent to pursue an international assignment. Simpson, Sturgers, Woods, and Altman (2005) further reveal that men under 35 (50%) and women over 35 (53.6%) are more likely to face improved job opportunities in the market than older men (36.9%), younger women (28.6%) respectively. An MBA degree is important to men and women under 35 (23.4% and 38.8% respectively) who may be seeking to switch career paths, thus they are more likely to take advantage of the opportunities the MBA offers to move their career to the next level. Approximately 40% of women and men attained some sort of a promotion upon receiving their MBA degree. The authors also discussed how age impacts the monetary compensation of the MBA graduates. In analyzing the under 35 age category, the authors observed that only 6% of young men received salary under \$60,000 whereas for young women the percentage is about 20%. Most of young men and women received salary compensation between \$60K and \$100K (58% and 46% respectively). A very high percentage – 70% - of older men (35 and over) received compensation over \$100K after graduating with MBA. The older women (35 and over) – 60.9%- received wages between \$60,000 and \$100, 000 upon completing their degree. Overall, Simpson, Sturgers, Woods, and Altman (2005), illustrated the importance of age in evaluating the career benefits of MBA graduates.

Marital Status and Global MBA Career We refer again to research by Collier, Jones, McGowan (2006) who surveyed 29 students in an AACSB accredited MBA program in Moscow, which is jointly sponsored by California State University, East Bay and the Institute of Business and Economics at the National Academy of Economics, on their attitudes toward international careers. The results showed that students with family constraints are less likely to pursue an international career. The study concludes that students who are "male, single, or with no children were slightly favorable towards international career" while students who are married with children or have a spouse who has a career are less likely to pursue an international career. The study also noted that respondents with a spouse without a career were neutral towards pursuing an international career. PricewaterhouseCoopers (2000) survey of firms operating in Europe found that nearly half reported more problems in attracting employees to accept an international assignment over the last two years than before; 80% reported employees refused because of dual career or family issues. In a study done by Bruce and Nailin (2004), they concluded similarly on the family constraints citing "disruption to family life and undesirable location" as the top reason why students may reject an international assignment. "Over 50 percent of the male and female students considered an assignment unattractive if their spouse was either unwilling to move or unable to attain suitable employment, or if their children would not be able to receive adequate education" (Bruce and Nailin 2004). Adler's (1986) survey of MBA students noted that students feared that their personal life would be negatively impacted by an international career as "many feared that that their spouse or future spouse would be unable to find a suitable position in foreign locations, that their marriage or future marriage would be strained due to relocation, and that their children or future children would not enjoy adequate educational and medical facilities in foreign countries". However, single people have less emotional ties to

their home country and are thus more daring and welcoming of new opportunities that demand they stay overseas. They are more likely to pursue an international career because the spouse or children of an individual who is offered an international position may not want to move to a foreign country. After all, "a significant number of managers reject an overseas assignment opportunity because of the career of their spouse" [Harvey and Wiese, 1998].

Multi-lingualism and the Global MBA Career. As mentioned earlier, Bruce and Nailin (2004) surveyed 145 senior undergraduate business students on their attitude toward international career post 9-11 terrorist attack on the United States of America. The study concluded, that majority of the students attitude towards international careers were not adversely affected 9-11 and "business students' receptivity to international careers is positively related to their level of foreign language proficiency. "MBA students who are most interested in international assignment also speak more languages" (Bruce and Nailin 2004). Students who speak more than one international language tend to have international exposure either through their family background, studying abroad, or simply by having foreign friends which all influence their level of receptivity to international careers. Being exposed to different languages signifies that a student is perhaps diverse and more knowledgeable about international affairs since they are intertwined with an international country, which leads us to hypothesize that CSU East Bay students who speak more than one language are more likely to pursue and international career.

Hypotheses: The following hypotheses are based on the literature reviewed.

1. There will be no gender differences in MBA students' international career aspirations.
2. Younger MBA students (who are under the age of 35) will more often aspire to international careers than older students.
3. Single MBA students will have stronger international career aspirations than married students.
4. Students who speak more languages are more likely to pursue International careers than monolingual students.

### **3. RESEARCH METHODOLOGY**

Data for the research study was collected from MBA students at California State University, East Bay. The survey was administered as an online survey using the following collection methods: CSUEB Department of Graduate Programs sent out an email to MBA students registered in January 2007 requesting their participation and, in addition we directly solicited responses from CSUEB MBA students before their evening classes. There were 646 active MBA students, 76 of these students completed the survey. The analysis will be based on the responses of these 76 MBA students. The survey was based on Adler's global careers survey instrument (2001). This has been in numerous studies and is a reliable and valid instrument.

### **4. RESULTS**

CSU Eastbay Male and Female students share an equal intent to pursue International careers:

In looking at the responses from participants we find a close degree of interest to pursue an international career or global assignment from both men and women. When asked to rate the statement "I am seriously considering a global career," 50 percent of women either strongly or somewhat agreed compared to 55.6 & of the men. When asked to rate the statement "I would like my first job after school to be in another country," 45 percent of the female respondents strongly disagreed while only 10 percent strongly agreed. Almost likewise, 33.3 percent of males strongly disagreed while 19.4 percent strongly agreed. Respondents then showed that if they had a choice between equivalent positions in the home country, 37.5 percent of female respondents would prefer to work at home. Almost likewise, 36.10 percent of males said the strongly agree that they would prefer to work at home. Regarding the opportunity to have a series of international assignments, 57.5 percent of female participants either strongly or somewhat agreed to that statement. The males responded with 47.3 percent of respondents either somewhat agree and strongly agreed to the same statement. This may not be surprising, considering 70 percent of females and 55.6 percent of males agree that international experience is

essential to make it to the top in today's global economy. To better understand the intent to pursue international careers, we asked numerous questions that may explain reasons of intent. The following two responses showed significant agreement between the male and female respondents. Sixty percent of female respondents believe they can earn a higher salary with a global career. The male respondents similarly agreed with a 58.3 percent agreement. A majority of the respondents believe they can have a more interesting professional life with a global career. In order to understand the perception of the success rate between men and women regarding careers, the participants were asked who they thought have the better chance in domestic and international assignment. Women and men indicated that they believe men are more likely to be selected for an international assignment with a 72.5 and 77.8 agreement respectively. Twenty-four of the 36 male participants believe men have a greater chance in advancing in an international career while 19 feel that men and women have an equal chance of advancement in a domestic career. When asked who would have a better chance of being exposed to personal danger in another country, 25 female respondents feel women are more exposed, while 22 male respondents agree that women are more exposed to danger. Only 2 females and 4 males believe that men have a better chance of being exposed to personal danger.

Students who speak more languages are more likely to pursue International careers: Based on the research articles we studied and on the hypothesis we constructed, we asked participants to specify their language skills as a part of survey questionnaire. Of our 76 participants, 35 were monolingual, 31 were adept at two languages and 10 were versatile in three or more languages. In order to assess the results more accurately, we classified the responses into two categories namely students who spoke only one language and students who spoke two or more languages. Thus we had 35 monolingual students and 41 multilingual students. The students were asked to respond to a several questions to understand their extent of interest in pursuing an international career. When asked to rate the statement "I am seriously considering a global career," more than 67 percent of the multilingual students either strongly or somewhat agreed as opposed to 40 percent of the monolingual students. When asked to rate the statement "I would like my first job after school to be in another country," the responses were similar for both groups. About 23 percent in both groups answered them as somewhat or strongly agree. About 51 percent of the students who spoke two or more languages strongly agreed when asked about the opportunity of pursuing international career at some point in their career. The response was down to 45 percent in the group of students who speak only one language. When asked if International experience is essential to make it to top in today's economy, 70 percent of the students who spoke two or more languages somewhat or strongly agreed. The response rate in the group of monolingual students was high as well but was relatively lower at 57 percent.

Students who are under the age of 35 are more likely to pursue International career positions: Of those surveyed 50 MBA respondents were under 35 year old and 26 students were over 35 years old, with an average age of 33 years for the CSUEB MBA students who took our survey, which is a little bit higher than 27, the average age of students involved in all MBA programs from USA and Canada. Comparing both age categories, we notice that in the first one, under 35 years old, there more women involved in the program, but, in the second age category, men are 62% whereas women are only 38%. We expected to get these results because of the career aspirations for men who want to advance for executive positions which require a MBA degree. Measuring the intent of pursuing a global career, we observe that younger students (56%) are more willing in this than older students (46%). Interesting is the high percentage of MBA respondents over 35 (50%) who are "disagree or strongly disagree" to pursue a global career. The result is understandable if we are taking into account that older people are already settled on particular locations and do not prefer to have big changes in their personal and professional life. As we expected, most of young students (84%) are interested in an international assignment. Even for MBA students over 35, this direction is very attractive (74%). The results show us that most of the students from both age categories are thinking for an international career for a short term period (under one year).

An interested point in our survey was analyzing the reasons that discouraged our MBA students from pursuing an international career. When the respondents were asked to evaluate "putting pressure on marriage", both age categories considered this an important issue that might discourage them from following an international career. However, we had some unexpected results as follows. MBA students, under 35, "agree & strongly agree" (30%) that "learning a foreign language" is an issue which discourage

them to pursue an international career. However, only 19% of students over 35 consider this a barrier. We know that young people are more capable to assimilate new languages than older people are, so that we would expect to see this in the survey's results. Doing a deeper analysis, we found out that the percentage of older students who speak foreign languages is higher than that of students under 35. This can be an explanation for the survey's result and shows the older CSUEB students' ability to learn another language. A double percentage of CSUEB MBA students under 35 (38% vs. 19%) feel more insulated in another country than older students do. We have believed that younger people are more willing to participate in social activities, to build more friendships, and not to feel lonely in a foreign country than older people do. However, the survey results do not confirm this aspect. Most of the respondents from the both age categories consider that a global career would bring them more satisfaction in their life and a better social status. Also, MBA students from CSUEB believe that they could succeed a little bit faster in a global career than they could do in a domestic one.

Single students are more likely to pursue International careers: The breakdown of the single and married students is 42 and 34 respectively. Single students were favorable to the statement "I would like my first job after school to be in another country" with 29% of the students agreeing to the statement 19% been neutral, and 52% disagreeing to the statements vs. married students responses were 15%, 35%, and 50% respectively. 40% of the single students vs. 21% of the married students surveyed strongly or somewhat disagreed with the following statement "If offered an equivalent position in my home country and a foreign one, I prefer to work at home." The higher rate of disagreement of single students to the about statement show that single students are more favorable to international position.

Single students also answered favorably to the statement "While continuing to live in my home country; I would like to travel internationally more than 40 % of my time (approx 20 weeks)" with 60% of the students agreeing to the statement 5% been neutral, and 35% disagreeing to the statements vs. married students responses which were 26%, 21%, and 53% respectively. Single students also answered favorably to the statement "I would like to follow a global career path where I have a series of international assignments" with 60% of the students agreeing to the statement 7% been neutral, and 33% disagreeing to the statements vs. married students responses which were 44%, 24%, and 32% respectively.

Single students also answered favorably to the statement "International experience is essential to make it to the top in today's global economy" with 60% of the students agreeing to the statement 7% been neutral, and 33% disagreeing to the statements vs. married students responses which were 44%, 24%, and 32% respectively.

Married students answered favorably to the statement "My spouse would not want to live in another country." with 53% of the students agreeing to the statement 21% been neutral, and 26% disagreeing to the statements vs. single students responses which were 26%, 36%, and 38% respectively. Married students answered favorably to the statement "It is not good to move children" with 59% of the students agreeing to the statement 15% been neutral, and 26% disagreeing to the statements vs. single students responses which were 29%, 26%, and 45% respectively. Married students answered favorably to the statement "I want my children to be educated in my home country." with 50% of the students agreeing to the statement 32% been neutral, and 18% disagreeing to the statements vs. single students responses which were 24%, 38%, and 38% respectively

## 5. CONCLUSION AND RECOMMENDATIONS

Our findings support our belief that **women are equally as interested** in pursuing an international career despite the responses that women and men lean more towards women being more exposed to personal danger and that women believe that men have a better professional opportunity in international assignment. The men and women's intent to pursue an international career is seemingly supported by their belief that they can earn a higher salary in a global career in addition to having a more interesting professional life. We also find that **students under 35 years of age** prefer more to go for an international career rather than older students. Looking at the broad range of questions we asked, and based on the responses, we conclude that **language skills have a critical part** in determining students' degree of intent to pursue International career. This is in line with the research articles we studied as a part of this



project. We also find that **single people** are more willing to pursue an international career. But, a significant amount of **married people** are also interested in pursuing an international career and believe that international career is important to make it to the top in today's economy. The intent to pursue an international career is limited by family constraints as students surveyed responded that they would be discouraged from an international career because of the impact it would have on their family and friends. Married students are affected by the impact an international career would have on their spouse and children, while single students were affected by the impact on their parents, friends, and close relatives.

Overall, in summary several studies have been conducted to address the international career paths of MBA graduates. Majority of these research scholars agree that the key factors influencing the MBA graduate/student's intent to pursue an international career fall under the categories of gender, age, marital status and multi-lingualism. However, few research studies have taken it a step further by focusing their attention on CSU East Bay students specifically. Our research study will take on this challenge by providing empirical evidence that shed some insight as to where our CSU East Bay MBA students want to go internationally and why. We offered our own hypothesis and research findings to substantiate our ideas and observations in the hopes that our faculty, students and business school as a whole will have a better understanding of what the MBA students' international career needs are.

We also make the following **recommendations** based on our findings. Women and men perceive that women are more likely exposed to danger in another country. We recommend companies offer corporate housing facilities which are in close proximity to working facilities. Our analysis suggests that students who speak multiple languages are more inclined to pursue international careers. To better equip CSUEBAY students with language skills needed to better compete in the global economy, we recommend that CSU takes measures to educate students in languages. We also suggest that CSUEBAY partner with few universities across the globe so that students can interact with students in different countries as well as explore options of studying in the partner schools across the world.

## REFERENCES

- Adler, N. J., "Women managers in a global economy", *HR Magazine*, 38(9), 1993, 52-58.
- Adler, N. J., "Expecting International Success: Female Managers Overseas," *The Columbia Journal of World Business*, Fall, 1984, 79-85.
- Adler Nancy, "Women in International Management: Where are they?" *California Management Review*, Vol. 26(4), 1994, 122-132
- Adler, N.J., "Do MBAs want international careers?", *International Journal of Intercultural Relations*, Vol. 10, 1986, 277-300.
- Hay, A, and Myra Hodgkinson., "Exploring MBA career success", *Career Development International*. Bradford, 11 (2), 2006,108
- Harvey, M. and Danielle Wiese. "The Dual-career Couple: Female Expatriates and Male Trailing Spouses," *Thunderbird International Business Review*, July/August. 1998.
- PricewaterhouseCoopers, London. PricewaterhouseCoopers, 2000, "Managing A Virtual World," PricewaterhouseCoopers, London. Sullivan, S.E. 1999, 'The changing nature of careers', *Journal of Management*, vol. 25, pp. 457-84.
- Simpson, R., Sturgers J., Woods, A., Altman, Y., "Gender, Age, and the MBA: an analysis of extrinsic and intrinsic career benefits" , *Journal of Management Education*, 2005, 218.
- Collier, HW, Jones, R and McGowan, "Gender And Attitude Toward An International Career: A Survey of Russian Nationals," January 2006. <http://ro.uow.edu.au/commpapers/27>.
- Tharenou, P., "Receptivity to careers in international work--abroad and at home" *Australian Journal of Management*, 27, 2002, 129-136
- White, E. *Wall Street Journal*. May.10.2005
- Wang, B. C.Y. and Nailin Bu. "Attitudes toward international careers among male and female Canadian business students after 9-11" *Career Development International*. Bradford:2004. 9 (6/7), 2004, 647-672

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# SYSTEMATIC DISTORTION: A PHENOMENON THAT MAY BE INFLUENCING CONSUMER PERCEPTION AND ADOPTION OF ORGANIC PRODUCTS

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## ABSTRACT

*Consumers are not perfect in their evaluation of products. They do make errors, and these errors may not be random but systematic. Consumers' preexisting perceptions or biases may cause them to systematically distort their evaluation of products for which they have limited knowledge about. The resulting distortion is based on beliefs regarding how certain product attributes should go together. This article looks at the role of systematic distortion in influencing consumer perception and adoption of organic products. Implications are discussed that may aid marketers in managing consumer adoption of both organic and conventionally grown/processed foods.*

**Keywords:** Systematic Distortion, Consumer Perception, Product Adoption, Organic Foods

## 1. INTRODUCTION

Organic foods is one of the fastest growing segments of the food industry today, with projected sales to reach \$22 billion by 2010 (Scheel, 2003). For example, organic dairy products (i.e., milk, butter, ice cream, cheese, and yogurt) has experienced a growth in sales of 20-30 percent over the last few years (Organic Trade Association, 2007). Organic foods are seemingly no longer considered just an alternative to conventional food products, but are rapidly becoming part of mainstream food products. Nearly 50% of all consumers buy some type of organic food (Howell, 2005). Consumers today can purchase organic products in almost every food category in supermarkets and specialty stores across the country.

Although current scientific data are inconsistent regarding organic foods and whether they are actually healthier and/or more nutritional, many consumers perceive this to be true (Barrett, 2006). A recent survey indicated that 67% of consumers that purchased organic foods did so for health and nutritional benefits (Winter, 2006).

The purpose of this article is to examine how consumers may systematic distortion their evaluation of organic products, and to discuss how this phenomenon may impact the adoption and usage of products labeled "organic." With the increased popularity of organic products in the marketplace, marketers of both organic and conventional products need to be aware of the possible implications of systematic distortion.

## 2. LITERATURE REVIEW

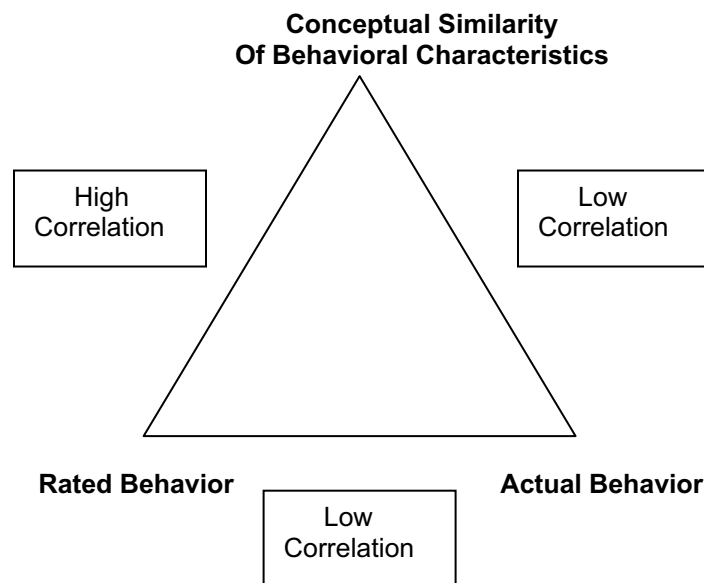
### 2.1 Systematic Distortion

Studies have shown that human perception is often guided by prior beliefs (Edward and Smith, 1996; Koehler, 1993). These prior beliefs, however, may lead to personal bias and perceptual errors. One type of error occurs when an individual systematically distorts his or her evaluation of a person or a product because of misguided inferences or incomplete information. These systematic errors appear to occur because of misconceptions as to what personal or product attributes tend to go together.

The systematic distortion hypothesis suggests that human perceptions are influenced more by factors internal to an individual than by the actual data available for observation. For example, under difficult memory conditions (i.e., situations where limited information is known), individuals distort their evaluations of other people due to (a) preexisting ideas of "what behaviors goes with other behaviors," (b) retrieving conceptually affiliated memory items which are easier to remember than individual memory items, or (c) both (Shweder and D'Andrade, 1979). The implication is that human perceptions are under the influence of preexisting conceptual schemas. These schemas may be erroneous, thus resulting in systematic bias and perceptual errors.

Figure 1 depicts the basic assumptions of the systematic distortion hypothesis. An individual rating/recalling the behavior of another is influenced by two types of information: (1) the actual behavior of the person, and (2) the observer's own implicitly held conceptualizations as to what behaviors "go together." The systematic distortion hypothesis predicts that the latter will have a greater influence on human perception.

**FIGURE 1**  
**SYSTEMATIC DISTORTION OF INDIVIDUAL BEHAVIOR**



The systematic distortion hypothesis argues that rated behavior is almost entirely under the influence of preexisting conceptual schemas as to what behavior goes with other behaviors. Moreover, rated behavior corresponds to actual behavior only to the extent that preexisting conceptual schemas happen to coincide with actual behavior. Research suggests that conceptual schemas are more likely to be used when raters lack knowledge about a particular individual, or when there is a delay between the observation and the rating of performance, thus the performance evaluation is primarily memory-based (Murphy & Balzer, 1986; Woehr, Day, Arthur, and Bedeian, 1995).

## 2.2 Organic Products

The organic food industry has grown rapidly in the United States over the last twenty years. The sales of organic products have increased by nearly 20% annually since 1990, and reached \$13.8 billion in 2005 (Organic Trade Association, 2006). Much of the growth is occurring in the mainstream distribution channels as retailers expand their product assortments. Supermarkets and discount grocers now offer a wide variety of organic produce, meat, dairy, beverages, and other items to meet the diverse tastes and choices of consumers. The prices for most organic products are higher than for similar conventional products, so this has caused a barrier for product adoption for some consumers.

"Organic" is a labeling term that identifies products produced under the authority of the Organic Foods Production Act. Labeling guidelines are designed to make it easier for consumers to understand what they are buying. Labeling requirements are based on the percentage of organic ingredients in a product. Products labeled as "100 percent organic" must contain (excluding water and salt) only organically produced ingredients. Products labeled "organic" must consist of at least 95 percent organically produced ingredients (excluding water and salt. Processed products that contain at least 70 percent organic ingredients can use the phrase "made with organic ingredients." (Organic Trade Association, 2007).

The principal guidelines for organic foods relate to the use of materials and practices that enhance the ecological balance of natural systems. Organic growing and processing methods for products sold in the United States are regulated by national organic standards implemented in 2002. These growing and processing rules are intended to address production methods rather than the physical qualities of the products themselves (Barrett, 2006).

For example, beef production and handling operations must undergo onsite inspections and have operating plans in place in order to be certified organic. The standards include requirements, such as 1) livestock cannot be given plastic pellets, formula containing urea or manure, antibiotics, or growth hormones, 2) meat processors must segregate their handling of organic and non-organic meat products, and 3) an animal's mother must have been fed organic feed for at least the last third of gestation (Organic Trade Association, 2007).

While many consumers consider organic foods to be more nutritious than conventional foods, this claim is difficult to support, based on available scientific data (Winter, 2006). Recent studies comparing conventional and organic foods with regard to nutritional levels have been mixed and inconclusive. Organically grown foods may or may not be more healthy and/or nutritious.

### 2.3 Product Adoption

The widely accepted "Rogers' curve" identifies five types of adopting consumers based on the relative timing of their adoption of new products. The speed at which a new product is diffused throughout a target market is dependent upon the following characteristics: 1) *relative advantage* it offers over existing products, 2) *compatibility* with existing values and needs of potential adopters, 3) *complexity* in understanding and using a new product, 4) *trialability* of the new technology on a limited basis, and 5) *observability* to others (Rogers, 1983).

The five product characteristics identified by Rogers (1983) helps to explain why organic foods are being diffused so rapidly into the market. Most organic foods are very compatible with the health conscious lifestyle, they are not complex in nature, they are easy to buy on a trial bases, and they are somewhat observable during usage. However, the most important product characteristic causing rapid product adoption may be the perceived "relative advantage" organic foods offer over conventionally grown and processed foods. In some cases, the perceived relative advantage could be reasonably accurate (i.e., less pesticides, better for the environment, tastier). However, in other cases the perceived relative advantage could be skewed or biased.

## 3. SYSTEMATIC DISTORTION OF ORGANIC PRODUCTS

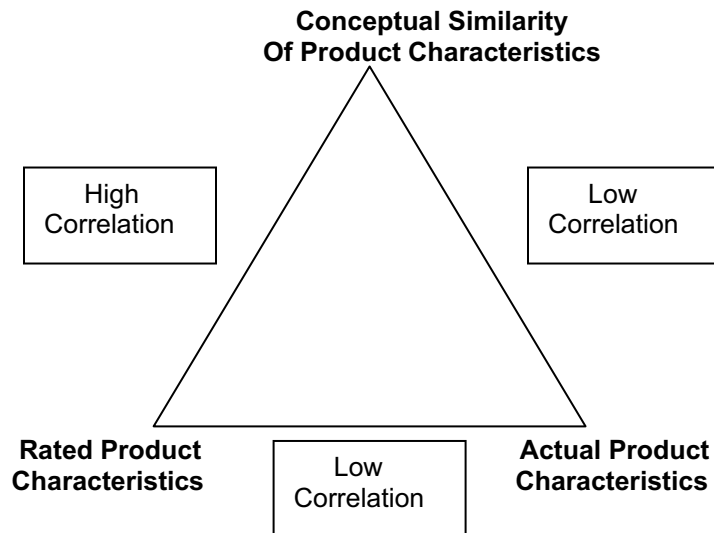
It is seemingly reasonable to assume that many of the processes that affect person perception may also affect product perception. Thus, a consumer may systematically distort his/her evaluation of a product similar to how a rater may distort his/her evaluation of an individual's behavior. Russo, Meloy, and Medvec (1998) suggest that consumers may distort product information as a result of a trade-off between accuracy and a reduction in effort, the preservation of consistency, or the maintenance of a positive mood.

Figure 2 depicts the systematic distortion hypothesis for organic products. A high correlation between Rated Product Characteristics and Conceptual Similarity of Product Characteristics is hypothesized. By contrast, a low correlation is hypothesized to exist between Rated Product Characteristics and Actual Product Characteristics. Moreover, a low correlation between Conceptual Similarity of Product Characteristics and Actual Product Characteristics is also hypothesized.

For example, a consumer may observe a display of bananas in a supermarket. Half of the display includes organic bananas, and the other half includes regular bananas. If the consumer has a preexisting perception that the "organic" label implies healthier and/or more nutritional bananas, the consumer may systematically overestimate the nutritional value of the bananas. A prior belief based on limited knowledge that the product characteristics "organic" and "nutritional value" are highly correlated has caused the consumer to possibly distort his/her evaluation of the organic bananas.

**FIGURE 2**  
**SYSTEMATIC DISTORTION OF ORGANIC PRODUCTS**

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#### **4. DISCUSSION/IMPLICATIONS**

As the diffusion process suggests, not all new products are adopted throughout a target market at the same rate. Some products are diffused fairly quickly, while others are adopted at a much slower rate. On a similar note, it appears logical that not all new products or innovations have the same likelihood of being distorted by consumers. One reason for this difference in likelihood of distortion may be that conceptual schemas (prior beliefs regarding what product characteristics go together) are more likely to be used when an individual lacks knowledge about a particular product. Unfortunately, these conceptual schemas seemingly allow for more opportunities to distort or bias an evaluation of a product.

Promotional strategies play a critical role in increasing or decreasing the likelihood of systematic distortion occurring. Companies that market conventionally produced and processed food products must continually evaluate their promotional strategies. Marketers need to be aware of the key attributes that most customers will use to evaluate a particular product or service. Moreover, they should try and assess the likelihood of perceived conceptual similarity between key product attributes. This could be accomplished through the use of consumer surveys. Promotional activities should then provide complete and accurate information regarding possible misconceptions of product attributes.

Systematic distortion may actually help companies that market organic products. For example, the perception that all organic products are more nutritious than conventionally grown products may cause some consumers to gravitate towards the organic products. Consumers justify paying the higher prices because of the increased nutritional value. By not taking steps to dispel the possible misconception regarding nutritional value, systematic distortion may increase.

#### **5. SUMMARY**

Consumers' preexisting cognitive structures or beliefs may cause them to systematically distort their evaluation of organic products where limited information is known. This distortion may be caused by preexisting beliefs regarding what product attributes go together. Marketers need to be diligent about providing adequate information regarding product attributes. In addition, it is imperative for marketers to be aware of the informational sources (e.g., mass media, opinion leader, etc.) that different types of adopters use to evaluate products and to focus their promotional efforts towards these informational sources. If the phenomenon of systematic distortion of organic products is in fact occurring in the

marketplace, it is critical that marketers of conventionally grown products be aware of this as this may be influencing their sales, market shares, and profit.

## REFERENCES

- Barrett, Stephen, "Certification Does Not Protect Consumers", 2006; Quackwatch., [www.quackwatch.org/101QuackeryRelatedTopics/organic.html](http://www.quackwatch.org/101QuackeryRelatedTopics/organic.html).
- Edwards, Kari and Smith, Edwards E., "A Disconfirmation Bias in the Evaluation of Arguments," *Journal of Personality and Social Psychology*, 71 (1), 1996, 5-24.
- "How to Read USDA Organic Labels," THE O'MAMA REPORT, *Organic Trade Association*, Greenfield, Mass., 2007.
- Howell, Debbie, "Naturally, Consumer Trends Skew to Organic Foods," *Retailing Today*, (April), 2005, 29.
- Koehler, Jonathan J., "The Influence of Prior Beliefs on Scientific Judgments of Evidence Quality," *Organizational Behavior and Human Decision Processes*, 56 (1), 1993, 28-55.
- Murphy, Kevin R. and Balzer, William K., "Systematic Distortions in Memory-Based Behavior Ratings and Performance Evaluations: Consequences for Rating Accuracy," *Journal of Applied Psychology*, 71 (1), 1986, 39-44.
- Rogers, Everett M., *Diffusion of Innovations*, The Free Press: New York.
- Russo, Edward J., Meloy, Margaret G., & Medvec, Victoria Husted, "Predecisional Distortion of Product Information," *Journal of Marketing Research*, 35 (4), 1998, 438-452.
- Scheel, Joan, "The Health of Organic Foods," *Prepared Foods*, 172 (5), 2003, 25-29.
- Shweder, Richard A., and D'Andrade, Roy G., "Accurate Reflection or Systematic Distortion? A Reply to Block, Weiss, and Thorne," *Journal of Personality and Social Psychology*, 37, 1979, 1075-1084.
- "U.S. Organic Industry Overview," THE O'MAMA REPORT, *Organic Trade Association*, Greenfield, Mass., 2006.
- "Why Buy Organic Dairy Products?" THE O'MAMA REPORT, *Organic Trade Association*, Greenfield, Mass., 2007.
- Winter, Carl K., "Organic Foods," *Food Technology*, 2006, 44-48.
- Woehr, David J., Day, David V., Winfred, Arthur, Jr., and Bedeian, Arthur G., "The Systematic Distortion Hypothesis: A Confirmatory Test of the Implicit Covariance and General Impression Models," *Basic and Applied Social Psychology*, 16 (4), 1995, 417-434.

## TECHNICAL ANALYSIS: DONCHIAN CHANNELS AND THE BRITISH POUND

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### ABSTRACT

*Richard Donchian was a legendary figure in the world of commodity and futures trading. He wrote his first market letter in 1930 and originated Shearson's "Trend Timing" commodity newsletter in 1960. He also launched the first managed futures fund in 1948. His basic trading methodology, the Donchian Channel, (also known as Donchian's Rule) was also adopted by Richard Dennis and taught to the "Turtles" of the 1980's. This article examines the basic setup and logic behind the Donchian Channel and investigates whether the use of such channels would be, and have been, a successful technical trading tool for the futures contract based on the British Pound. The British Pound futures contract has been continually traded since 1976 and is one of the most deep, liquid markets available.*

*"The trend is your friend... until the end of the trend"*

**Keywords:** Technical Analysis, Donchian, Turtle Traders, Derivatives

### 1. INTRODUCTION

Investors sometimes line up in two different camps. Fundamental analysts scrutinize financial statements, economic reports, and management reports to identify strong performers in the financial arena. Their faith in the recorded numbers, allows them to find investments that will return profitable returns on their monies. True fundamental investors do not pay any heed to the charts of historical price action.

Technical analysts, on the other hand, follow the logic that all information is contained the price of a security. Accounting numbers, public and private information is reflected in the market's price. These investors believe that history does indeed repeat itself. The study of patterns of price and volume movement can reveal the next move of the security in question.

Of course, many, if not most, investors actually use a combination of both styles of analysis.

This study uses a system based on the strategy of Richard Donchian. Donchian Channels are a simple form of channel breakouts. Technical analysis in its simplest and purest form. If a security such as the British Pound moves in trends for periods of identifiable time, profits may be captured.

### 2. LITERATURE REVIEW

The late 19<sup>th</sup> century established the beginning of the financial markets and institutions that are giants of the industry today. Fundamental analysis was virtually unknown at that time, as financial reporting was not readily available and not required by the government (except for taxes). Charles Dow and the Wall Street Journal created the first index and the first widely followed public information on business activity. Dow could also be considered the father of technical analysis, since the Dow Theory was the first mechanical method that predicted the movements of company prices. The Dow Theory is still utilized today by some investors.

Barron's advance/decline indexes and other measures of company performance, also technical indicators were very popular in the early 1900's and are still published today in the weekly newspaper.

The passage of the Securities and Exchange Act of 1934 required publicly traded companies to submit Annual Reports and financial statements on a regular basis. Since that time financial statements and



fundamental analysis became a standard of financial analysis. While fundamental analysis reigned supreme from the 1950s until the end of the dotcom bubble of the 1990's, many fundamental analyst's were left scratching their heads as companies decline in value much faster than their financial reports indicated.

Many technical analysts recognized problems with the market and individual securities at this time, due to their charts. Some of the most successful traders of the 1980's were among a group known as the "Turtles". Richard Dennis, also a successful trader, taught the group his system, which was based on the concept of trading channel breakouts. The channel breakout system was based on an earlier system created by Richard Donchian.

Channel breakouts have been studied in the financial literature since the 1960's. Alexander's filter rules were an early study on this phenomenon (1961). Luka,, Brorsen, and Irwin (1988), LeSweeney (1986), Taylor (1986 and 1992), all examined types of filter rule applications.

Anderson (2003, and also in an undated working paper) examined a channel breakout system modeled after the Turtle system to trade US Bond and US Corn futures contracts. Miyazaki and Riles (2004) reported on group of traders working in a Japanese investment house who based their trading strategy on the channel breakout system as posited by the Turtles.

The rise of inexpensive, powerful computers and the "free for all" of information that has descended on all investors through the Internet has created a new environment for technical analysis. Information that previously was available to a few companies with the financial and labor resources can now be downloaded free from hundreds of websites.

### **3. DONCHIAN CHANNELS**

Richard Donchian's breakout system is simple enough to understand. The success of the system depends on a security continuing in motion once the trend breaks out of a "channel". The breakout can either be up or down, requiring either a long (buy) or a short (sell) position.

The channel is simply the high price and the low price of a security for the last 20 trading days. If a new price is higher than the last twenty days, the security is purchased and held until a sell signal is generated. A sell signal follows the same opposite logic.

The Turtles used the twenty day channel, but also used a fifty-five day channel for a more conservative approach.

The system can be traded with or without stops, since the reversal signal is a stop of sorts. The system can trade stocks or futures contracts.

### **4. TRADING THE BRITISH POUND**

The trading system was set up on Wall Street Analyzer 1.27 and the data was obtained from Norgate Investors Services.

Six contracts were examined to find if the system had some potential. The British Pound contract maturing in December for the years 2001-2006 were tested. If the daily closing price for a day exceeded the previous 20 days high prices, the next closing price was purchased. The contract was held until a reversal signal was generated by the system, or until 14 days before the last trading day of the contract. This is necessary because it is not the intent of a speculator to take possession of the underlying commodity, in this case, British Pounds. If the closing price was the lowest in the past 20 days, a sell signal was generated and the next day's closing price was recorded as the sell price. Again, the contract was held until a reversal signal was generated or the exit day was hit.

Table 1 shows the summary results.

**TABLE 1: SUMMARY RESULTS**

<b>Trade Results</b>	<b>Average</b>
Return	0.04
With buy & hold	0.11
Total net loss	4,389.55
Ending amount	104,389.55
Number winning trades	3.17
Number losing trades	2.67
Gross Profit	10,399.09
Gross Loss	-6,009.53
Largest winning trade	7,293.55
Largest losing trade	-3,260.13
Average winning trade	3,314.65
Average losing trade	-2,448.84
Maximum number bars by trade	76.17
Minimum number bars by trade	7.50
Average number bars by trade	32.33
Number of trades	5.83

The system generated 36 trades over the six contracts, 19 profitable and 16 unprofitable. The longest position held was 114 days (2004), the shortest, 1 day in 2001 and 2002. The overall return for the 6 year period was 4.389 percent, compared to a simple buy and hold position in an S&P 500 index fund of 11 percent.

## **5. DISCUSSION AND CONCLUSION**

The preliminary results do not indicate that the Donchian Channel System has much potential for trading the British Pound. Six contracts and 36 trades do not provide much of basis for conclusive results. The time period in question may be an aberration. This study will be extended to examine the predictive effects of the system on contracts from 1976 to 2007 and for the four primary expiry months (March, June, September and December). Upon a more complete examination, more conclusive results can be generated.

The use of trailing stops, not yet incorporated into this simple model, may also help to capture trending profits. Further testing is required.

The system did discover that the price of the British Pound can move in trends for as long as 114 trading days. The price of the British Pound moved in a trending direction for more that 22 weeks. Patterns such as this on more contracts may indicate non random movement. Further tests will be required.

This type of system may be more applicable on cyclical investments such as agricultural commodities or perhaps certain types of stocks.

Finally, the system should also be tested on different time periods. The 20 day rule was Donchian's, but there may be better time frames for different types of underlying securities and commodities.

More data and analysis is required to reach conclusive statements.

## **REFERENCES**

Alexander, S.S. "Price Movements in Speculative Markets: Trends or Random Walks", *Industrial Management Review*, II, 2, May, 1961.

Anderson, John A. "Taking a Peek Inside the Turtle's Shell," Queensland University of Technology, undated manuscript,

Anderson, John A. "Optimal f and Portfolio Optimization in US Futures Markets, Discussion Papers in Economics, Finance and International Competitiveness, Discussion Paper # 133, January 2003.

Bilson, J.F.O. "Technical Currency Trading," The Currency Hedging Debate, Thomas, L. R. (ed.), London, IFR Publishing, 1990, 257-275.

Dixon, Barbara S. *Commodities*, October 1978, 44,45.

Donchian, Richard, "Top Trading Ideas", *Futures*, 1995, 32-36.

Fama, E.F. and E. Blume, "Filter Rules and Stock Market Trading Profits," *Journal of Business*, 39 Special Supplement, 1966, 26-241.

LeBaron, B. "Technical Trading Rules and Regime Shifts in Foreign Exchange," Working Paper, Social Systems Research Institute, University of Wisconsin, 1991.

Norgate Investors Services, Premiumdata.net. © 2007.

Sweeney, R.J, "Beating the Foreign Exchange Market," *Journal of Finance*, 1986, 41, 163-182.

Taylor, S.J. "Trading Futures Using a Channel Rule: A Study of the Predictive Power of Technical Analysis with Currency Examples," *The Journal of the Futures Markets*, April 1994, 14:2, p. 215.

Wall Street Analyzer 1.27, © 2002 F.D. Collin and M. Van de Reyd, [www.lathuy.com](http://www.lathuy.com).

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## STUDENTS AS MARKETING CONSULTANTS

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### ABSTRACT

*This paper reports on eight different marketing projects completed by students as members of AMA (American Marketing Association) chapters at two universities in Ohio. As the key to success of these projects is an active AMA membership base, the paper concludes with suggestions for the academic advisor to follow to develop a student group capable of performing fee-based marketing consulting to clients who are willing to pay.*

**Keywords:** Marketing Education, Experiential Learning, Student Consulting

### 1. INTRODUCTION

Business education at the university level must be a balance of theoretical and experiential education. The theoretical education provides a background of principles that have been applied over and over so that they have been thoroughly validated. At the same time the theoretical education provides an awareness of the 'best practices' at various organizations that have not yet been validated as universally true. These 'best practices' are particularly useful in turbulent and dynamic industries that may change too rapidly for their business models to be thoroughly validated.

Experiential education is necessary to augment the theoretical education. Students generally have little to no experience in the business world other than as consumers of products. Few students seem to be aware of the business to business (B2B) markets in spite of their being approximately 80% of marketing (Kotler 1999). This lack of a business frame of reference is a significant issue in the classroom. Often the student will respond that the information in the book or in the lecture is just text book and not 'real world.' The experiential education can provide a business frame of reference as well as a validation to the student of the more theoretical education s/he is receiving. For example, if the student takes a job as a sales person, s/he rapidly gains an appreciation of Professional Selling and Sales Management courses. The text books and classroom lectures become more 'real' and less theoretical (in the pejorative sense).

The student also gains an understanding of business cultures. A famous example of this is the IBM dress code in the past. Men were 'required' to wear suits with white shirts and muted ties. Although this was not written in policy or procedural manuals, IBM people adhered to this dress code. Further, the corporate culture of a fast growing, dynamic software company is entirely different from a large money center bank in New York City or San Francisco. Programmers on Microsoft's web sites often wear short pants; the CEO of Apple almost always wears jeans and never wears a tie. Contrast these styles with the more formal suits worn by the bankers in New York. The corporate cultures within the different industries are also different but difficult to analyze from the outside. These concepts are seldom discussed in the literature but they are nonetheless real and very important to the student who wants a business career.

The advantages of an experiential education to augment the theoretical education are not in doubt. There is a strong literature base on internships, community projects and other classroom-related projects. Young, Klemz and Murphy reported a literature that said there has been a shift in the from knowledge-transfer instructional methods (lecturing of theoretical material) to interactive, experiential learning (Frontczak 1998; Karns 1993; Young et al. 2003). Activities that provide realism and stimulation, yet require reasonable effort, are preferred and perceived as effective (Karns 1993).

Although the literature discusses in-class exercises, cases and lectures, group research projects and teamwork ((Bridges 1999; Davis et al. 2000; McCorkle et al. 1999), there does not appear to be any literature discussing consulting services provided by students to local businesses as a way of gaining this experiential education

This paper reports student marketing consulting experiences and how they relate to marketing classes at the business schools at two universities in Ohio. One university was a small, 8,000 student, and private university. The other was a medium sized, 14,000 student, and state university. The consulting services were under the auspices of the local chapter of the American Marketing Association (AMA).

## **2. AMA CHAPTERS AT TWO UNIVERSITIES**

The AMA "...is a professional association for individuals and organizations involved in the practice, teaching and study of marketing worldwide" (<http://www.marketingpower.com/content407.php>.) Students join the organization to get business experience they can put on their resumes to help differentiate themselves from their fellow students when interviewing for jobs as they approach graduation. The challenge for the faculty advisor is to get students who wish to be active in the organization rather than those who are content to be passive and still differentiate themselves. The next challenge is to get the business community involved in requesting university assistance on projects. This however can be a two edged sword. Projects are very important to the success of the AMA: too few and there will not be many students who will join. Too many projects and the students will not be able to satisfactorily complete the projects. Lastly, the biggest challenge may be getting the faculty advisor involved. Many projects require the advisor to provide direction, guidance and feedback to the students. In some cases the advisor may be required to do some of the actual work as well. The following are the marketing consulting projects done at the two different universities:

### **2.1. Small Private University**

This university had a fairly strong AMA organization as it was a residential campus. That is, students were not allowed to live off-campus until their senior year. Hence, students were always on campus and available to join organizations. Perhaps since the university was the largest employer in the county, and perhaps since it had an active internship and college recruitment program (both of high school sports stars and of employers), it was considered to be an asset to the community and a source of inexpensive help and advice to the community. Hence the AMA had a manageable number of projects.

#### **2.1.1. Project Number 1 - Customer Satisfaction Survey: Marketing Research**

A company in Cleveland, Ohio requested this project. The president and the marketing manager were both alumnae of the university and wanted to help the students gain 'real-world' experience. They explained that since they were attempting to become ISO 9000 certified, they had to do periodic surveys of their existing customers.

A team of AMA students met with the marketing manager in order to understand their business and their requirements better. Later they visited the company and went on a tour of the factory. The team then returned to the university to develop a formal proposal for the client. The proposal included fees and a timeline for accomplishing the task. The client agreed to \$1,500 (50% payable to the team and 50% payable to the AMA chapter at the school).

A literature review was conducted and SERVQUAL (Parasuraman et al. 1988) was used to provide a basis for the survey. The suggested survey was sent to the client. He changed a few questions to better fit his understanding of his clients as well as to fit his needs.

The survey was sent via email to his clients with a URL from the local AMA chapter. The data were downloaded automatically into excel and then into SPSS. Data analysis was performed after the two week deadline.

A summary report was provided to the client within the 6 week deadline. The students were very happy with the \$750 for marketing consulting. The AMA chapter gained additional funding and the school gained additional credibility in the local business community. The client later admitted that if he used his research firm, the work would have cost him \$15,000.

### **2.1.2. Project Number 2 - Marketing of a Local Sports Bar: Public Relations and Advertising**

The new owners of local sports bar near the university asked the AMA to help market the business. His idea was to have one team of students promote the bar for one week. He would authorize each individual team to spend up to \$1,000 in promotions. The second team would promote the bar on the same week in the following month. The winning team would be the one who increased profits the most. Their compensation was to be \$1,500 for the winning team and \$1,500 for the AMA.

Students were very creative. Both groups had a different theme for the week with creative material developed for the bar. One group developed ads in the university and the local newspapers. The other group developed flyers and put them everywhere in the community. Both groups had promoters at the bar. The bar owners even involved the local media for PR.

The project was a resounding success. Due to being actively involved in applying principles from PR and Advertising classes, the students gained quite a bit of experience. At the end, both teams shared their money. Everyone gained though, including the AMA which received \$1,500.

### **2.1.3. Project Number 3 - Secret Shopper: Marketing Research.**

The local Chamber of Commerce, as part of an urban redevelopment program, requested the AMA construct a secret shopper program with a bit of a twist. It was to be administered by the three different demographic groups: students, professionals and retirees. A local bank agreed to pay the AMA \$1,500 for the secret shopper program.

As in the Customer Services Survey discussed in 3.1.1, the students did a literature survey and decided to use the constructs and questions from SERVQUAL(Parasuraman et al. 1988). The students then worked with the president of the Chamber of Commerce on the final wording and the layout of the survey form. The AMA then released the document to the Chamber of Commerce to use as often as they wished.

Again the project was a success. The AMA chapter received additional funding and the students received both marketing research experience as well as a resume item that may help them get a job.

## **2.2. Mid-sized, State University**

This was an open university (it admits anyone with a diploma and then ensures excellence by rigorous testing) in what had been referred to as an older, former steel / auto industry town that was in transition. Members of the university community and the city recently recognized the advantages of working together. The city recently helped the university acquire some land for a new business school near the downtown. In addition, Ohio has a government group called the Small Business Development Corporation (SBDC) that helps small businesses.

As a commuter school, students were seldom on campus, preferring instead to work part-time. Since it was an open university with many students being the first in their families to go to college, the desire to join professional student groups is not very strong. This creates a serious challenge for all student groups to have sufficient numbers of active students.

Although the university, the city and the SBDC help bring business projects to the school, the challenge is for the AMA group to have a critical mass of active members to complete the projects.

### **2.2.1. Project 1 - A Medical Software Project: Marketing Research and Channel Development.**

Medical clinic software marketing via the Ohio Small Business Development Corporation (SBDC): A local doctor had developed a software package to allow a clinic to automate its patient care services. He wanted an AMA team to sell it through telemarketing. The team suggested it would search the academic literature and come back with a formal proposal.

One week later the team sent a proposal on 3 levels. First, it would look at the channels to sell the software through: direct sales, distributors and OEMs. Next, the team would develop a survey that could be sent to each of the channels to discover their buying criteria. Finally, this could be developed into a

formal marketing plan. Each of the three steps would be billable at \$2,500 for a total of \$7,500 to be shared 50% with the team and 50% with the AMA chapter.

After spending hours on a literature review in order to develop the proposal, the SBDC informed the AMA chapter that they could not bill for services performed.

### **2.2.2. Project 2 and 3 - Two Small Retail Shops: Marketing Research, Personal Selling and Advertising**

A franchise ice cream parlor and an indoor black light miniature golf course requested an AMA team develop promotional material and select niches to target. The team thoroughly analyzed the market, reviewed the marketing literature and proposed a plan of action. Although the ice cream parlor required a great deal of work and although there was an email stating the customer would pay the AMA students \$1,000, in the end the ice cream parlor refused to pay. This was a good experience for the students – get the order signed at the outset. The miniature golf course did not want to spend \$200 for any research. The AMA team decided not to offer services for free.

Both were disappointments for the students. The students worked hard and wanted to work harder for the client. But a good lesson was received. Wanting to do a service because it is interesting is not enough. The client must be willing to pay. The challenge is to sell to the client in such a way as to win the business.

### **2.2.3. Project 4 – Small Grocery Store Chain: Marketing Research**

A local marketing company requested students to conduct surveys on a convenience sample of shoppers as they left grocery stores on a Saturday morning. The surveys themselves were very badly written by the grocery store chain. 2,800 surveys were collected, entered into SPSS and analyzed for the client. Later in the year, the same client asked a team from the AMA to recruit 80 people via telemarketing for focus groups.

The total bill for both projects was \$3,700 for the AMA chapter. The students only received gasoline money. The students were able to hear the respondents' negative feedback to the surveys as they were administered. When the data analysis was performed, the students learned how to clean the data before and after it is entered, what techniques to use to analyze the data, and the impact of a poor survey on the final data.

### **2.2.4. Project 5 - Small Industrial Company With \$14 Million In Sales: Marketing Research**

A local company that provides high temperature crucibles for melting metal alloys for high technology companies such as jet engine manufacturers, brake and bearing manufacturers. This company requested an AMA team do a customer satisfaction survey for them. After a factory tour was provided by the client, a team conducted a literature review and determined that SERVQUAL (Parasuraman et al. 1988) would provide the basic platform for a survey after some minor wording changes. A proposal to do the survey, including fees of \$1,500 to be charged was sent to the client. The client agreed and made changes to the survey to make it more suitable for their industry.

The team is currently working with the client to complete the project. Thus far, the literature review and the factory tours were very impressive.

## **3. CONCLUSIONS**

### **3.1. Student Experiential Learning**

The AMA students invariably say the projects make them more aware of the practicality of the theoretical information received in the text and in the classroom. For the student who has never been inside a factory or inside a retail establishment except as a customer, these are extremely valuable opportunities. When a potential client refuses to pay even a small sum such \$200 for a survey but is willing to pay much more for promotional material without first understanding who the customers are, what media they use and why they buy the products, the student is left to ponder the reasons why. Classroom discussions

about marketing research, channel development and advertising oftentimes do not consider mundane issues such as cash flows and the visions of the small business owner.

### **3.2. Faculty Advisor Roles and Caveats**

The key for the faculty advisor is to have a 'critical mass' of capable students who are willing to be involved in community projects. If not, the advisor will either have to do the work him/herself or will have to decline to do these projects. Unfortunately it is a chicken and egg situation. Does the capable team precede the business opportunities or are the business opportunities what attracts the capable student? For a successful team, the advisor should consider the following:

#### **3.2.1. Pay**

No services should be provided for free. All projects must be fee-based for four reasons.

**3.2.1.1. Student Motivation:** The student always seems to get a great motivational 'buzz' from receiving a few hundred to a thousand dollars – it is sometimes a good reason for the student to consider a career in marketing research.

**3.2.1.2. "Differentiator":** A client who is willing to pay for marketing consulting is telling a prospective employer of the student that this student has done some 'real' work. This helps differentiate the student from other students at interview time.

**3.2.1.3. "Real work":** A client who is willing to pay for the project is not likely to give simple 'make work' projects. If s/he is willing to pay, there must be something of value s/he needs.

**3.2.1.4. Chapter Funding:** It is a great way to fund the AMA chapter. After all, a bake sale or a car wash is not something marketing students should do. The AMA chapter in 2006 asked other AMA organizations around America how they raised funds. Only two of the 19 who responded indicated they did any actual marketing work for clients who would pay them.

### **3.3. Officer Titles**

AMA members should have officer titles as well. This is especially important for the seniors who have been active since they were sophomores. All projects should have a project leader, a statistical expert and perhaps a web master to manage the URL where surveys are listed and data collected.

### **3.4. Membership**

There should be weekly meetings with all members encouraged to bring a new friend to each meeting. Once a person is enrolled as a new member, someone should act as a mentor to ensure the person becomes active.

### **3.5. Recognition**

There should be periodic recognition by the department chairs and the dean. Everyone, including students, needs verbal praise especially by those people they respect.

## **REFERENCES**

- Bridges, Eileen (1999), "Experiential Learning and Customer Needs in the Undergraduate Marketing Research Course," *Journal of Marketing Education*, 21 (1), 51.
- Davis, Richard, Shekhar Misra, and Stuart Van Auken (2000), "Relating Pedagogical Preference of Marketing Seniors and Alumni to Attitude toward the Major," *Journal of Marketing Education*, 22 (2), 147.
- Frontczak, Nancy T. (1998), "A Paradigm for the Selection, Use and Development of Experiential Learning Activities in Marketing Education " *Marketing Education Review*, 8 (3), 25-33.
- Karns, Gary L. (1993), "Marketing Student Perspectives of Learning Activities: Structure, Preferences, and Effectiveness," *Journal of Marketing Education*, 15 (1), 3.
- Kotler, P. and G. Armstrong (1999), *Principles of marketing*. New Jersey: Prentice-Hall.



- McCorkle, Denny E., James Reardon, Joe F. Alexander, Nathan D. Kling, Robert C. Harris, and R. Vishwanathan Iyer (1999), "Undergraduate Marketing Students, Group Projects, and Teamwork: The Good, the Bad, and the Ugly?" *Journal of Marketing Education*, 21 (2), 106.
- Parasuraman, A., Valerie A. Zeithaml, and Leonard L. Berry (1988), "SERVQUAL: A multiple-item scale for measuring consumer perceptions of service quality," *Journal of Retailing*, 64 (1), 12-40.
- Young, Mark R., Bruce R. Klemz, and J. William Murphy (2003), "Enhancing Learning Outcomes: The Effects of Instructional Technology, Learning Styles, Instructional Methods, and Student Behavior," *Journal of Marketing Education*, 25 (2), 130-42.

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# GENERATIVE LEARNING AS A CATALYST FOR SERVANT LEADERSHIP AND CO-CREATED UNIQUE VALUE AT THE ORGANIZATIONAL AND COMMUNITY LEVEL

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## ABSTRACT

*Generative learning practices, evidenced by organizational interaction and evolution, provide an opportunity for the unleashing of human potential. In a case study of four organizations under the leadership of a single Chief Executive Officer, intentional learning through purposeful dialogue, increased exposure to an open systems environment, and the collective study of leadership literature led to the emergence of indwelling organizational mission and purpose, a demonstration of servant leadership among the staff, and the realization of co-created unique value in shared healthcare initiatives with the local community. The study demonstrated that learning in itself was not the organizational mission, but when seeded and nurtured served as a pivotal catalyst for organizational development and cultural change.*

**Keywords:** Management; Generative Learning, Co-Created Unique Value, Servant Leadership, Organizational Development, Unleashed Human Potential.

## 1. INTRODUCTION

At a time when organizations are challenged with rapid and unpredictable change in the marketplace (Vaill, 1996), the ability to convert knowledge and reflection to transformational change is a formidable goal. Technology, trade, television, and travel are driving the relentless pace of change in the world. Knowledge is said to replace itself every two or three years (Marquardt, 2002, p. 4). Heightened levels of uncertainty accompany the pace of change, especially if the organization operates primarily as a closed system (Scott, 2003). Simply repeating prior years' achievements without incremental value may be insufficient to keep pace with business pressures.

The effectiveness of the organizational response depends upon cultural factors, resident leadership, and the overall learning orientation and practices (Letiche & Statler, 2005). Given the goal of sustained and progressive transformation, learning and cultural capacity for change become important factors. Generative (March 1991; Senge, 1990) and transformative (Brooks, 2004; Scharmer, 2001; Schein, 2004) learning constitute important tools in this challenging environment.

## 2. LITERATURE REVIEW

Literature on organizational learning and learning organizations gained notoriety with the work of Argyris and Schön (1996) as well as Senge (1990). Published research increased significantly in the 1990s (Bapuji & Crossan, 2004), and although some researchers regard organizational learning as a unique experience, in truth, learning occurs in all organizations (Blackman & Henderson, 2005; DiBella, 2005; Dilworth, 1995; Nicolini & Meznar, 1995). The effectiveness of any learning endeavor must be measured against the corresponding intention of the specific organization.

Learning organizations are well characterized and documented (Chawla & Renesch, 1995; Kline & Saunders, 1998; Marquardt, 2002; Senge, 1990). Additional research offers prescriptions for change (Kotter, 1996; Quinn, 1996; Senge), although questions remain regarding exactly how an entrenched culture is moved from a reactive stance to one that is more resilient and proactive (Pulley, 1998; Horne & Orr, 1998).

A behavioral approach considers basic biological responses where successful consequences are reinforced and negative consequences discourage repeat behavior (DeFillippi & Ornstein, 2005).

Skinner's work on stimulus and response represents such zero order adaptation (Yeo, 2002). Researchers correlate the behavioral response to lower levels of adaptive learning. Adaptive changes in an organization's structures, routines, and rules represent a response to external stimuli that stabilizes the internal environment at or near equilibrium (Gharajedghi & Ackoff, 1984). Imparting explicit knowledge through training, policies, or procedures reinforces an existing culture (Scharmer, 2001). Using this tactic, efficiency gains may feel like change to the organization even though the undisturbed values keep the culture intact (Argyris & Schön, 1996).

Adaptive learning is more prevalent in mechanistic organizations (Scott, 2003) where the purpose is tied to achieving specific outcomes and where training or straightforward experiences are vehicles for gaining knowledge (Lumpkin & Lichtenstein, 2005). Unchallenged tacit assumptions from prior successes reinforce the perception of operational effectiveness; this perception creates a challenge to learning and change since the organization's empirical evidence is rooted in existing mental models and behaviors (Shrivastava, 1983). Changes at this level represent modest improvements (Swieringa & Wierdsma, 1992). Shrivastava differentiated between error correction without values change (single loop) and corrections accompanied by both values and strategy changes (double loop). Argyris and Schön (1996) indicated that single loop learning evaluates product outcomes and double loop learning evaluates processes.

Ongoing double loop or generative learning is necessary in order for an organization to continually adapt to variable external influences. The first example of generative learning may be the point when leadership senses Gestalt in how the organization deals with new challenges (Kline & Saunders, 1998). Conscious awareness of a gap may result in conflict and negotiation, which in turn generates knowledge and understanding (Swieringa & Wierdsma, 1992). An organismic environment (Scott, 2003) favors higher order, generative learning where content and cognition are emphasized over outcomes (Blackman & Henderson, 2005; Gharajedghi, 2006). In double loop learning, participants cognitively evaluate an experience and determine whether existing values, assumptions, and norms should be challenged or changed (Argyris & Schön, 1996, p. 21). Generative learning denotes incremental change versus a return to the expected state based on a values judgment. Leadership plays an important role in guiding the organization to understand how various learning practices apply, and when each type of learning is appropriate.

Because there are benefits in learning that may outweigh maintaining equilibrium, some degree of turbulence or disruption is encouraged and tolerated. Disparity between current state and desired state instigates a curiosity that promotes reflection and creative tension (Argyris & Schön, 1996; Brooks, 2004; Hendry, 1996; Senge, 1990). The ensuing process can be compared to the unfreezing stage in Lewin's (1997) change model. In contrast to adaptive change where existing practices are improved or strengthened, a generative change seeks a new process or views the process in a new way (March, 1991). Contemporary research in transformative learning incorporates the action of collective will on evaluation of related processes (Senge, Scharmer, Jaworski, & Flowers, 2005).

Some assert that learning occurs at the individual level and progresses to a collective level via dialogue and social networks (Pinchot & Pinchot, 1996; Senge, 1990; Weick, 1991). Senge and Vaill (1996) promoted personal mastery in preparation for team level learning. Others perceive a dynamic and simultaneous flow of knowledge and cognition, imperceptible as distinct stages (Argyris & Schön, 1996; Kolb, 1976). Yanow (2001) asserted that learning occurs in an organization much the same way that a culture produces artifacts – as a collective endeavor.

Schein's (2004) widely accepted definition of culture includes *shared* beliefs and assumptions. Generative learning assumes evaluation of and reflection on the cultural framework to assess the adequacy of currently held beliefs and practices. From a systemic perspective, learning occurs within individuals, between individuals, and as a collective body in an iterative fashion relative to incoming stimuli. In this respect, social learning takes place when shared knowledge is disseminated and adopted in the culture (Gharajedghi, 2006; Plaskoff, 2003). Organizations that find value in generative reflection and change necessarily require learning at each level.

Organizations seeking transforming change provide for increasing knowledge at the personal level, and also create an environment for collective sharing and learning. Brown and Isaacs' (2005) work with The World Café demonstrates the power of posing meaningful questions as a way to stimulate dialogue and problem solving. From a systems perspective, shared knowledge through dialogue and discourse results in collective learning since each party brings a unique paradigm and contribution to the conversation. Overlooking a shareholder point of view can result in an incomplete solution (Brown & Isaacs). Jensen (2005) differentiated between individual knowledge and the ability of a collectivity to use knowledge to create values. The power of shared knowledge is the resulting recognition of themes, patterns, and ideas (sense making) that stimulate additional dialogue from a constructivist perspective (Weick, 1991).

Researchers have used various models to characterize and prescribe organizational learning practices. The dominant models have emphasized action, reflection, and experience. Two dimensional, generative learning is portrayed in models that promote action and reflection. Kolb (1976) first conceptualized ongoing cycles of experience and reflection in the Experiential Learning Model, influenced by Lewin's Field Theory and John Dewey's practical approach to inquiry (reflection). Three dimensional learning moves beyond action and reflection to include collective will. The creative outcome has been termed *presencing* (Scharmer, 2001), or *ba* (shared space) (Von Krogh, Ichijo, & Nonaka, 2000). Organizations engaged in transcending learning reach new levels of connectedness together to intuitively sense opportunities and create the future. Building on explicit and tacit knowledge, learning communities transcend individual understanding to allow the emergence of a new awareness. This concept builds on reflection with imagination, inspiration, and intuition at the collective level. An important element of transcendent, collective learning is the role of dialogue in co-creation of new paradigms and solutions.

Combining tacit knowledge transfer with reflection and dialogue may allow an organization to capitalize on proprietary experience in a way that offers a competitive advantage (Lubit, 2001). In addition, dialogue moves individual learning to the collective experience (Senge, 1990). Scharmer's (2001) work indicated that dialogue is essential to moving tacit knowledge from the intangible to the tangible. Assumptions can only be challenged once revealed, then evaluated, and either confirmed or replaced. Of four dialogue levels (I-IV), the third level incorporates reflection and the fourth level results in generation of new rules and accepted assumptions. This rare level of interaction begins to access the non-negotiable assumptions that drive an entrenched organization or a stubborn problem. Scharmer admits that moving an organization to the critical fourth level is difficult to describe and initiate.

Systems theory addresses the whole, the components of the whole, and the relationship between the components (Gharajedaghi, 2006; Senge, 1990). Learning in such systems is the result of surprise and reflection on gaps between the expected and the experience (Gharajedaghi). The open system is often challenged with ongoing contributions from the external environments that bring an unpredictable measure of chaos (Briggs & Peat, 1990; Gleick, 1987) and complexity (Brown & Eisenhardt, 1997; Csikszentmihalyi, 1991). The other unpredictable variable in an open system is human interaction. When learning results from systemic interaction, the organization experiences emergent learning. Emergent or creative learning recognizes its dependence on continual change where culture represents the "firmly implanted beliefs and values of its organizational members" (Schneider, Brief, & Guzzo, 1996, p. 11), while climate comprises the visible manifestations of policies, practices, reward and recognition programs, and organizational structure. Other intangible components and processes include attitudes towards learning and learning practices, and flexible behavioral roles of leaders and employees. Changes in traditional leader-follower roles can present challenges to the organization often resulting from a reversal of traditional roles and emergent learning which values employee insight in creating the future.

A top down perspective positions learning as an application to, or inert component of, the overall learning process. In this scenario, the employee is not invited to take an active role in the transition of an adaptive orientation to the generative orientation (Smith, 2003). When leaders, employees, and other stakeholders are considered co-creators (Prahalad & Ramaswamy, 2004) new opportunities to seed generative learning may be revealed and realized in the organization. In order to leverage learning opportunities, both leaders and employees must understand how external factors influence organizational drivers and decisions. Exemplary followers offer as much potential for generative learning as exemplary leaders (Banutu-Gomez, 2004).

An organization's capacity for progressive change is linked to the capacity for generative and transformative learning practices (Ackoff, 1998; Swieringa & Wierdsma, 1992). Paradoxically, culture acts as a stabilizing force and is also an essential component of change (Gharajedaghi, 2006; Heifetz & Laurie, 2001).

### **3. CULTURE, LEARNING, LEADERSHIP, AND CO-CREATED UNIQUE VALUE**

The culture of an organization serves as its society, providing context and meaning (Geertz, 1973). Culture establishes and maintains the control mechanisms for accepted behavior through artifacts of structure, rules, policies, and processes (Vera & Crossan, 2004). Values and beliefs reside at a deeper level of consciousness, and become assumptions if empirically substantiated (Schein, 2004). As the organization matures, assumptions become assimilated into language, company rituals, stories, and reward systems until they permeate nearly every facet of the culture (Higgins & McAllaster, 2003).

Organizational cultures have assumptions about learning – what it means, how it occurs, whether it is important, the role it plays in achieving short and long term goals, and how or if it is rewarded. These assumptions are important because the transition from adaptive to generative learning involves a change within the context of the culture. Organizational values and beliefs differ between settings that practice a one dimensional approach and those that experience a two or three dimensional approach. While adaptive learning leaves the existing values framework intact (Hayes & Allison, 1998; March, 1991) a generative stance presents challenges to the status quo. These challenges are often resisted because they conflict with the organization's empirical definitions of success (Schein, 2004).

#### **3.1 Leadership and Learning**

Resistance to change can originate from senior staff, a functional area, or the organization at large. Cultural norms and assumptions (Bolman & Deal, 2003) may differ among these organizational factions, creating a variety of learning challenges. Although executive management may espouse the value of organizational learning, this same group may also represent an obstacle to learning. Barriers to sustained transformational change include unclear strategy and conflicting priorities, a top management team tied to status quo, the inability to make decisions, ineffective collaboration, poor communication skills, and pervasive leadership incompetence (Beer & Eisenstat, 2000, p. 31). Entrusted with authority and responsibility for strategy and decision making, the executive team imposes its values on the organization to meet goals and provide stability (Nystrom & Starbuck, 1984; Kotter, 1995). Leaders must first understand the conditions for organizational learning then determine whether they have the skill and desire to foster a learning culture. A learning culture encourages creativity, dissent, experimentation, and calculated risk (Garvin, 1993; Kotter; Schein, 2004). A hierarchical culture built on command and control (Mintzberg, 1973) may espouse learning but find resistance among its leadership ranks, effectively blocking learning (Scharmer, 2001).

Sharing power, admitting vulnerability, and entertaining personal challenges are a few of the changes executives face when transitioning to a learning culture (Cairo, Dotlich, & Rhinesmith, 2005; Heifetz & Laurie, 2001). In an environment where power is afforded or assumed by structure, leaders see their role as maintaining status quo, managing uncertainty, and controlling when and if a course of change is pursued (Hambrick, 1981; Hambrick, Geletkanycz, & Fredrickson, 1993) – in effect, *managing* the process. A continuous change view engages employees, assumes that leaders do not have ready solutions to systemic issues, and views change as the responsibility of the entire organization. Initially, leaders find themselves on unfamiliar ground because problem identification is elusive and solutions require collaboration through informal authority (Heifetz & Laurie, 2001). In an adaptive change environment, shared power and bidirectional commitment support transforming degrees of change. Commitment to learning and personal change is essential in continuous change. Quinn (1996) asserted that "deep change means surrendering control" (p. 3). For many leaders, deep change will require a significant amount of introspection to assess the gap between their current leadership style and a style that can support adaptive change. Kouzes and Posner (2002, p. 48) suggested that conducting an inventory of personal values is a good place to start.

In the case study, the chief executive officer (CEO) of a mid-Western medical association and foundation intent on personal leadership development was hired to lead four affiliated organizations. The respective Boards of Trustees were looking for an experienced candidate to further develop the organizations for improved service to the community. In a quest for personal development, the CEO made a personal commitment to explore concurrent and collective leadership (Raelin, 2003). Upon hire, the he articulated goals of learning, individual leaderfulness (Raelin), and improved internal and external communication. In parallel he established simple but clear 1, 3, and 5-year goals for the four organizations. His opening remarks prepared the organization for the ambiguity, change, and managed chaos that would generate innovation and creativity. The goals and impending leadership style were a dramatic change for the traditional, hierarchical operation.

A balance of transformational (Bass, 1999), adaptive (Heifetz & Laurie; Kouzes & Posner, 2002), emotionally intelligent leadership (Goleman, 1998), and servant leadership (Greenleaf, 1991) skills support a learning culture. Articulating the new vision and developing a new strategy are familiar ground to leadership; the challenge begins with creating a new process for responding to the problems (Kotter, 1995). As executives share control for the learning experience and become learners themselves, self-awareness, motivation, social skills, and self-regulation allow simultaneous connection with employees and the emotional stability that the organization expects (Goleman, 1998). Servant leadership shares many characteristics with transformational and emotionally intelligent leadership – vision, integrity, service, empowerment, ethics, and appreciation – contending that these leadership skills reinforce the values that transform at the individual and organizational level (Russell & Stone, 2002). Similarly, adaptive leaders shepherd an organization during cultural and organizational change by providing a safe environment, direction, and managed conflict (Conger, Spreitzer, & Lawler, 1999; Heifetz & Laurie, 2001).

The servant leader's altruistic approach favors service over leadership (Sendjaya & Sarros, 2002). Transformational and servant leadership share common attributes of influence, vision, trust, integrity, modeling, communication, listening, teaching, and empowerment (Stone, Russell, & Patterson, 2004). Kofman and Senge (1995) saw servant leadership as practical and ideal, promoting learning over mastering and problem solving. Banutu-Gomez (2004) and Prewitt (2003) promoted servant leadership as a means of bringing caring and trust to organizations. Transformational leadership differs from a servant approach by driving the organization for results, sharing the risk, and offering problem solving as appropriate.

When learning is identified as a potential catalyst for transformation, taking inventory of resident leadership style is an important consideration. Aspects of transformational leadership, emotionally intelligent leadership, adaptive leadership, and servant leadership support a transitional environment. Leadership's ability to effect transformational change is related to cultural receptivity. The CEO provided adaptive, transformational, and servant leadership while building a culture that embraced change and new idea generation.

### **3.2 Unleashing Human Potential**

An aspect of innovative problem solving is listening to new voices and alternative points of view without applying personal filters or framing discussions from existing paradigms (Kuhn, 1996). When leaders and stakeholders are willing to dialogue and listen in new ways, solutions can emerge because sacred assumptions are challenged without fear in a spirit of hope (Synder, 1994) and anticipation. Creating a purposeful environment (Gharajedaghi, 2006) calls for a type of leadership that maximizes human potential by coaxing it to emerge from within the organizational setting that is open to change and innovation (Heifetz & Laurie, 2001; Quinn, 1996). As Margaret Wheatley (2005) reminds us, the days of effective, sustainable leadership through command and control are over. Leadership that unleashes human potential represents the best opportunity to co-create innovative solutions to new, complex issues (O'Toole, 2005).

Transforming change requires shared power, a commitment to learning and personal change by those with formal authority. The transformative leader gets people excited, creates vision, ensures consistent purposefulness, decides effectively, stays close to all members of the team and acts in a highly ethical manner (Lapp, 1999). In turn, they are keenly invested in creating the social architecture (Bolman, &

Deal, 1991) and systemic culture (Gharajedaghi & Ackoff, 1984) that serves as the inspirational catalyst for exponential and multiframe thinking (Bolman, & Deal).

Cultures built on shared values, generate change and require that the leader understands of core values, constituency values, and gaps between espoused and real values before meaningful alignment can take place (Cameron & Quinn, 1999; Taylor, 2004, p. 162). Alignment and common goals can initiate a co-creative environment as long as leadership does not seek to dominate and filter the goal setting, and allows higher level dialogue to emerge. O'Toole (2005) indicated that generative leaders have a responsibility to balance owner and employee needs to guide the organization to mutually satisfying results. When Hanover Insurance CEO Bill O'Brien sought to create a dynamic culture, he relied on purpose and vision, ensuring that as the organization's most visible leader he co-created the operating principles with the employees (Sugarman, 2001). His goal was to tap the enormous potential within each employee and create an environment where all parts of the system felt compelled to support its renewal. Similarly, Frank Douglas, Executive Vice President for Aventis Corporation, believes that leadership is responsible for creating a work environment where people want to contribute and where innovation can emerge and percolate (Douglas, 2004). Ethics and social responsibility now extend to active promotion of well-being and support for all component parts of the system – owners, shareholders, customers, environment, community, and employees.

The value of human potential and creativity are more readily recognized when leaders view the organization and its surroundings from a systems perspective. A living system cannot thrive without ongoing renewal, or oxygen. Generative leaders' fuel growth and change from contributions of the total resource pool (Ray, 2004). In order to leverage the strength of the systems perspective, Frank Douglas (2004) actively practiced a four step process of listening, observing, creating hypotheses, and experimenting with emerging solutions. Although this presented a challenge for the traditional work environment, the development (Gharajedaghi & Ackoff, 1984) practice allowed creativity to emerge amidst a holistic view of the operation.

Scharmer (2001) described the leader's role as shifting the collective attention – listening, speaking, and supporting the output of human potential without attempting to direct the outcome. Scharmer (2000) identified this approach as *presencing* where a person's "highest self is used as a vehicle for sensing, embodying, and enacting futures" (p. 4). In this realm, all participants are potential leaders and each has a unique contribution once their human potential is unleashed.

### 3.3 Learning Practices

With no specific or formal plan in mind, the CEO initiated activities to stimulate learning and discussion. Work objectives were revised to include a performance expectation for leaderful behavior; leaderful behavior was flexibly defined as anything anyone did to move the organization towards accomplishing its goals. The first organized learning activity was a lunchtime book club, open to everyone on a voluntary basis. The CEO selected *Leadership and the New Science* (Wheatley, 1994) because the book introduced chaos, shared leadership, and the resulting creativity born of unleashed human potential. Each reading session was facilitated by the chief executive; eventually Dr. Margaret Wheatley visited the organization and provided discussion and insights on the book. Other book club selections have featured *Solving Tough Problems* (Kahane, 2004) and Collins' *Good to Great* (2001). Kahane also visited the organization.

In parallel with the book club, the CEO introduced two "technologies" for conversation and problem solving – The Art of Hosting ([www.artofhosting.org](http://www.artofhosting.org)) and World Café ([www.theworldcafe.com](http://www.theworldcafe.com)). The Art of Hosting promotes meaningful conversation with a circular formation and a talking piece. This practice was extended to staff meetings and planning retreats where employees established the meeting agenda. As a result of new skills and regular practice, deeper levels of conversation began to take place among staff and at Board meetings. Employees felt free to express creative alternatives and challenge status quo practices. Silos that existed in the organization began to blur as people leveraged the thoughts and ideas of others.

Organized training was provided to staff members and Board members, and has subsequently been offered to the community. In keeping with the World Café approach (Brown & Isaacs, 2005), an environment was created where participants meet in small groups to brainstorm issues and solutions, then move and continue discussions with a different group. People are free to identify a new topic or modify the starting topic. The World Café concept allows many solutions to surface, and promotes creative thinking and open discussion. These approaches are used in community assemblies to discuss and address health care services, concerns, and alternatives. The case study site sponsors the assemblies that are jointly attended by medical professionals, community members, and employees from the four affiliated organizations. The combination of enhanced communication skills, deliberate interaction with external stakeholders, and leadership at a personal level stimulate organizational growth and a stronger partnership with the local community.

Learning about leadership is further encouraged through attendance at the Shambhala Institute for Authentic Leadership ([www.shambhalainstitute.org](http://www.shambhalainstitute.org)), an annual conference with guest leaders and authors to discuss relevant topics. The case organization funds the training and grants the time to any employee willing to make the learning investment. The CEO participates in the annual conference and is a Board member for Shambhala Institute.

### **3.4 Modified Cultural Values and Norms**

Leadership influences culture by driving the formation of values and beliefs, eliciting commitment to shared values, and modeling espoused values (Bolman & Deal, 2003; Kouzes & Posner, 2002; Jaskyte, 2004). As the CEO modeled learning and collective, concurrent leadership, the organization slowly modified its ideas of best practices over a seven year period. Constructive challenges to status quo and an interest in continued learning became commonplace. People began to see themselves as leaders regardless of title, and sought overtly cooperative interactions with external stakeholders. The Board of Trustees amended its bylaws to allow community members to serve on the Board. Managers in the organization began to look for candidates interested in continual learning. Throughout the case, the published mission and purpose for the affiliate organizations were reflected in interview responses from employees and Board members. The emphasis on learning, combined with new skills, began to unleash individual leadership potential in contacts with external constituencies. At the staff and Board level people described new ideas for services and projects; individual leaders began to articulate goals in terms of service to stakeholders.

### **3.5 Co-created Unique Value**

Co-creating unique value moves or reorients firms from a telling or asking posture to one of negotiation directly with end users (Prahalad & Ramaswamy, 2004). This 21<sup>st</sup> century collaboration is anchored in four building blocks. These cornerstones are dialogue, access, risk/benefit, and transparency of information (DART) (p. 9). Although foundational, the four pieces are interactive and fluid from a systemic perspective. In the DART model, co-equal collaboration between consumers and providers define markets as forums instead of targets, and product or service choices are made by informed participants. At an individual level consumers have greater access to product information. At a community level consumers are mobilizing through chat rooms, virtual constituencies, and local groups to create specialized markets. Given the rate of change (Vaill, 1996) and the dynamic nature of this new marketplace, organizations must re-tool to accommodate emergent and ongoing change.

In order to co-create unique value and presence emerging capability (Scharmer, 2000) firms must develop the skill of foresight by increasing time spent looking outward, modeling the future, and engaging customers in shared reflection and visioning (Prahalad & Hamel, 1994). In some industries, the customer may become part of the design and development process, and participate in innovation and prototype testing (Thomke & von Hippel, 2002). Prahalad and Ramaswamy (2000) called for “Velcro®” organizations capable of ongoing reconfiguration to meet market needs; establishing and sustaining this type of organizational flexibility calls for 21<sup>st</sup> century learning and hiring practices (p. 87).

In the case study, employees began spending more time with external customers. Curiosity stimulated by learning techniques enabled the organization to seek external inputs with confidence and to negotiate co-created unique value. For the medical foundation co-created value surfaced in new grant request

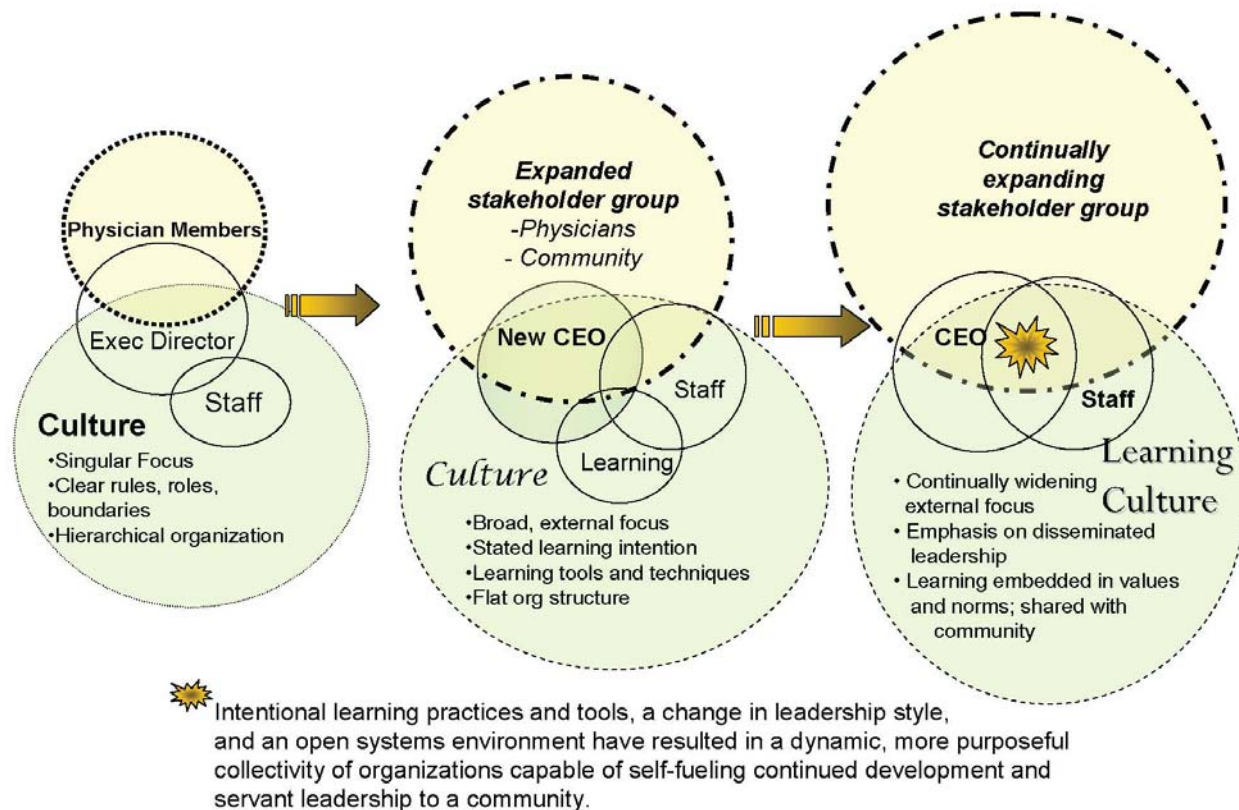


methods and broader funding visions. At the medical association, member physicians provided expertise at a free clinic and in community assemblies. The affiliate for trauma coordination co-created emergency plans with local hospitals and the Department of Homeland Security.

Learning in a generative system leverages reflection on the gaps between the expected and the experience (Gharajedaghi, 2006). Emergent or creative learning recognizes its dependence on the fuel of continual change. When leaders, employees, customers, and other stakeholders are each considered co-creators and leaders, new opportunities to seed generative learning may be revealed and realized in the organization. In order to leverage learning opportunities, both leaders and employees must understand how external factors and systemic interaction influence organizational drivers and decisions, and stand ready to effectively process the fuel of constant change. A self-motivated culture that thrives on change can serve as the crucial catalyst in a system of co-created unique value (Prahalad & Ramaswamy, 2000).

#### 4. CONCEPTUAL FRAMEWORK

This conceptual framework is an out-growth of the case study demonstrating the influences involved in creating a learning culture where generative learning and its component parts thrive.



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**FIGURE 1: CONCEPTUAL FRAMEWORK – CASE STUDY**

#### 5. CONCLUSION

Generative learning is essential to ongoing transformation and development in organizations. The case study demonstrated that generative learning can be seeded with intention, a simple vision, and most importantly, action. With active engagement, tools, and support from the CEO, the organization cultivated

individual leadership and enhanced service to the community (Hallcom, 2007). By co-creating unique value with stakeholders, the organization has leveraged learning to presence innovation and continued development. This organization has the potential to serve as a model for the future demonstrating that generative learning is a holistic, vibrant process that serves as a catalyst for organizational development and cultural change.

## REFERENCES

- Ackoff, R., "A Systematic View of Transformational Leadership", *System Practice and Action Research*, Vol. 11(1), 1998, 23-36.
- Argyris, C. and Schön, D.A., *Organizational Learning II: Theory, Method, and Practice*. Addison-Wesley, Reading, MA, 1996.
- Banutu-Gomez, M.B., "Great Leaders Teach Exemplary Followership and Serve as Servant Leaders", *Journal of American Academy of Business, Cambridge*, 4(1/2), 2004, 143-151.
- Bapuji, H., and Crossan, M., "From Questions to Answers: Reviewing Organizational Learning Research", *Management Learning*, 35(4), 2004, 397-417.
- Bass, B.M., "Two Decades of Research and Development in Transformational Leadership", *European Journal of Work and Organizational Psychology*, 8(1), 1999, 9-32.
- Beer, M., and Eisenstat, R.A., "The Silent Killers of Strategy Implementation and Learning", *Sloan Management Review*, 41(4), 2000, 29-40.
- Blackman, D., and Henderson, S., "Why Learning Organizations Do Not Learn", *The Learning Organization*, 12(1), 2005, 42-56.
- Bolman, L. G., and Deal, T. E., *Reframing Organizations: Artistry, Choice, and Leadership*. Jossey-Bass, San Francisco, 1991.
- Bowerman, J.K., "Leadership Development Through Action Learning: An Executive Monograph", *International Journal of Health Care Quality Assurance*, 16(6), 2003, vi-xiii.
- Briggs, J., and Peat, F.D., *Turbulent Mirror: An illustrated Guide to Chaos Theory and the Science of Wholeness*, Harper & Row, New York, 1990.
- Brooks, A.K., "Transformational Learning Theory and Implications for Human Resource Development", *Advances in Developing Human Resources*, 6(2), 2004, 211-225.
- Brown, S.L., and Eisenhardt, K.M., "The Art of Continuous Change: Linking Complexity Theory and Time-paced Evolution in Relentlessly Shifting Organizations", *Administrative Science Quarterly*, 42(1), 1997, 1-34.
- Brown, J., and Isaacs, D., *The World Café: Shaping Our Futures Through Conversations That Matter*, Berrett-Koehler, San Francisco, 2005.
- Cairo, P., Dotlich, D.L., and Rhinesmith, S.H., "The Unnatural Leader", *Training & Development*, 59(3), 2005, 27-30.
- Cameron, K.S., and Quinn, R.E., *Diagnosing and Changing Organizational Culture: Based on the Competing Values Framework*, Addison-Wesley, Reading, MA, 1999.
- Chawla, S., and Renesch, J. (Eds.), *Learning Organizations: Developing Cultures for Tomorrow's Workplace*, Productivity Press, New York, 1995.
- Conger, J.A., Spreitzer, G.M., & Lawler, E.E., III (Eds.), *The Leader's Change Handbook: An Essential Guide to Setting Direction and Taking Action*, Jossey-Bass, San Francisco, 1999.
- Csikszentmihalyi, M., *Flow: The Psychology of Optimal Experience*, Harper Perennial, New York, 1991.
- DeFillippi, R., and Ornstein, S., "Psychological Perspectives Underlying Theories of Organizational Learning", in M. Easterby-Smith, and M.A. Lyles (Eds.), *The Blackwell Handbook of Organizational Learning and Knowledge Management* (pp. 19-35), Blackwell Publishing, Malden MA, 2005.
- DiBella, A.J., "Organizations as Learning Portfolios", in M. Easterby-Smith, and M.A. Lyles (Eds.), *The Blackwell Handbook of Organizational Learning and Knowledge Management* (pp. 145-160), Blackwell Publishing, Malden, MA, 2005.
- Dilworth, R., "The DNA of the Learning Organization", in S. Chawla, and J. Renesch (Eds.) *Learning Organizations* (pp. 243-255), Productivity Press, New York, 1995.
- Douglas, F., "Platform for Innovation", *Reflections*, 5(6), 2004, 1-12.
- Garvin, D. A., "Building a Learning Organization", *Harvard Business Review*, 71(4), 1993, 78-91.
- Geertz, C., *The Interpretation of Cultures: Selected Essays*, Basic Books, New York, 1973.

- Gharajedaghi, J., Systems Thinking: Managing Chaos and Complexity: A platform for Designing Business Architecture, Elsevier, Oxford, UK, 2006.
- Gharajedaghi, J., and Ackoff, R. L., "Mechanisms, Organisms and Social Systems", Strategic Management Journal, (5), 1984, 289-300.
- Gleick, J., Chaos: Making a New Science, Penguin Books, New York, 1987.
- Goleman, D., "What Makes a Leader?", Harvard Business Review, 76(6), 1998, 93-102.
- Gosling, J., and Mintzberg, H., "The Five Minds of a Manager", Harvard Business Review, 81(11), 2003, 54-63.
- Greenleaf, R.K., Servant Leadership, Paulist Press, Mahwah, NJ, 1991.
- Hallcom, A. S. (2007), Exploring Intentional Learning Practices in Mature Organizations: A Phenomenological Case Study, unpublished doctoral dissertation, Capella University, Minneapolis, Minnesota.
- Hambrick, D.C., "Environment, Strategy, and Power Within Top Management Teams", Administrative Science Quarterly, 26(2), 1981, 253-276.
- Hambrick, D.C., Geletkancycz, M.A., and Fredrickson, J.W., "Top Executive Commitment to the Status Quo: Some Tests of Its Determinants", Strategic Management Journal, 14(6), 1993, 401-418.
- Hayes, J., and Allinson, C.W., "Cognitive Style and the Theory and Practice of Individual and Collective Learning", Human Relations, 51(7), 1998, 847-871.
- Hendry, C., "Understanding and Creating Whole Organizational Change Through Learning Theory", Human Relations, 49(5), 1996, 621-641.
- Heifetz, R.A., and Laurie, D. L., "The Work of Leadership", Harvard Business Review, 79(11), 2001, 131-141.
- Hendry, C., "Understanding and Creating Whole Organizational Change Through Learning Theory", Human Relations, 49(5), 1996, 621-641.
- Higgins, J.M., and McAllaster, C., "If You Want Strategic Change, Don't Forget to Change Your Cultural Artifacts", Journal of Change Management, 4(1), 2004, 63-73.
- Horne, J. F., III, and Orr, J.E., "Assessing Behaviors That Create Resilient Organizations", Employment Relations Today, 24(4), 1998, 29-39.
- Jaskyte, K., "Transformational Leadership, Organizational Culture, and Innovativeness in Nonprofit Organizations", Nonprofit Management and Leadership, 15(2), 2004, 153-168.
- Jensen, P.E., "A Contextual Theory of Learning and the Learning Organization", Knowledge and Process Management, 12(1), 2005, 53-64.
- Kahane, A., Solving Tough Problems: An Open Way of Talking, Listening, and Creating New Realities, Berrett-Koehler, San Francisco, 2004.
- Kline, P., and Saunders, B., Ten Steps to a Learning Organization, (2<sup>nd</sup> ed.), Great River Books, Salt Lake City, UT, 1998.
- Kofman, F., and Senge, P., "Communities of Commitment", in S. Chawla and J. Renesch, (Eds.) Learning Organizations: Developing Cultures for Tomorrow's Workplace, Productivity Press, New York, 1995.
- Kolb, D.A., "Management and the Learning Process", California Management Review, 18(3), 1976, 21-31.
- Kotter, J.P., Leading Change, Harvard Business School Press, Boston, 1996.
- Kouzes, J.M., and Posner, B.Z., The Leadership Challenge (3<sup>rd</sup> ed.), Jossey-Bass, San Francisco, 2002.
- Kuhn, T., The Structure of Scientific Revolutions (3<sup>rd</sup> ed.), The University of Chicago, 1996.
- Lapp, J. E., "New Models of Leadership", Executive Excellence, 16(6), 1999, 20.
- Letiche, H., and Statler, M., "Evoking Metis: Questioning the Logics of Change, Responsiveness, Meaning and Action in Organizations", Culture and Organization, 11(1), 2005, 1-16.
- Lewin, K., Resolving Social Conflicts: Field Theory in Social Science, American Psychological Association, Washington, DC, 1997.
- Lubit, R., "Tacit Knowledge and Knowledge Management: The Keys to Sustainable Competitive Advantage", Organizational Dynamics, 29(4), 2001, 164-178.
- Lumpkin, G.T., and Lichtenstein, B.B., "The Role of Organizational Learning in the Opportunity Recognition Process", Entrepreneurship: Theory and Practice, 29(4), 2005, 451-472.
- March, J.G., "Exploration and Exploitation in Organizational Learning", Organization Science, 2(1), 1991, 71-87.

- Marquardt, M.J., Building the Learning Organization: Mastering the 5 Elements for Corporate Learning, (2<sup>nd</sup> ed.). Davies-Black, Palo Alto, CA, 2002.
- Mintzberg, H., "A New Look at the Chief Executive's Job", Organizational Dynamics, 1(3), 1973, 20-30.
- Nicolini, D., and Mezner, M.B., "The Social Construction of Organizational Learning: Conceptual and Practical Issues in the Field", Human Relations, (48)7, 1995, 727-746.
- Nystrom, P.C., and Starbuck, W.H., "To Avoid Organizational Crises, Unlearn", Organizational Dynamics, 12(4), 1984, 53-65.
- O'Toole, J., "The True Measure of a CEO: Aristotle Has Something to Say About That", Across the Board, 2005, September/October.
- Plaskoff, J., "Creating a Community Culture at Eli Lilly", KM Review, 5(6), 2003, 16-19.
- Prahalad, C.K., and Ramaswamy, V., "Co-creation Experiences: The Next Practice in Value Creation", Journal of Interactive Marketing, 18(3), 2004, 5-14.
- Pulley, M.L., "Leading Resilient Organizations", Leadership in Action, 17(4), 1997, 1-5.
- Quinn, R.E., Deep Change: Discovering the Leader Within. Jossey-Bass, San Francisco, 1996.
- Raelin, J.A., Creating Leaderful Organizations: How to Bring Out the Leadership in Everyone, Berrett-Koehler, San Francisco, 2003.
- Ray, M., The Highest Goal: The Secret That Sustains You in Every Moment, Berrett-Koehler, San Francisco, 2004.
- Russell, R.F., and Stone, A.G., "A Review of Servant Leadership Attributes: Developing a Practical Model", Leadership and Organization Development Journal, 23(3/4), 2002, 145-158.
- Scharmer, C. O., "Presencing: Learning from the Future as It Emerges", presented at the Conference on Knowledge and Innovation. Helsinki School of Economics, Helsinki, Finland, May, 2000.
- Scharmer, C.O., "Self-transcending Knowledge: Sensing and Organizing Around Emerging Opportunities", Journal of Knowledge Management, 5(2), 2001, 137-150.
- Schein, E.H., Organizational Culture and Leadership (3<sup>rd</sup> ed.), Jossey-Bass, San Francisco, 2004.
- Schneider, W.E., Brief, A.P., and Guzzo, R.A., "Creating a Climate and Culture for Sustainable Organizational Change", Organizational Dynamics, 24(4), 1996, 6-18.
- Scott, W.R., Organizations: Rational, Natural and Open Systems (5<sup>th</sup> ed.), Prentice-Hall, Upper Saddle River, NJ, 2003.
- Senge, P.M., The Fifth Discipline: The Art and Practice of the Learning Organization, Doubleday, New York, 1990.
- Senge, P., Scharmer, C.O., Jaworski, J., and Flowers, B.S., Presence: An Exploration of Profound Change in People, Organizations, and Society, Currency-Doubleday, New York, 2005.
- Shrivastava, P., "A Typology of Organizational Learning Systems", Journal of Management Studies, 20(1), 1983, 7-28.
- Snyder, C. R., The Psychology of Hope: You Can Get There from Here, The Free Press, New York, 1994, December.
- Sugarman, B., "Twenty Years of Organizational Learning and Ethics at Hanover Insurance: Interviews with Bill O'Brien", Reflections, 3(1), 2001, 7-17.
- Taylor, W.C., "The Leader of the Future", in G.M. Spreitzer & K.H. Pertulla (Eds.), Fast Company Reader Series: Leadership, (pp. 162-168), Wiley, Hoboken, NJ, 2004.
- Vaill, P., Learning As a Way of Being: Strategies for Survival in a World of Permanent White Water, Jossey-Bass, San Francisco, 1996.
- Von Krogh, G., Ichijo, K., and Nonaka, I., Enabling Knowledge Creation, Oxford University Press, New York, 2000.
- Wheatley, M.J., Leadership and the New Science: Learning About Organization from an Orderly Universe, Berrett-Koehler, San Francisco, 1994.
- Wheatley, M.J., Finding Our Way: Leadership for an Uncertain Time, Berrett-Koehler, San Francisco, 2005.
- Yeo, R., "Learning Within Organizations: Linking the Theoretical and Empirical Perspectives", Journal of Workplace Learning, 14(3), 2002, 109-122.

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## **WILLIAM GATES AND MICROSOFT: SYNTHESIZING 21<sup>ST</sup> CENTURY GLOBAL LEADERSHIP APPROACH**

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### **ABSTRACT**

*William Gates, current Chief Executive Officer (CEO) of Microsoft is studied using a cross-cultural lens to extract lessons on global leaders' attributes that may be useful in facing challenges in the early 21<sup>st</sup> century context. By performing a synthesis of the whole based on an extensive literature review, the unique attributes of Gates' in the global context are defined and developed demonstrating his major contributions in global leadership. Further the global profile of Gates' competencies and skills leads to recommendations to become a more effective entrepreneurial global leader. The conclusions consider individual leaders as systems themselves, highlighting that global leader's regularly work in a systemic fashion.*

**Keywords:** Synthesis, Global Leadership, Global Systems Context,

### **1. PURPOSE**

The purpose of this paper is to analyze Bill Gates as a global leader by extracting and synthesizing lessons from his behavior and ways of thinking. In order to perform this analysis, the analysis starts describing and analyzing the unique attributes of global executive context. Then, a profile of a global executive within the cross-cultural context is developed. From these two parts, general global executive competences and skills are identified in order to face the 21<sup>st</sup> century challenges. Having developed this framework, specific competency and skill-building exploration for the leader under study are developed. Finally, recommendations to become an even more effective entrepreneurial leader are offered according to 21<sup>st</sup> century global executive leadership requirements.

### **2. UNIQUE ATTRIBUTES OF GLOBAL EXECUTIVE OR MANAGER CONTEXT**

Defining the context is a crucial part in order to understand any phenomenon in terms of systems perspective. Gharajedaghi (1999) stated, "Neither problems nor solutions can be entertained free of context" (p. 116). Later, he added, "purposeful behavior defines the context" (p.116). Therefore, the context in this paper is formulated in such a way that it depicts the society in which Microsoft emerged and at the same time, describes that society in terms of Microsoft and William Gates' purposes and vice versa.

#### **2.1 William Gates and Microsoft**

William Gates has been recognized as one of the most influential leaders of the late 20<sup>th</sup> century, and the first part of the 21<sup>st</sup> century (Wallace, 1993). Gates currently is the Chief Executive Officer of Microsoft Corporation. In addition, he is considered the richest man of the world, and one of the leaders that have shaped the world as it is today.

Microsoft is currently the largest software corporation in the world and one of the largest companies in absolute terms. According to its own web page, "Microsoft had revenues of US\$39.79 billion for the fiscal year ending June 2005, and employs more than 61,000 people in 102 countries and regions" (Microsoft, 2006). Microsoft produces and sells software for a broad range of applications such as word processors, spreadsheets, database managers, development tools, and other software for portable and personal computers. The company started its operations as a kind of a friends club, with all of these friends being deeply interested in computers (Wallace, 1993). William Gates, a 19 year-old student at Harvard University, quickly took the control of the company because of his bargaining abilities, strategic thinking and workaholic life-style.

## **2.2 The Beginning**

Bill Gates was born in 1955. He grew up in a sociocultural environment characterized by a relatively comfortable economic situation. Early in his youth, his family upbringing gave him a strong competitive spirit and this spirit marked his attitudes toward life from then on.

Gates became a teenager during the late sixties and the early seventies. Those were years of deep social and technological changes in the United States and the world. One of those technological changes was the development of computers. This change attracted Bill Gates' attention. The private Lakeside School, which Gates attended, bought a mainframe computer. Gates began programming computers at age 13 (Microsoft, 2006).

In 1974, the first microprocessor appeared (Anders, 2005). The apparition of the microprocessor immediately caught Gates' attention. Gates anticipated that the contemporary society will be based on information exchanges rather than on the trade of tangible goods, and that without proper software the microprocessor would be useless. The society of those years needed a way for managing information in personal terms. Being aware of this need, Gates was "guided by a belief that the computer would be a valuable tool on every office desktop and in every home" (Microsoft, 2006). At that moment, in 1975, Gates founded Microsoft with Paul Allen, a Gates' friend.

### *An Economic and Cultural Contextual Change*

For the period of 1975 until 1980, the United States was involved in a set of social and political events. The cold war was in its peak. Racial protests in the United States and its defeat in Vietnam caused a loss of purpose of the American society (Kalmus, 2006, p. 4). An intense economic crisis and high inflation rates appeared during the Carter's administration, forcing companies to look for new markets, whether in their own countries but in different segments, or in foreign countries. In this context, International Business Machines (IBM) pursued the first strategy: the development of the first personal computer (PC). Knowing that IBM would develop a PC, Gates had a revolutionary idea. Microsoft's people would write the operative system for these IBM computers while Microsoft would hold the copyright of the noted operative system. This action gave Gates the monopoly of the operative systems for the PCs when these computers, as Gates predicted, appeared in 1980. This event catapulted Gates as one of the most successful executives during those years.

In the mid 1980's Apple computer was also in the market with its own operative system. Nevertheless, the inability of Apple's leaders to understand what people really wanted, and the fact that the computer industry was going toward one standard in terms of operative systems, put Apple out of the market. The same thing happened to IBM, whose leaders' inability to understand that people wanted simplicity instead of sophistication in those years left IBM out of the PC market. Taking advantage of these contenders' pitfalls, Microsoft offered Windows 3.1 and later with Windows 95, being the latest the standard for operative systems in the mid and late 1990s. It was at this moment that Microsoft and Gates became what they are today. Gates was trying to build what is called, metaphorically, the flat world (Friedman, 2005).

## **3. BECOMING A GLOBAL CORPORATION**

During 1991, the USSR collapsed and the world became more liberal in terms of trading and sharing information. The United States emerged as the unique superpower of the world. Old political barriers disappeared. More and more countries appeared in the economic world. The need for more effective and efficient communications was an imperative necessity. The Internet appeared and immediately Microsoft offered Internet Explorer, an internet navigator, which has become the standard in its class. The apparition of Internet and the increasing ease for accessing it changed the relationship of power-authority in the society, making the access to educational and informational resources very inexpensive. This was the beginning of what has been called the information era (Kalmus, 2005, p. 1).



### **3.1 The Origins of Microsoft Dominance of the Software Market**

In the noted context and throughout the years, Microsoft has become one of the largest corporations of the world. Products offered by Microsoft are essential computer programs that allow personal computers being extremely productive for users. These products may be classified into three groups. The first group is comprised of computer programs that increase people's productivity in the office. These programs are spreadsheets (Excel), word processors (Word), database managers (Access) and presentation managers (Power Point). The key element that has made these programs extremely successful is that all of them are integrated. Thus, users of these computer programs can share the same information, and exchange information without using complicated processes in order to build documents comprised by words, numbers and graphics (Anders, 2005).

Those computer programs that allow computers to work comprise the second group. These programs are called operative systems. In the beginning, Microsoft developed the unique operative system for personal computers; the disk operating system (DOS). Later, searching for user friendliness, and due to the apparition of new technologies, Microsoft adopted a technology from Xerox by which users do not need to learn complicated programming codes, but instead, users work by using a graphic interface. This operative system was called Windows, and it is still the most used operative system in the world. A key aspect with respect to this group of computer programs consists in that they control how computers work. Gates understood that the company which would control which operative system would be used would control the software market. And this is exactly as it happened. In this sense, all software developers were forced to develop their computer programs in such a way that these programs were compatible with Microsoft's operative systems. Gates took advantage of this fact and through Microsoft, started to offer development tools and software for office tasks for DOS and Windows. This way, Gates achieved the control of the software market. It is expected that his control will last at least "ten years more" (FastCompany, 1999, p. 200).

Communication computer programs constitute the third group of software produced by Microsoft. Internet Explorer and Office Outlook represent part of these programs. The first program allows computer users to access and navigate through the Internet. The second program allows users to integrate their communications, via electronic mail, into other office applications such as the noted Word and Excel. Other competitors such as Netscape have also developed these kinds of computer programs, but their software had to be compatible with Windows. As most users want that their computers ready for operating from the moment they buy them, manufacturers who place these programs into computers beforehand will have the users' preference. As Windows has always come in computers since 1990, it was the only available operative system that fulfilled customers' requirements. Microsoft gained the monopoly of the operative systems market (Ransdell, 1998). Nowadays, Microsoft and Gates control 96% of the software market for personal computers (Ransdell). Gates anticipated that the company that controls the operative system and connectivity software will control the noted market, which was once again found to be true (Rubin, 2002).

Microsoft's dominance of the personal computers software market is one of the reasons that explain why Microsoft has become a global corporation. As personal computers and its technology quickly disseminated around the world, the world demonstrated the capacity of these machines for boosting people's productivity. In practically every office around the world, there is a personal computer and consequently, Microsoft is found within.

The noted facts are crucial for understanding why Bill Gates has become a global leader. Microsoft's products are present around the world. These products, even though customized to different languages, use the same concepts. Users of these computer programs thus share similar ideas when working with computers. All computer users around the world share the same particular language used for managing Microsoft's computers programs. Similarly, this common language has oriented and shaped how people think about how their tasks must be performed. The noted computer programs were developed in the context of the American culture. In this way, elements of the American culture and way of thinking, embedded in the logic by which these programs were developed, have permeated into different cultures around the world (FastCompany, 1999). This is one reason that explains why Gates may be considered a



global leader, given his influence on all people's way of thinking. Another reason consists in that Microsoft and Gates are always introducing changes that affect the way by which things are done.

#### 4. THE CURRENT DAYS IN CONTEXTUAL TERMS: THE GLOBAL CONTEXT

Since the late 1980's the world has become a global world. Drucker (1994) wrote in this sense:

No century in recorded history has experienced so many transformations and such radical ones as the twentieth century. In the developed free-market countries, which contain less than a fifth of the earth's population but are the model for the rest, work and work force, society and polity, are all, in the last decade of this century qualitatively and quantitatively different not only from what they were in the first years of this century, but also from what existed at any other time of the history: in their configurations, in their processes, in their problems and in their structures (p. 53).

According to Conrad and Scott (1998), some of the most important changes that Drucker (1994) alluded to are a) the transformation to a knowledge society, b) knowledge work, and c) increased instability, complexity, and turbulence of organizational environments. These are the characteristics of the global world in the first years of the 21<sup>st</sup> century. The phenomenon by which the world and societies have transformed into a global world is called *globalization* (Conrad and Scott, p. 164). The word globalization implies a large set of complex phenomena that scholars are still trying to understand and practitioners are trying to manage.

Gates and Microsoft were not only part of a changing context, but they have changed the context by their influence. Gates and Microsoft have influenced the global context in such a way that currently, it would be hard to imagine the world without personal computers and programs such as Microsoft Word, Excel, Windows, and other computer programs. Moreover, many people's way of thinking and communicating has been influenced by Microsoft and Gates achievements (Wallace, 1993). From a systems thinking perspective, Microsoft and Gates illustrates appropriately the following idea posed by Gharajedaghi (1999),

"Effective integration of multilevel purposeful systems requires that the fulfillment of a purposeful part desires depend on fulfillment of the larger system's requirements and vice versa. In this context, the purpose of an organization is to serve the purposes of its members while also serving the purposes of its environment" (p.12).

#### 5. THE SOCIOCULTURAL CONTEXT

Sociocultural context has a strong influence on how leaders and companies are successful or are not. Furthermore, the definition of what success means depends on the sociocultural context. A model will be necessary in order to depict the sociocultural context in which Microsoft and Gates emerged. Hamden-Turner and Trompenaars (1997), and Trompenaars and Hampden-Turner (1998) proposed a model that has evolved from Hofstede's ideas (Hofstede, 1980; Hofstede, Neuijen, Ohayv, & Sanders, 1990; Hofstede, 2001). Even though Hofstede's works were and still are, a landmark in the field of national culture and cross-cultural studies, there are some criticisms to his work (see McSweeney, 2002), that make preferable the use of the Trompenaars and Hampden-Turner (1998) model. Moreover, the application of Hofstede's national typology of values is not designed to be applied to individuals, but rather on a country level (McSweeney).

Table 1 shows the sociocultural context in which Microsoft emerged (Capella University, 2005) according to Hofstede's criteria. As shown in table 1, the culture in which Gates and Microsoft emerged shows a small power distance and weak uncertainty avoidance level; factors that promote risky entrepreneurship. In contrast, the findings of Trompenaars and Hampden-Turner are summarized in five dimensions: the individualism versus collectivism dimension, the universalism vs. particularism dimension, the neutral vs. emotional and the specific vs. the diffuse dimension (Hampden-Turner & Trompenaars, 1997). The individualism versus collectivism dimension refers to whether the people in the culture see themselves as individuals or as a part of a group. Adler (1997, as cited by McPhail, 2004) noted that "Americans, who

are highly individualistic, perceive individuals as heroes and he provides examples such as Bill Gates" (p. 31). This dimension of culture is thus relevant to different perceptions of success and achievement between cultures.

**TABLE 1. APPLICATION OF THE HOFSTEDE CONCEPT**

Country	Power Distance	Individualism and Collectivism	Assertiveness vs. Modesty	Uncertainty Avoidance	Long-term and Short-term Orientation
United States	Small	High	Weak	Weak	Short term

Other dimensions are described in Trompenaars and Hampden-Turner (1998) work. According to McPhail (2004), Trompenaars and Hampden-Turner's results indicate that "while Australia and the US, along with Singapore, China and Hong Kong, adopted an emotional approach" (p. 38). Trompenaars and Hampden-Turner also found that Australia and the US preferred diffuse relationships and favored achievement (p. 12).

McPhail (2004) noted, "Cultural attitude to time differs" (p. 39). Some cultures, "place a lot of value on the past, while others, such as the American culture, place importance on what is currently under way and what is planned for the future" (Trompenaars and Hampden-Turner, 1998, p8). McPhail insisted, "This dimension may affect strategic planning and recognition programs" (p. 39). Australia and the US were highly futuristic in their planning according to Trompenaars and Hampden-Turner results, claimed McPhail (p. 40).

In summary, by using the Trompenaars and Hampden-Turner (1997) model, it is possible to conclude that Microsoft emerged in a sociocultural context in which individualism, affection by achievements, short-term orientation, orientation to the future, diffuse relationship orientation are all key features of the noted sociocultural context. These features affected Gates' behavior and way of thinking. On one hand, Gates and Allen' initiative in order to initiate Microsoft has been classified as a "typical American initiative" (Anders, 2005). Second, by using Trompenaars and Hampden-Turner's perspective the foundation of Microsoft may be seen as the individualistic effort of two young people that were searching for a dream. If they were failed, that fact had been their responsibility solely. Rather than searching for money, Gates and Allen's efforts can be seen from the noted sociocultural perspective as proof of self-proud and ability. Finally, by using Hofstede's (1980) perspective, short-term orientation and low uncertainty avoidance levels of the American culture promotes this kind of entrepreneurial activity, such as founding one's own company. It can be concluded that all these elements constitute part of what has been called the American dream. Opportunities for emerging in such a society depend more on self-abilities and capabilities rather than on the support of other people (Conrad & Poole, 1998). Even though it is clear that the efforts of many people are necessary for developing a company such as Microsoft in terms of the depicted sociocultural context, these efforts should be interpreted not in terms of a strong friendship, but rather in terms of collaboration and sharing common goals, as noted by Wallace (1993).

## **6. PROFILE OF GLOBAL EXECUTIVE WITHIN THE CROSS CULTURAL CONTEXT**

### **6.1 Developing and Understanding Gates' Profile**

Taxonomies must be developed prior to stating the profile of any leader. Nevertheless, different taxonomies can be developed from different perspectives because there is no universal agreement among scholars in this sense (Zaccaro, 2004). Thus, in this section two taxonomies have been developed in order to create an instrument by which Gates' profile can be developed holistically.

The first taxonomy was synthesized from Bennis (1984) and Kets de Vries, Vriणाud and Florent-Treacey's (2002) works. From these sources eleven dimensions were extracted. The result of this synthesis is shown on Appendix A.

From the dimensions noted on Appendix A, it can be concluded that a global manager will have and must have all of them to a certain degree, because each dimension comprises part of the others (Bennis, 1984). Depending on the strength of each of the noted dimensions, the following taxonomy can be developed. There are many possible combinations. One possible taxonomy that emerges through combining the noted dimensions is the following: a) the visionary, b) the negotiator, c) the global architect, and d) the spokesperson. These classes emerge by giving more or less weight to one of the noted dimensions, leaving the remaining as supportive dimensions. Bill Gates in particular, has been characterized as a visionary, workaholic, highly tenacious, analytical and persuasive leader (Banks, 2001). In addition, his professional expertise as a computer programmer and cognitive abilities has been also broadly recognized (Wallace, 1993). Finally, Gates also has shown a high degree of enthusiasm for projects he has developed, global mindset, and architectural and organizational abilities (Wallace, 1997). Matching these qualities with the taxonomy proposed on Appendix A, Bill Gates would be classified as a visionary global leader because he rates high in the long-term vision, resilience to stress and tenacity, enthusiastic, dynamic, empowerment, and in the team building dimensions (Wallace, 1993, 1997; Lowe, 1998). On the other hand, according to Lowe, Gates' has shown weaknesses in the balance between personal and work duties dimension, which is typical for this class of leaders. This lack of balance could direct the leader to an unbalanced lifestyle that, in the long-term could turn success into failure (Spreitzer, McCall & Mahoney, 1999). Gates has also been recognized for his lack of social abilities (Lowe). One reason that explains this lack of social abilities comes from Gates' childhood. Turbulent relationships between Gates' parents developed a defensive personality (Lowe). Social abilities have become increasingly important since the world has become more and more global (Goleman, 2004; Gosling & Mintzberg, 2003). In this aspect and in terms of the cultural dimension with respect to multilingual skills Gates' profile does not fit with what it is expected from a global leader. According to this taxonomy, global leaders should be able to manage some different languages. Nevertheless, in the context where Gates emerged as global leader, multi-language abilities did not have as strong a weight as these abilities have nowadays; simply because in those days the world was not globalized.

These last findings do not imply that Bill Gates is not a global leader. These findings imply that Gates developed his other abilities in such a way that he is capable of managing this deficiency, but only partially. Lack of the noted abilities has been the source of several criticisms against Gates, such as the idea that Gates was and is trying to develop a monopolistic control of information flows around the world (Lowe, 1998). On the other hand, Gates has been recognized as a person able to identify common things in all cultures and countries, but at the same time recognize differences among cultures (Lowe). Gates (1996) stressed that his main abilities and skills are systems thinking, empowering people, enthusiasm, resilience to stress and particularly global mindset (Wallace, 1993). Most of these abilities were developed during his teenage years. In those years these were the required abilities in order to exert the leadership Gates has exerted over time. All these elements concur with the idea that Gates is a transformational rather than transactional leader, which is the type of leadership required in the global age (Spreitzer, McCall & Mahoney, 1999). However, a transformational leader bases his or her leadership on charisma (Bass, 1986). Particularly, Gates is not a charismatic leader in the usual sense of the word charisma (Wallace). Consequently, the noted qualities that do not fit on the typical global leader's profile may imply that either Gates is not a true global leader, or that he is a global leader for a world that currently does not exist.

Following this last line of thought it is possible to explain why Gates has been a successful leader who has built a large company and has influenced many people during the last 30 years, but has not achieved a particular relevant achievement since the 21<sup>st</sup> century began. According to previous sections, Gates developed his company before global changes started to appear markedly. Gates promoted and influenced some of the changes and characteristics of the current global world. Subsequently, the noted Gates' strengths were enough to allow him to develop his company and influence the world of the late 1970's, 1980s and even the first decade of the 21<sup>st</sup> century. Nevertheless, social capabilities, emotional intelligence and multi-language skills are now required at the same degree of the other Gates' strengths just mentioned (Goleman, 2004). This rationale leads to the fact that Gates needs to change and reinforce his weak abilities in order to keep his leadership. On the contrary, it can be stated that Gates was and still is a global leader of the last part of the 20th century and the first part of the 21<sup>st</sup> century, but he will not be able to sustain his leadership in the long-term. This partial conclusion can be supported by

Gregersen, Morrison, and Black (1998) and Goleman's ideas, in the sense that life balance, emotion management and multilingual skills are extremely important abilities in the global arena.

### **6.2 Zaccaro and Gordon's Taxonomies**

The second taxonomy emerged by synthesizing the works of Zaccaro (2001), Walker (2004) and Gordon (1974 as cited in Gharajedaghi, 1999, p. 42). Zaccaro developed five categories and sixteen attributes in his taxonomy. The complete Zaccaro's taxonomy is shown on appendix B. In Zaccaro's taxonomy the five characteristics are professional expertise, cognitive capacities, social capacities, change capacities and internalized ethos. From the mix of these attributes, four leader classes emerge. These are global leadership, local leadership, incipient local leadership and skilled worker and local leader. The characteristics of these classes are shown on Appendix C.

Gordon (1974, as cited by Gharajedaghi, 1999, pp. 42-43) proposed a two dimensional taxonomy. The first dimension consists in the ability to find similarities among objects that seem to be different, while the second dimension consists in the ability to find differences among objects to be similar. Gordon assigned two possible values to each dimension: high and low. People who present a low-low profile are classified as imitators. People who present a low-high profile are classified as problem solvers. People who present a high-low profile are classified as problem formulators. Finally, people who present a high-high profile are classified as innovators.

### **6.3 Synthesis of Zaccaro and Gordon's Taxonomies**

By synthesizing these two previous works, a three dimensional taxonomy can be developed. The two dimensions proposed by Gordon remain but a third dimension, social and cultural skills, has been added. Therefore, nine types of leaders emerge from this synthesis. The relevant classification in this case would lead to classify Bill Gates as (high, high, and high) in the three noted dimensions. Nevertheless, as it has been pointed out, Gates (1996) has recognized his visionary, high resilience, tenacity, bargaining and global mindset abilities on one hand (Lowe, 1998). On the other hand, he recognized this lack of multilingual abilities. This fact implies that Gates does not fit exactly in the last taxonomy.

One possible explanation to this fact is that the theories the noted taxonomy is based on do not address the possibility that multilingual skills are determinant for people who do not command English, because English has become the international language. This rationale has support in some literature of the 1970's (Frances, 1978). Nevertheless, 30 years is a large span of time that makes this rationale rather unlikely. Another possibility consists in that Gates is not really a global leader for the upcoming years of the 21<sup>st</sup> century, although he was and still is a classical global leader of the late 20<sup>th</sup> century and the first ten years of the 21<sup>st</sup> century. This was the conclusion reached previously in this section. Consequently, by using two taxonomies that in fact constitute two different approaches, it can be concluded that Gates is not really a global leader for the upcoming years of the 21<sup>st</sup> century, at least in the same terms he has been known during the last 30 years.

There are some signals that point out to the idea that Gates is changing his behavior, trying to develop social and multilingual skills. Kawasaki (2006) considered that Gates' decision of quitting from Microsoft is the supreme exercise of leadership, because by leaving Microsoft Gates he recognizes that his age has over. On the other hand, Gates might be leaving Microsoft in order to spend his time with his wife in a foundation by which Gates will invest his resources promoting people's education. Consequently, this act can be seen as an attempt to develop his social activities, for increasing the time he spends with his family, and as an activity by which he could emerge later as a stronger and revamped leader. Even though the reviewed literature does not offer academic support to this last idea, examples of leaders that have recognized their weaknesses, managed them and later emerged yet again are illustrated in the history. For instance, Winston Churchill, after recognizing that he had lost the social abilities to know what his people was thinking and needed during the end of World War II, reinforced his social and emotional abilities and won the office of Prime Minister for a second term. (Churchill, 1958). In fact, Gates is not really quitting Microsoft. Gates will become the Chief Executive Architect, a new position by which he will continue exerting his leadership from a mentoring perspective (Barlett & Mahmood, 2006).

In conclusion, the developed taxonomies show that Bill Gates is still a global leader, extremely visionary and innovative, with a high degree of bargain skills and team-building skills. His tenacity, workaholic personality, and global mindset permit it to be said that he is the prototypical visionary global leader of the late 20<sup>th</sup> century and the first ten years of the 21<sup>st</sup> century. However, the analysis of Gates' profile shows that Gates' weaknesses in some required skills for facing the upcoming years of the 21st century may point out the possibility that Gates' era is coming to its end, unless Gates improve these weaknesses.

## **7. ANALYSIS OF GLOBAL LEADER'S COMPETENCIES AND SKILLS WITHIN THE CROSS-CULTURAL CONTEXT**

In this section Bill Gates' competencies and skills are analyzed in the cross-cultural context. The structure of this section is as follows: a) a list and description of skills and competencies of the noted global leader is developed, b) how these skills and competencies are related to his success, c) an explanation concerning how Gates has proven himself to be equal to the global challenge is shown, d) specific examples of successes and failures from which he has learned important lessons for conducting business in the global context are depicted, and e) an analysis concerning how lessons from the noted successes and failures have been incorporated into Microsoft and Gates' knowledge in order to improve their ability for facing challenges presented during the last years of the 20<sup>th</sup> century and the first years of the 21<sup>st</sup> century is developed.

### **7.1 List of Competences and Skills**

In the previous sections, a specific taxonomy was developed in order to classify Bill Gates as a global leader. It is worth recalling that Gates was classified as a visionary leader, extremely innovative, with a high degree of bargaining and team-building skills, resilience to stress, a high degree of tenacity, workaholic personality, and with a global mindset. According to Lohse (as cited by Weinstein, 2001) "one of Gates's biggest strengths is his ability to invent the future" (p.4). Lohse went beyond this affirmation insisting that "Gates is a visionary who looked at the facts today and says, out of these possibilities, what can come true tomorrow? Once he did that, he knew how to commit himself and his company to making it happen" (p.1). This ability is what Scharmer, (2000) called presencing. It is also important to note that Gates started his career as a computer programmer; an activity that allowed him to develop a systems thinking approach, and enough knowledge to understand the computer business (Gates, 1996). Besides Paul Allen, Gates learned how to develop software and computer programs by himself. This fact shows that Gates has always shown interest in learning new things. Consequently, motivation to learn is also a positive skill that Gates has. In addition, Gates has the ability to choose the right people for his company; and once people have been hired, they enjoy a large degree of independence (Wallace, 1997). This is part of Gates' firm conviction about empowering people.

One of Gates' abilities which positively influence his performance as a global leader is his open mindset (Banks, 2001). Many Microsoft's products have not been Gates' or even Microsoft's own creations. Rather, most Microsoft products have been products developed by third-party people, who have not been able to see the large reach and impact that their products could have in the market. Finally, Gates' flexibility and respect for others have also been largely acknowledged (Banks). Regarding flexibility, Gates has not only adapted Microsoft to the global environment, but he adapted the world to Microsoft (Banks). The formulation of such a strategy requires a large degree of mind flexibility. On the other hand, concerning the respect for others' abilities, the following anecdote is relevant for illustrating this ability:

When a person who was and still is hired in Microsoft made a mistake that cost Microsoft almost five million dollars Gates was told about his mistake, Gates simply answered, "We all make mistakes. We must learn from them. Consider your mistake as one of the most valuable source of learning. Obviously, you do not should make the same mistake twice" (Banks p. 42).

Nevertheless, Gates shows weak communication abilities, at least in public presentations, even though he has improved the noted ability over time (Reynolds, 2005). Gates has partially fixed this weakness by using other people's ability in this sense, building communicational groups that have helped him in his communication duties.

In summary, Gates possesses the following abilities in high degree: a) motivation to learn, b) flexibility, c) open-mindedness, d) respect for others, e) sensitivity, f) systems thinking, g) tenacity, h) resilience to stress, i) empowering and team building abilities, j) a peculiar charisma (Wallace, 1993), and k) the presencing ability, the ability to see and learn from the future today.

## **7.2 Relationships between Depicted Skills and Competences and Gates' Success as Global Leader**

The abilities depicted in the previous section have enabled Gates to be one of the most successful global leaders of the last part of the 20<sup>th</sup> century and the first years of the 21<sup>st</sup> century. Particularly, presencing, learning from the future today and his tenacity are two of the skills that have contributed the most to his success. Furthermore, Gates was never interested in money. Rather, he was interested in playing the game of competing worldwide (Gates, 1996). According to Streitfeld (2000), Gates was obsessed by work and so were his employees. He would do anything to beat a competitor, and they [his employees] would too. Employees feared, but mostly revered him.

The abilities depicted in the previous section have allowed Gates to replicate himself in a large scale, reflecting throughout Microsoft his own strengths and abilities. Andreessen (1999, as cited by Streitfeld, 2000) stated in this sense, "these companies are like organisms. It's as if you took a DNA sample from the chief executive and blew it up to monstrous size. The founder and the company share all the same strengths and weaknesses" (p. 2).

Gates also shows a peculiar charisma. In previous sections was stated that Gates does not possess charisma in the normal sense of the word. Rather, his charisma has been related to what has been called by some authors as the "nerd's charisma" (Lowe, 1998, p. 42). Apparently innocent, fragile, weak, his personality was attractive and endearing to many people; at least during the first Microsoft years. This form of charisma has allowed him to incorporate into Microsoft, people from all the cultures, people who are willing to take risks, and willing to offer their souls to Microsoft (Lowe). As noted by Jain (1999, as cited in Streitfeld, 2000),

A high-tech executive must have the charisma of a cult leader. Especially in the beginning, when you're starting a company, you have nothing to offer other than yourself, your vision and passion. People in high tech can get 20 job offers in a day. Why would they stay with you unless they believe in you absolutely? (p.3).

Consequently, Gates' visionary leadership style and peculiar charisma have allowed him to anticipate challenges presented by the industry and globalization in a proactive way.

## **7.3 How Gates Has Proven Himself to be Equal to the Global Challenge**

When Gates started Microsoft with Paul Allen and a bunch of young people in 1975, he established a clear goal: "One computer on every desktop" (Lowe, 1998, p. 12). Gates recognized that this goal was largely accomplished (Gates, 1996). However, his achievement has been going beyond the noted goal. The accomplishment of this goal has shaped the world in which we live. Most of the personal computers use Windows for the operative system and Microsoft Office as the standard business software worldwide. Hotmail, the electronic mail service maintained by Microsoft, has become the most popular e-mail service around the world, connecting people and making the world smaller. Gates forced IBM to retire from the personal computer business. Indeed, Gates and Microsoft control where the world is going, at least in the communication field (Banks, 2001).

Possibly one way to prove that Gates is a leader equal to global challenges is the announcement that he is going to retire from Microsoft in 2008. Although this decision might be considered as proof against Gates ability to face global challenges (Weinstein, 2001), his retirement might be interpreted as an action by which Microsoft will be able to face new global challenges. On the other hand, his retirement announcement does not necessarily imply a loose of leadership. Rather, that announcement might be interpreted as a change of Gates' leadership roles and as a positive step in planning his succession.

Another perspective can be used in order to explain why Gates has announced his retirement as a way for continuing to face global challenges. As human beings, including leaders change over time, Bennis (2004) has proposed seven ages in order to depict why these changes happen. Each of these ages implies different mindsets and different leadership roles. Following Bennis's ideas it is possible to conclude that Gates is in the seventh age, where the leadership role is mainly focused on mentoring others. Consequently, Gates' new role would consist of mentoring. This is an appealing explanation, because this explanation will almost match with Gates' current behavior. Bennis stated in this sense that "when you mentor, you know that what you have achieved will not be lost, that you are leaving a professional legacy for future generations" (p. 53).

#### **7.4 Specific Examples of Success and Failures: Lessons Learned from These Events**

One specific example of Gates' greatest achievements that shows his tenacity and vision was the launching of Windows 95, one of the most popular Microsoft's operating systems. Against all odds, criticisms, and legal battles, Windows 95 became the standard operative systems worldwide. According to Gates, he learned that when "one believes is right one should fight until the fight is over" (Gates, 1996, p. 68).

Gates and Microsoft have made mistakes, too. For instance, in 1984 a program called Multiplan, designed for the Apple Macintosh, contained a faulty code that destroyed data. Another important mistake was the failure to control the shareware software market, an error that allowed the apparition of Linux. This last mistake had global consequences. That mistake allowed global competitors to develop parallel operating systems for free, thus decreasing Microsoft's position in the market.

From these and others mistakes, Gates and Microsoft have learned a set of lessons that could be summarized in Gates' policy in this sense (Gates, 2005):

In the corporate world, when someone makes a mistake everyone runs for cover. At Microsoft, I try to put an end to that kind of thinking. It's fine to celebrate success, but it is more important to heed the lessons of failure. How a company deals with mistakes suggests how well it will bring out the best ideas and talents of its people, and how effectively it will respond to change. The message I want a manager to communicate is, 'I don't blame anybody in particular for this problem. What I care about is how well we rally around to come up with a new approach to resolve it' (p. 5).

With respect to the Multiplan bug previously noted, Gates (2005) stated how he managed that event:

When members of the Multiplan team informed me of the problem, they asked if we should send a free corrected version to the product's 20,000 customers. I said yes. There was no argument, no discussion. The answer was obvious. Before they left, the team leader said, 'But this is going to cost a lot of money.' Indeed, it was almost \$250,000. "Just because it's bad doesn't mean that there is any room for discussion", I replied. "One day, you come into work and lose a quarter of a million dollars. The next day you come in and you try to do better". When employees know that mistakes won't lead to retribution, it creates an atmosphere in which people are willing to come up with ideas and suggest changes. This is important to a company's long-term success. And drawing lessons from mistakes reduces the possibility that errors will be repeated or compounded. (p. 4)

Consequently, Gates has always considered that mistakes are a source of learning, a way if thinking he has transmitted to his employees (Wallace, 1993). Gates has pointed out that the main lesson he has learned from his mistakes is that mistakes are unavoidable but can be diminished by thinking of them as a costly way of learning. In addition, Gates stated that the noted mistakes have shown that Microsoft is not unbeatable. Consequently, change and innovation are two key elements of Microsoft strategy in order to keep Microsoft's leadership. However, at the same time, innovation implies risks. Gates called this kind of circle as the innovation trap that only can be broken by taking calculated risks (Gates, 1996).

## **8. SPECIFIC COMPETENCY AND SKILL BUILDING: NEGOTIATION, CONFLICT, MISCOMMUNICATION, CHANGE, AND ETHICS**

In this section Gates leaders' specific skills that have helped him to succeed in the global context are depicted, analyzed and evaluated. The structure of this section consists of two parts. In the first part, Bill Gates is described in terms of his specific skills and ethical behavior. These skills are described and analyzed in the context of global culture, analyzing how these skills were and are useful for succeeding in the global context. In this part Bill Gates' behavior is also analyzed from an ethical perspective in relation to the global culture in order to determine how consistent Gates' ethical behavior is with respect to the expected ethical behavior of global leaders.

In the second part of this paper, Bill Gates' leadership is defined in terms of his ability to create and lead change within another culture. Gates' approach to change is analyzed and evaluated in terms of achieved results and his perspectives for the future.

### **8.1 Specific Skills Analysis**

Bill Gates has been classified as a visionary global leader (Banks, 2001). Researchers have recognized Gates' leadership as a combination of visioning, resilience to stress, tenacity, enthusiastic, dynamic, empowerment, and team building, in an interesting and well-balanced mix. (Wallace, 1993, 1997; Lowe, 1998). These competencies have been documented as essentials for leading in the 21<sup>st</sup> century (Satterlee, 1999; Kets de Vries, 2005).

According to Spreitzer, McCall & Mahoney (1999), the interaction among the previously depicted skills constitute the type of leadership required in the global age. Gates has always thought in terms of his customers. The ability of feeling what customers need and think has been recognized by Aaker (1989) and Pritchard (1999) as one of the most important abilities for survival in the global context.

Gates has also been recognized for his bargaining abilities (Lowe, 1998). According to Drucker (2004), bargaining is the ability that allows leaders to obtain what they want to achieve. Gates have fully achieved his goals in personal and organizational terms (Gates, 1996). For instance, his vision of one computer in every desktop was successfully achieved. Gates' bargaining style came from the years when he was a blackjack player. By playing blackjack, Gates developed the ability to see how opponents develop their strategies. With this knowledge, one is able to formulate counterstrategies for neutralizing opponents' attacks. Even more, one is able to be one step ahead of the opponents. Lowe offered an example. The disk operating system (DOS) developed partially by Microsoft was in fact developed in its beginnings by a small software firm. Gates realized that these small firm members had the technical knowledge, but they did not have retail distribution capabilities. Gates persuaded these people to sell their software to Microsoft, because they would not have the chance of selling their software to other companies. Gates bought the software, modified it and offered the software to International Business Machines (IBM). However, Gates' offer did not include selling the copyright. Gates persuaded IBM that personal computers would be a small market. The small software firm and IBM later realized how wrong they were. The real winner was Gates.

The noted example highlights Gates' bargaining behavior of neutralizing possible or real competitors. Aaker (1989) stressed the importance of neutralizing competitors' abilities and skills. Gates neutralized the innovation abilities of the small firm on one hand, and used the retailing ability of IBM in order to distribute his software. Later, Gates neutralized some of IBM's abilities by opening his software to other computer manufacturers. In this way, Microsoft emerged as the most powerful organization in the personal computer industry.

The noted Gates' behaviors are coherent with the acquisition of power behavior illustrated by Kovach (1986) as an important element that characterizes global leaders. By using the noted abilities, Gates acquired personal power, the power given by the fact of being one of the geniuses of global business. In a certain moment, his power was so large that it caused Gates' image to suffer accusations of being a monopoly baron. According to Kovach, this fact was almost predictable because Gates' abilities and skills "do not naturally lead to positive perceptions in the latter half of the career" (p. 43). In 1996, Gates



apparently was on the way to derailment, a concept described by Kovach. One cause of this apparent derailment was Gates' well-known insensitivity to others (Banks, 2001). However, Gates used his team-building ability to open his mind to people's needs. He promoted the establishment of multicultural teams that reported directly to him any difference of alignment between his thoughts and the actual world (Wallace, 1997). In other words, Gates started to develop his emotional intelligence, an essential ability for managing global people (Goleman, 2004; Adler & Bartholomew, 1992; Kedia & Mukherji, 1999).

In a certain moment, Gates' became a model to follow for many people. Gates was seen as the epitome of individualism, one of the most beloved values of the western culture (Banks, 2001). A man who, by his own efforts, became the richest man in the world is the realization of the American's dream (Banks). In this sense, Gates' behavior fits perfectly in the western culture's scheme of values and assumptions. However, as Microsoft was becoming a global corporation, at the same time the world became global in terms of economic barriers. Gates' achievements started to be a counterpoint. Even though Gates and Microsoft were promoting an entrepreneurial spirit, which has been recognized as one of the most important factors for economic development ( Morris, Davis & Allen, 1994), in many countries Microsoft started to be rejected, prosecuted and punished because of apparently monopolistic practices (Wallace, 1997). Consequently, up to this point, Gates' behavior fit very well with the United States' culture, but did not fit very well with other countries' cultural practices.

However, thanks to the globalization of markets and economics trends that started in the late 1990, an interesting phenomenon started to happen: Gates began to change his behavior. He started to be warmer with people, less aggressive at least in public appearances, and his discourse changed from an aggressive style to a conciliatory style (Lowe, 1998). Gates (1998) explained that he realized that the world was becoming a place with no boundaries. Consequently, Microsoft had to deal with a global market, in which different cultures have different needs on one hand and similar needs on the other hand. His former behavior was not reflecting this fact. After changing his behavior in order to adapt his company to the global context, people from different parts of the world welcomed Microsoft. Local subsidiaries are currently managed by local people. These people have influenced how Microsoft currently works. In the beginning, in every subsidiary the work style was almost the same as the work style observed in the Microsoft's Headquarters. Nowadays, cultural differences are respected, and diversity of opinions is welcome in Microsoft (Banks, 2001). In fact, the Office 2007 software incorporates these multicultural approaches since its development and its appearance. In addition to this fact, many Microsoft's subsidiaries are currently working in a collectivistic style (Wallace, 1997). This behavior might be seen as a strategy for adapting Microsoft to the turbulent and changing environment that the 21<sup>st</sup> century shows. The noted behavior has been highlighted as appropriate for dealing with the complexity that multicultural environment shows, according to Offerman and Hellman (1999).

Gates and Microsoft have gone beyond the point of adapting themselves to the global culture. Gates first started creating the Microsoft culture, where workaholic style, visioning and bargaining skills were highly rewarded. However, since 1991, Gates has modified the global culture instead of expecting that global culture to modify him. Gates broke down communicational barriers by using technological advances and promoting an open style for communicating ideas by appearing in several public forums (Wallace, 1997). The effects of this approach are visible in the current world. Electronic mail, for instance, is a tool that has allowed distance barriers to be broken down and partially, some cultural barriers by offering almost free information of the world to all people that can access the Internet. These facts are partially a consequence of Gates and Microsoft's behaviors.

Based on the previous depiction and analysis, this author contends that Gates and Microsoft are aiming to build a global redistributed leadership that would be in no one specific spot and in actually everywhere at the same time, allowing Microsoft to adapt itself to different cultures, and at the same time, allowing different cultures to adapt themselves to Microsoft.

In conclusion of this part, Gates is not reacting to the global context but rather creating and modifying the global context by creating a shared leadership. This is perhaps one of the best approaches for supporting the Microsoft's work in the Western culture specifically and in many different cultures around the world as well.

## **8.2 Gates and Ethic Behavior**

Satterlee (1999) has pointed out that ethics is one of the competencies required for competing in the global arena. Rationale for supporting why ethics is a crucial behavior consists in that ethic behavior provides a solid foundation on which behaviors can be explained and justified irrespective of how turbulent changes may be. In addition, ethic and coherent behavior serve as models to follow by people inside and outside an organization, thus supporting and validating other leadership abilities such as vision and tenacity.

In the software industry, ethics plays a vital role (Wallace, 1997) specifically, where people are aware that since 1990 they are using products manufactured by a corporation who is owned and guided by one man (Lowe, 1992), at least in terms of perceptions. Consequently, if people disagree with ethic behavior, they will take countermeasures in order to avoid using these products (Gates, 1996).

As was pointed out previously, Microsoft and Gates have been broadly criticized by their apparent monopolistic practices (Lowe, 1992). It was also pointed out that these practices were strategies for neutralizing competitors. Moreover, these strategies are reasonable in the context of achieving competitive advantage for organizations (Aaker, 1989). Some people think that the charity activities Gates is currently performing are part of a genuine behavior (Wallace, 1997) while others have seen these charity activities as a strategy Gates is pursuing in order to improve his ethical position with respect to how people perceive him in this aspect. Caplan (2005) went beyond in this point stating the following question:

Who needs Bill Gates? I mean, who needs a gazillionaire corporate titan, a man whose company, Microsoft, took in billions of dollars last year by controlling nearly all the software used to run nearly every computer on the planet (p.1).

Given these two perspectives, people who support Gates and people who do not support him, it is possible to examine and evaluate how well Gates has performed in ethical terms. First of all, Gates has stated that without ethics, no business could survive for a long time (Gates, 1996). Second, it is hard to think that Gates had been capable to attract very smart people to Microsoft if he had shown constantly unethical behaviors. Third, Gates explained that anti-monopoly rules are obsolete and do not take into account what a global economy means. According to Gates (as cited in Banks, 2001, p. 23), in a global economy "few actors will play the [business] game, because economies of scale are crucial in order to compete in a global world. However, this idea does not mean that there are no spaces for innovating individually. Rather, innovations have to be more creative and profound".

These thoughts might be interpreted in two ways: First, Gates' ethic is an example to follow; second, that Gates' behavior is a fake. From the first manner for interpreting Gates' behavior, it can be said that he has just applied what strategy prescribes for winning the business game. The competitor must be neutralized while his organization becomes stronger. However, after winning the competitive game in the software industry at least for now, Gates is redistributing his wealth among people who really need his help, being this proof that Gates' behavior is authentic. This way of thinking is shared by The Tech Museum of Innovation, one of the American premier science and technology museums.

Gates' behavior in terms of ethics has changed since the years of fierce fighting in order to assure Microsoft's existence. His behavior has changed to a more acceptable behavior in ethical terms. This change has been recognized as the piece that was needed to make Gates a truly global leader (Banks, 2001). It is possible to conclude then that Gates' current ethics matches the global context very well, helping people to survive, to become educated, understanding that poverty in the end will be harmful even for Microsoft.

## **8.3 Gates and the Ability to Create Change within another Culture**

There is not one example concerning how Gates has created change within a specific culture because Gates' actions have changed most of the cultures of the world. The current world without personal computers is almost inconceivable. These broad and generic changes happened during the last thirty

years and were due mainly to Microsoft and Gates. It is true that Gates was part of the people who created the Silicon Valley culture, but this was a change made in his own culture. However, Gates believes that change is an essential part of life. Therefore, instead of waiting for change, it is better to promote changes (Banks, 2001).

Microsoft has faced three changing stages, all of them well managed by Gates. The first stage was the beginning of Microsoft when the company was competing against well-established companies. Microsoft was the winner in that stage because of Gates' visioning and bargaining skills as was noted in this paper. The second stage was the battle for becoming the dominant company in terms of operative systems. Microsoft also won this battle because of the large amount of resources Microsoft had in those times and Gates' ability for perceiving what people wanted. The third stage is the change of Microsoft from a software producer to a company that will provide solutions based on the Internet, two-way T.V. sets, and every technological advance that "enables people to make their own choices and connect with whomever they want" (Banks, 2001). In this sense, Gates is trying to spread real democracy. In the late 1990's Gates developed a new vision, the vision of a world with no boundaries. In his own words,

In such a world, the boundaries that once shaped our primary identity will not mean so much. The concept that "I belong to this nation" won't hold as much sway with individuals as it once did. In a free world connected in this way there will be as many ideal societies and communities of common interest as there are individuals to make choices. No studio executive, bureaucrat or politician can draw a blueprint of the ideal society in advance. And they won't be able to define the boundaries either (Banks, 2001).

According to Microsoft's results during the last 20 years, there is no question about the fact that Gates has managed changes very well and that Microsoft has faced them by using the noted mix of abilities in the first part of this paper. However, the most challenging change for Microsoft and Gates is still forthcoming. Gates has decided to leave Microsoft in 2008 and wants to devote all his time to charity activities. As usual, Gates has started this change by trying to convince many people to help him in this endeavor and by dedicating a large part of his energy and wealth to this new vision.

In conclusion for this part of this paper, the noted facts allow evaluating Gates as a leader who constantly promotes change. Even though he has not made changes in a specific culture, he has influenced and changed many cultures by his actions and products. Gates is now trying to change the structure of the society and preserve cultural differences, while spreading his fundamental idea that has moved him since the beginning of his career; that every person has the right to be free.

## **9. RECOMMENDATIONS FOR INCREASING BILL GATES' EFFECTIVENESS AS A GLOBAL EXECUTIVE**

Bill Gates has been described as a "a modern business phenomenon...his story is one of remarkable business vision and an obsessive desire to win...It is also about a leadership style that is radically different to anything the business world has seen before (Lowe, 1998, p. 41). Even this spectacular success Gates, "perhaps due to painful relationships and separations in his early life, does not trust others very easily and it takes a long time to take down all of his barriers and defenses. He may feel that he has few friends or people that really care about him. Bill Gates needs to learn to value and love himself more and to express his appreciation for others more openly" Love, 1998, p. 32). As noted, Gates as every human being shows weaknesses, as noted previously in this paper.

The analysis presented in this paper shows that there are a few, but nonetheless, important areas in which Gates could improve his performance, and in consequence, his effectiveness as global leader.

In the other hand, from a systems thinking perspective it is dangerous to offer isolated suggestions for improving Gates effectiveness as global leader. From this perspective, improving one area often conducts to counterintuitive results (Gharajedaghi, 1999). Considering Gates impersonally as a system, suggestions for improving his three main weak areas, namely interpersonal abilities in social terms, family development, and multilingual skills can conduct to a spoiling of his overall performance as a leader. Van

Velsor and Leslie (1995), who analyzed causes why managers derail, in fact stated that “typically, derailment causes are closely related”, supporting this point of view.

Following this line of thought, the next suggestions aim to increase Gates effectiveness based on recommendations offered by Van Velsor & Leslie (1995) and Kets de Vries (2005) considering Gates as a system. First, Gates is conscious about the noted weaknesses (Gates, 1996, 2005). This is the first step, required for beginning the improvement. Second, Gates should perform an in-depth self-analysis trying to find out reason why he has the noted weaknesses. This step might be a hard to achieve from Gates’ perspective, because this procedure “can be highly emotional, demanding an elevated level of readiness or maturity on the part of managers” (Van Velsor & Leslie, 1995, p.70). Gates is well-known for avoiding emotional issues (Lowe, 1998). Third, having achieved what he has achieved, Gates should unplug from his own perceptions about himself and from what others could think. In this way Gates could devote his energy in balancing his abilities and in developing new skills such as the multi-lingual skills and spending time with his family, which could be a source of new approaches and perspective in order to compete in the global software market. Van Velsor and Leslie offered a rationale for this suggestion:

Managers who are trying to improve their behavior and/or develop new skills must also balance their energy between the developmental efforts themselves and the management of others’ perceptions about the changes. The fact is that a manager’s reputation often lags behind whatever the reality of that individual’s behavior might be (p. 70).

Balancing energy is a matter of equilibrium. Consequently, Gates as seen as a system should manage the noted suggestions in such a way that his system does not fall apart in chaos. One approach for doing this is paying attention to his mind and body signals, such as his frequent changes of mood (Lowe, 1998). However, these signals should be interpreted as signals of an unbalanced system. In order to balance an individual human system it is clear that the current context influences such a system and pushes it towards a state of unbalance. Loehr and Schwartz (2001) offered a systemic perspective by which individual systems can be returned to balance. Imagining individuals systems as a pyramid, five components interact in the noted system. These components are the physical, the emotional, the mental and the spiritual capacities. The unbalance of one of these components might cause that the entire system to fall apart. Based on the analysis developed in previous sections, Gates shows weaknesses in his emotional capabilities. Consequently, it might be suggested that regular workouts could strength Gates’ physical capabilities and start to develop stronger relationships could develop and improve Gates’ emotional capabilities. Gates has always been criticized for being a loner, even by his closest and few friends (Lowe, 1998). Loehr and Schwartz suggested that meditation, practiced regularly, can focus one’s emotions and increase the ability for developing interpersonal relationships. These practices require time, but the final results can be even more impressive than Gates’ achievements to date. Gates could be greater than Gates.

## **10. CONCLUSIONS**

The present analysis depicted why Gates is considered one of the most poignant global leaders during the last years of the 20<sup>th</sup> century and the first years of the 21<sup>st</sup> century. Most of his abilities and skills match with those described in the reviewed literature as being key skills for succeeding in the global world. Those skills that do not fit in global leaders’ typical profile are source of some Gates’ pitfalls, one on hand, but also explain why his others abilities are so prominent in Gates. This unbalance might have been useful for the previous ages, before the globalization and for the first years of globalization. However, it has been pointed out that as globalization increases Gates’ weak abilities must be improved. Some suggestions from a systemic perspective were offered for improving Gates’ skills in order to face the new challenges in the coming years. Particularly, the emotional side of Gates must be improved. Weaknesses in this side are affecting his other dimensions, impeding the full development of Gates’ potential as global leader. This idea leads towards the final conclusion of this paper. Global leaders have to develop all of the performance dimensions in a harmonic way. Unbalances in developing such dimensions might lead to derailment and failure.

## REFERENCES

- Aaker, D. A. (1989, Winter). Managing assets and skills: The key to a sustainable competitive advantage. *California Management Review*, 31(2), 91–106.
- Anders, G. (2005). How the PC got really started. Fastcompany.com. Retrieved November 3<sup>rd</sup>, 2006, from [http://www.fastcompany.com/articles/archive/pc\\_bday.html](http://www.fastcompany.com/articles/archive/pc_bday.html)
- Adler, N., & Bartholomew, S. (1992). Managing globally competent people. *Academy of Management Executive*, 6(3), 52–65.
- Andrews, N. & Dandrea, T. (2006). The Upwardly Global MBA. *Content management, Strategy and Business Issue*, (1) 3, 36-46.
- Banks, D. (2001). *Breaking Windows: How Bill Gates Fumbled the Future of Microsoft*. New York: Free Press.
- Barlett, C.A., & Mahmood, T. (2006). Microsoft in transition. Bill Gates' Leadership. *Harvard Business Online*, DOI: 10.1225/399057. Retrieved November 20<sup>th</sup>, 2006, from <http://doi.contentdirections.com/mr/hbsp.jsp?doi=10.1225/399057>
- Bennis, W. (1984) The 4 competencies of leadership. *Training and Development*, 38(8), 14–19.
- Bennis, W. (2004). The Seven Ages of the Leader. *Harvard Business Review*, 82(1), 46-53.
- Caplan, A. (2005). Would you have allowed Bill Gates to be born? NBC services. Retrieved November 12, 2006, from <http://www.msnbc.msn.com/id/7899821/>
- Capella University. (2006). Unit 5 – Global Leader or Manager Competencies and Skills. Retrieved from <http://courseroom.capella.edu/webct/cobaltMainFrame.dowebct?JSESSIONID=FFwDQybxGDk10fJLLcVP9sTGxd0pyd3xp20hkszrkJhhv2Ly9QNC!491536126!-171850748&appforward=/webct/startFrameSet.dowebct%3Fforward=studentCourseView.dowebct%26cid=158740835>
- Capella University (2005). Guidelines for OM8103 learning unit 2. [http://courseroom.capella.edu/webct/ContentPageServerServlet/OM8103/Unit02/010\\_introduction.html;JSESSIONID=FyFCvb7hFF2nLQ15gNfMy8pWZh1cz7RN0Q4hpfl1kBpXh10qK0BX!-1730669295!-2003421636!1160938946460?pageID=158758349&uniqueKey=PageLO\\_158758349\\_0.09039042161426392](http://courseroom.capella.edu/webct/ContentPageServerServlet/OM8103/Unit02/010_introduction.html;JSESSIONID=FyFCvb7hFF2nLQ15gNfMy8pWZh1cz7RN0Q4hpfl1kBpXh10qK0BX!-1730669295!-2003421636!1160938946460?pageID=158758349&uniqueKey=PageLO_158758349_0.09039042161426392).
- Conrad, C., & Scott, M. (1998). *Strategic communication into the twenty-first century* (4th ed). Florida: Harcourt Brace & Company.
- Churchill, W.S. (1958). *Memorias de Winston Churchill* [Winston Churchill's memories]. Madrid: Ediciones Especiales.
- Drucker, P. (1994). The age of transformation. *Atlantic Monthly*, 3(4), 45-62.
- Drucker, P. (2004, November). What makes an effective executive? *Harvard Business Review*, 82(6), 58–63.
- Fast company (1999). It's your choice. FastCompany Publishing, 31, 195-205. Retrieved November 4<sup>th</sup> 2006 from <http://www.fastcompany.com/magazine/31/choice.html>
- Frances, A. (1977). What is leadership? Caracas: Ediciones IESA.
- Friedman, T. (2005). *It's a flat world: A brief history of the twenty-first century*. New York: Farrar, Straus, and Giroux.
- Gates, W. (1996). *The Road Ahead*. Caracas: Microsoft Press.
- Gates, W. (2005). My mistakes. Retrieved October 30, 2006 from <http://www.microsoft.com/billgates/columns/1995essay/ESSAY950425.aspx>
- Gharajedaghi, J. (1999). *Systems thinking: Managing chaos and complexity. A Platform for designing business architecture*. Boston: Butterworth- Heinemann.
- Goleman, D. (2004). What makes a leader? *Harvard Business Review*, 82(1), 82–91.
- Gosling, J. & Mintzberg, H. (2003). The five minds of a manager. *Harvard Business Review* 81(11), 54–63.
- Gregersen, H. B., Morrison, A. J., & Black, J. S. (1998). Developing leaders for the global frontier. *Sloan Management Review*, 40(1), 21–32.
- Hampden-Turner, C., & Trompenaars, F. (1997). Response to Geert Hofstede. *International Journal of Intercultural Relations*, 21(1): 149-159.
- Heifetz, R., & Laurie, D. (2001). The work of leadership. *Harvard Business Review*, 79(11), 131–140.

- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G. (2001) *Culture's consequences: Comparing values, behaviors, institutions and organizations across nations (2nd Ed.)*. Thousand Oaks, CA: Sage
- Hofstede, G., Neuijen, B., Ohayv, D.D. & Sanders, G. (1990) Measuring organizational cultures. A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 35, 286–316.
- Kalmus, V. (2005). Socialization in the changing learning environment: Some considerations for research. Paper presented at the Eighth IARTEM Conference, *Institute Universitaire de Formation des Maîtres de Basse-Normandie*, Caen.
- Kawasaki, K. (2006). *Where is Bill Gates going to?* Madrid: Harla.
- Kedia, B. L., & Mukherji, A. (1999). Global managers: Developing a mindset for global competitiveness. *Journal of World Business*, 34(3), 230–251.
- Kets de Vries, M., Vriegaud, P., & Florent-Treacy, E. (2002). The global leadership life inventory: Development and psychometric properties of a 360-degree feedback instrument. *International Journal of Human Resource Management*, 15(3), 475–492. Retrieved November 10, 2006, from [http://home.sandiego.edu/~pavett/docs/gsba532/global\\_leader\\_inventory.pdf](http://home.sandiego.edu/~pavett/docs/gsba532/global_leader_inventory.pdf).
- Kets de Vries, M. (2005). Leadership group coaching in action: The Zen of creating high performance teams. *Academy of Management Executive*, 19(1), 61–76.
- Kovach, B. (1986). The derailment of fast-track managers. *Organizational Dynamics*, 15(2), 41–48.
- Leslie, J., Dalton, M., Ernst, M. & Deal, C.J. (2002). Managerial effectiveness in a global context. *Center for Creative Leadership*, 1(4) 1-89.
- Leslie, J., Dalton, M., Ernst, M. & Deal, C.J. (2002). Managerial effectiveness in a global context. *Center for Creative Leadership*, 1(4) 1-89.
- Loehr, J., & Schwartz, T. (2001). The Making of a corporate athlete. *Harvard Business Review*, 79 (1), 120-128.
- Lowe, J. (1998). *Bill Gates Speaks: Insight from the World's Greatest Entrepreneur*. New York: John Wiley & Sons.
- McSweeney, B. (2002). Hofstede's model of national cultural differences and their consequences: A triumph of faith – a failure of analysis. *Human Relations*, 2002, 55, 89–118.
- McPhail, R. E. (2004). Understanding work commitment in the Asian Pacific region: An insider study of a global hotel chain. *Griffith Business School*.
- Microsoft (2006) web page at <http://www.microsoft.com/billgates/bio.aspx>
- Morris, M. H., Davis, D. L., & Allen, J. W. (1994). Fostering corporate entrepreneurship: Cross-cultural comparison of the importance of individualism versus collectivism. *Journal of International Business Studies*, 25(1), 65–89.
- Offerman, L. R., & Hellman, P. S. (1997). Culture's consequences for leadership behavior: National values in action. *Journal of Cross-Cultural Psychology*, 28(3), 342–351.
- Peterson, M., & Hunt, J. (1997). International perspectives on international leadership. *Leadership Quarterly*, 8(3), 3–231.
- Pritchard, K. H. (1999). Competency-based leadership for the 21st century. Retrieved November 14, 2006, from <http://www.au.af.mil/au/awc/awcgate/milreview/pritchard.htm>.
- Ransdell, E. (1998). Third Age - Do You Belong? FastCompany Publishing, 16, 162-170. Retrieved November 4<sup>th</sup> 2006 from <http://www.fastcompany.com/magazine/16/thirdage.html>
- Reynolds, G. (2005). Gates, Jobs, & the Zen aesthetic. Retrieved October 30, 2006, from [http://www.presentationzen.com/presentationzen/2005/11/the\\_zen\\_estheti.html](http://www.presentationzen.com/presentationzen/2005/11/the_zen_estheti.html)
- Rubin, H. (2002). Power. FastCompany Publishing, 64, 65-66. Retrieved November 4<sup>th</sup> 2006 from <http://www.fastcompany.com/magazine/64/hrubin.html>
- Satterlee, B. (1999). The acquisition of key executive skills and attitudes required for international business in the third millennium. (ERIC Document Reproduction Service No. ED432175).
- Scharmer, C.O. (2000). Presencing: Learning from the future as it emerges". Paper retrieved from internal communication during the Leadership Course, Capella University, May 2006.
- Sendelbach, N. (1993). The competing values framework of management training and development: A tool for understanding complex issues and tasks. *Human Resource Management*, 32(1), 75–99.
- Spreitzer, G. M., McCall, M. W. Jr., & Mahoney, J. D. (1999). Early identification of international executive potential. *Journal of Applied Psychology*, 82(1), 6–29.

- Streitfeld, D. (2000). Bill Gates' executive style inspires a cult following tech firms adopt Microsoft's winning ways. *The Washington Post*. Retrieved October 30, 2006, from <http://www.washingtonpost.com/ac2/wp-dyn/A45180-2000Apr30>
- Trompenaars, F., & Hampden-Turner, C (1998) *Riding the Waves of Culture*, London: Nicholas Brearley.
- Van Velsor, E., & Leslie, J. B. (1995). Why executives derail: Perspectives across time and cultures. *Academy of Management Executive*, 9(4), 62–72.
- Walker, R. (2004). A Summary of the requisite leader attributes for the Canadian forces. Retrieved October 23, 2006, from <http://www.cda-acd.forces.gc.ca/cfli>
- Wallace, J. (1993). *Hard Drive: Bill Gates and the Making of the Microsoft Empire* New York: Harper Business.
- Wallace, J. (1997). *Overdrive: Bill Gates and the Race to Control Cyberspace*. New York: John Wiley & Sons.
- Weinstein, B. (2001). You'd better believe Bill Gates can sell! Retrieved October 30, 2006, from <http://www.itworld.com/Career/4205/ITW010503salesspecial3>
- Zaccaro, S. (2001). *The Nature of Effective Leadership*. Washington, DC: American Psych. Associati

#### APPENDIX A

##### SYNTHESIS OF DIMENSIONS FOR CLASSIFYING GLOBAL LEADERS. AUTHOR'S TAXONOMY

Dimension	Skills or related abilities pertaining to the dimension	Sources
Empowerment	Confidence in employees, knowledge in depth of employees' abilities, trust in their independency.	Drucker (2004), Adler & Bartholomew (1992), Andrews & Dandrea (2006)
Enthusiastic, dynamic	The ability for transmitting enthusiasm to people.	Drucker (2004), Gosling, J. & Mintzberg (2003)
Team building, Integrating people	Selecting the best people. Solving conflicts, aligning people toward a common goal.	Drucker (2004), Heifetz & Laurie D. (2001), Drucker (2004), Adler & Bartholomew (1992)
Global Orientation, Cosmopolitanism, Cultural adaptability	Multilanguage skills. Identifies common things all cultures and countries have, but at the same time recognizes differences, even those subtle differences.	Drucker (2004), Leslie, Dalton, Ernst, & Deal, (2002), Peterson & Hunt (1997), Andrews, & Dandrea (2006)
Emotional intelligence	To Know his or her own abilities, capacities. Self-awareness, intuition is as important as logic intelligence	Goleman,(2004), Sendelbach (1993)
Resiliency to Stress and tenacity.	Pursuing goals against other people resistance. Managing stress appropriately.	Spreitzer, McCall, & Mahoney (1999), Goleman,(2004)
Architectural and organizational abilities	Build organizational structures. The ability for changing, designing and selecting adequate organizational structures.	Drucker (2004), Gosling, J. & Mintzberg (2003)
Global Mindset and learning abilities	The ability to know where the world is going. Cultural sensibility. Understanding about what is happening and what will happen in the world. Open-minded.	Leslie, Dalton, Ernst, & Deal, (2002), Kedia & Mukherji (1999), Spreitzer, McCall, & Mahoney (1999)
Long Term Vision	Systems thinking. Take advantage of opportunities. See the whole picture.	Drucker (2004), Spreitzer, McCall, & Mahoney (1999)
Balance between personal and work duties	To empower himself or herself by doing different activities. Matching other activities and extracting from them lessons to the job. Sharing time with the family. Time management skills.	Andrews, & Dandrea (2006), Goleman, (2004).



## **APPENDIX B**

### **ZACCARO'S TAXONOMY FOR GLOBAL LEADERS**

Professional Expertise	Professional Expertise consists of Specialist (proficiency and functional acumen, an understanding and development of the Organizational environment, practice and eventual stewardship of the profession of arms, and the capacities to transform the system through applications at the Institutional and Strategic levels.
Cognitive Capacities	Cognitive Capacities consist of: a problem-solving, critical, Analytical, "left-brain" competence to think and rationalize with mental discipline in order to draw strong conclusions and make good decisions; plus an innovative, strategic, conceptually Creative, "right brain" capacity to find novel means, "outside the box" ends, and previously undiscovered solutions to issues and problems.
Social capacities	Social Capacities consist of a sincere and meaningful behavioral Flexibility to be all things to all people, combined with Communications skills that clarify understanding and bridge differences. These capacities are blended with Interpersonal proficiency in being persuasive, Team relationships that create coordination, cohesion and commitment, and Partnering capabilities for strategic relations building.
Change capacities	Change Capacities involve Self-development, with risk and achievement, to ensure self-efficacy, Group-directed capacities to ensure unit improvement and group transformation, all with an understanding of the qualities of a Learning Organization, applications of a learning organization, and the capacity of knowledge management.
Internalized Ethos	Internalized Ethos is identified by the character/ values/ integrity/ authenticity/ reliability demonstrated in the Credibility (loyalty, courage, self-sacrifice, spirit, discipline) of a leader; the Professional Reasoning through ethics and moral logic resulting in internalization; and the Impact, assertiveness and extroversion in duty that assures the necessary effect by and from the leader.

Source: Walker (2004)



**APPENDIX C**  
**ZACCARO'S TAXONOMY FOR GLOBAL LEADERS**

Leader's Elements	Professional Expertise	Cognitive abilities	Social abilities	Change abilities	Internalized Ethos
Leader's attributes	Technical, Specialized, Organizational., Global	Analytical/Creative	Flexibility Communicational Skills Team Partnering	Self learning Group learning Learning organization	Professional reasoning Credibility Impact
Global	Expertise & Wisdom, Applications	Knowledge Creation Conceptualization Visionary	Strategic Relations Building, Partnering	Multi-Organizational Learning & Organization Applications	Stewardship of the Institution
Local leadership	Knowledge	Mental Models, Innovation Complexity	Team / Unit Coordination Cohesion Commitment	Group / Joint Transformation Improvement	Culture Alignment & Increasing Internalization
Incipient leadership	Manages information in strategic terms	Theories & Concepts	Individually Persuasive & Resolving	Self-Efficacy Self-Awareness External Orientation	Self-Regulation Understand Ethos, and Practice it. Credibility Reliability
Skilled Worker	Introductory Techniques & Tactical Procedures	Theorems & Practical Rules / "Laws"	Team-Oriented Followership	Awareness of Evolving, Nation, World	Guide Self-Values, Beliefs, -Expectations Normative Compliance

Source: Walker (2004)

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## THE EFFECTS OF A PROCESS CONTROL IMPROVEMENT INTERVENTION ON FISCAL PERFORMANCE IN A CORRECTIONS FACILITY

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### ABSTRACT

*A regional county department of corrections facility commissary has approximately \$500,000 in gross sales per year. Between 2004 and 2007 inventory reconciliation problems occurred on a regular basis. To address these problems a 3 phase study was conducted. The first phase consisted of baseline measurement as well as direct observation of commissary operations, an officer/inmate survey, and a review of financial documents. An inventory reconciliation strategy was adopted during phase 2. Specific interventions targeted the areas of inmate and officer productivity, accuracy of inventory counts, cost reductions in clerical and auditing areas, and integrity of inventory ordering. Phase 3 consisted of post-intervention measurement of fiscal performance. Results of the study indicated significant improvements in cost containment, systems control, and inventory reconciliation. Broader implications of the intervention strategies and future research recommendations are discussed.*

**Keywords:** Process Control, Inventory Integrity, Cost Containment.

### 1. INTRODUCTION

The organization under study was established as a Sheriff's department in 1892. Over one hundred years later, in 1983, a new detention center was built across the street from the courthouse. The new facility was four stories high, the length of a city block, and housed up to 288 inmates. Other additions and changes occurred over the next 10 years and in 1993 a Department of Corrections was created, with a separate budget process, a financial records system and new policy and procedures. The Commissary Division became part of this new organization.

As the organization grew in size and the number of inmates increased, the commissary division was forced to grow as well. Profit from the commissary division provided funding for non-mandated programming, books and supplemental entertainment. As the pressure for more materials, books and programming grew, the amount of items sold by the commissary division increased drastically. Between 1993 and 2002 the number of items sold in the commissary rose from 75 to 220. The increase in orders, sales and inventory caused an increased workload which occurred without increased staffing. Taking shortcuts became acceptable and every opportunity was taken to decrease processing time. In the private business world, shortcuts and decreased times are sometimes applauded. In the world of county jails where state audit requirements are stringent, inappropriate shortcuts are illegal.

The current annual budget for the organization is approximately \$250,000.00 for programming, books, education, religious and entertainment needs to the inmates. These expenses are not mandated but are provided to assist in inmate behavior and rehabilitation. In the fall of 2004, the division Chief for Commissary decided to only use the Spillman Law Enforcement Computer System for all commissary business. A critical feature of this system is the lack of an unbroken chain of money recording and receipting, resulting in the impossibility of passing a state audit.

One of the authors of the present study became the supervisor of the Commissary Division in 2005. At that point in time the three clerks employed in the commissary did a weekly inventory count but did not use the inventory count information. The clerks did not realize that they were only reconciling to a 42% rate weekly. Five inmate workers and the three clerks worked in a space of about 700 square feet in the main inventory area, and in a smaller bathroom/closet area of about 70 square feet. Inmates frequently bumped into each other trying to get to different sides of the room to find various order items. Inventory was stored in an illogical manner and did not match the listing on the commissary sheets.

The purpose of the study was to employ process improvement techniques to gain control over the business process in order to eradicate the systematic issues leading to financial losses and managerial inefficiencies at the commissary.

## 2. METHOD

Subjects in the study included commissary staff, inmates and Corrections management. Data collection methods included direct observation, interviews, follow-up meetings, the administration of a survey, and a complete review documented. Records audited included: inmate funds received, receipting and posting, the inmate funds checking system, the inmate request receipting/debit system, inventory profit/loss statements, clerical payrolls, direct and indirect fund costs (to include commissary space rental, lighting, heating, etc.) and cash drawer records. The study was conducted over an 18 month period beginning in September, 2004, including baseline, intervention and post-intervention phases, each lasting 6 months. Physical inventory flow and related financial records were documented in great detail using established TQM methods (available upon request). Key changes during the intervention phase included using plastic, sealed bags, rearranging the inventory in a logical manner (food, toilet products, etc... separated), adopting a color coded scheme for inventory type, and designing a new inmate order form consistent with new inventory locations. The new inmate order form required a signature, which triggered the release of funds from inmate accounts. The flow of inventory from delivery into the commissary through the staging area and pick-up desk were changed as well.

## 3. RESULTS

Figure 1 shows the eighteen-month "percentage of items reconciled" bar-graph divided with the pre-intervention, intervention and post intervention periods. During Phase I (baseline) the percentage of inventory reconciled fluctuated greatly from month to month, averaging 45%.

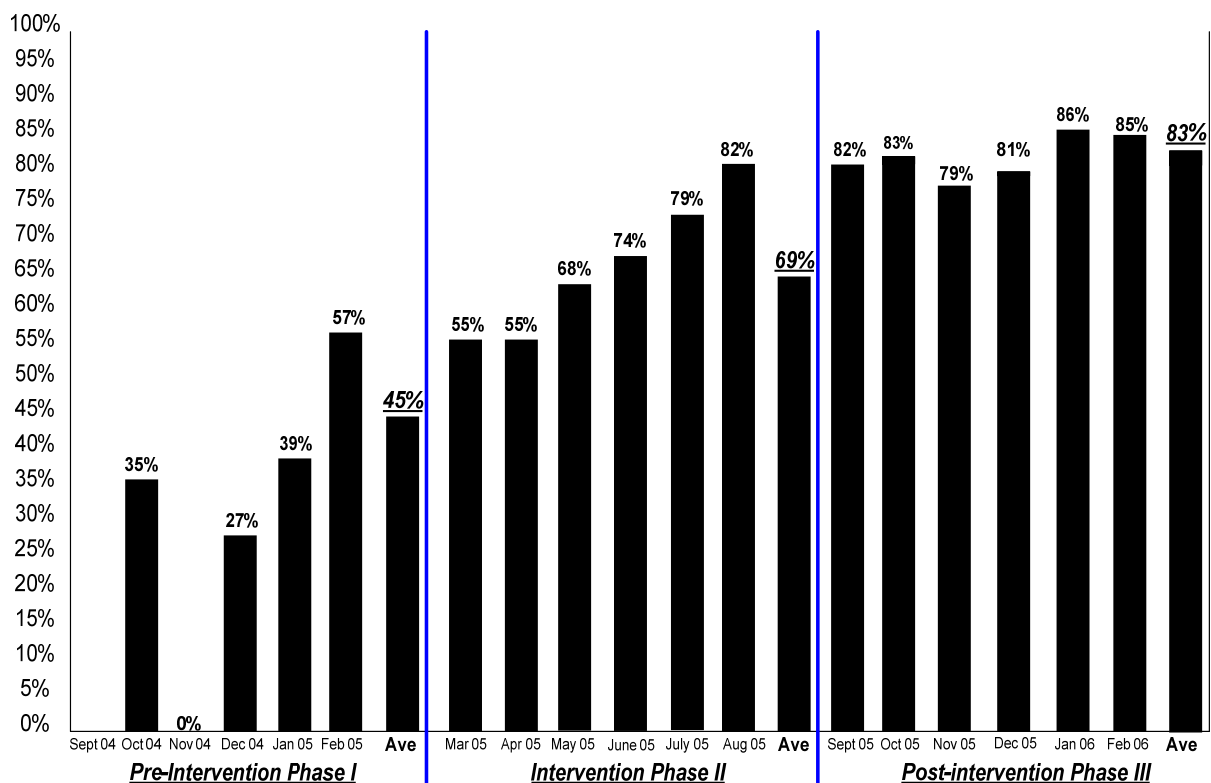


Figure # 1 Monthly Reconciliation Rate of Commissary Items

Phase II (the intervention) began in March 2005. The percentage was at 55% in March and then 57% in April. Beginning in May with 68%, the reconciliation percentages began a strong and steady increase: 74% in June, 79% in July and 82% in August. The average reconciliation rate for Phase II was 69%. In Phase III (post intervention) the reconciliation rate essentially leveled off for three straight months: September, October and November at 82%, 83% and 79% respectively. In December the rate rose to 81%, 86% in January and 85% in February of 2006. The average for Phase III was an 83% reconciliation rate.

Unreconciled losses for each phases which were calculated. Phase I averaged \$26,162.00 in inventory losses, the Phase II average was \$5, 396.00 and Phase III was a remarkable \$430.00.

## **4. DISCUSSION**

### **4.1 Summary**

Upon assuming a management position in a Commissary Division in a department of corrections in the northwest, it was noted by one of the authors of the study that critical process improvements were essential. The division was only reconciling inventory at 42%, and it was replacing approximately \$140 to \$160 a week in lost or stolen inmate orders. Commissary staff labored over getting inmate orders pulled and delivered to the Annex. Correction Officers spent hours in the inmate's units delivering the commissary and wrestling with inaccurate, hard to read paperwork. The commissary system was cumbersome, slow, inaccurate and difficult to use.

The author audited six months worth of data, did observations, interviews and a survey. After reviewing all processes, the author saw an opportunity to streamline the inmate ordering process, order-picking process, bagging process and the delivery system. The key points in this intervention are the sequences of events that must occur in order for processes to be successful. In conjunction with the weekly inventory sheets generated from the Spillman system, the author did a bar chart to show the clerks where they were on their weekly reconciliation rates. These weekly charts became the monthly charts that the author used in the Result Section.

After completing the baseline Phase (I), the author started the intervention with the way orders were filled out by inmates and with the necessary information that the inmate workers needed. The author then looked at how that order moved through the commissary division and was delivered to the inmates. Once the author redesigned the order form, the next step examined how that order got filled and who filled it. The author reviewed the order picking operation with the goal of streamlining and simplifying the operation by developing a production line type format for the inmate workers to use when pulling orders.

After the order filling process was streamlined (which allowed the inmate workers to be more accurate and faster), the author examined the data entry piece with the commissary clerks. Access to the computer programming for the Spillman Inventory System was changed and this allowed the clerks to have control over data entry problems. This small step eliminated a huge barrier that the clerks had been struggling with and created an atmosphere of "buy in" from the clerical staff.

Once all the processes in the inmate order slips, inmate order picking and the clerical data entry were resolved, the author looked at the order delivery system. The goal was to speed up the delivery from the officer to the inmate and provide a system that was accurate, audit compliant and officer friendly. This was achieved by changing the order bagging system to sealed clear plastic bags that did not require any of the intensive labor or time use that brown paper bags required.

In reviewing the charts, it is obvious that as the author presented the process changes in Phase II, the reconciliation rate started to improve immediately and drastically. It is also important to note that data entry mistakes were one of the key reasons that initially the reconciliation rate was so inaccurate. In looking at the intervention from a cost of resource overview, it is accurate to say that the commissary clerks are saving approximately ½ to ¾ of an hour a day each and that correction staff are saving about three hours a day.

#### **4.2 Research and Intervention Limitations**

Several limitations were apparent in this field study. The survey could have been given by someone other than the author, such as by another corrections officer that was not associated with the commissary division. There is the possibility that the author's high rank (sergeant) could have caused both inmates and officers to respond more favorably. It is also reasonable to believe that the rank of the author may have influenced both inmates and officers to participate in the survey. In reviewing the observation process the author examined different options that were not used. The author could have video taped the clerks and the inmates during the inventory counting process, order processing and delivery of the commissary orders. Even though the author did direct observations of all the processes and tasks, video taping would have allowed the author the opportunity to view the processes several times.

Staff's input was not sought during initial observations. It is possible that other employees of this facility may have been able to provide good insight into some of the processes and tasks that have been identified in this study earlier in the process.

During the interview process, the author could have easily impacted the level of clerical staff's participation and commitment based on the fact that the author was their supervisor. More candid answers may have been given sooner in the Pre-intervention stage if the clerks had been interviewed by a peer. When the commissary clerks gave answers that stated, "that is the way we have always done it", the clerks may have felt threatened or intimidated by the author because of the author's authority over the clerks. It is also possible that even though the author tried to limit interviews to the commissary room, a different interviewing location may have produced better results or more detailed responses.

#### **4.3 Future Research Directions**

It is recommended that inventory reconciliation data continue to be collected (this is currently underway as of the authors of the study continues to manage the division). It is also recommended that continuous process improvement meetings be held with commissary staff and random inmate customers. Additional input that could make the commissary order and delivery system even easier and more "user friendly" is desired. More feedback from the inmates and staff on the quality of orders could be helpful in determining future process changes. Additional survey information would help the division make future decisions on product selection and the quantities that inmates are allowed to order.

More research on the actual financial costs of clerk and officer time should be conducted. More time and money could be saved with research into additional cost saving electronic technology. The cost saving technology should examine how to write a computer program on incorporating all of the jail's financial information into the commissary records to ensure that inmates pay for services that they use before receiving their commissary orders; services such as medical or legal.

*References available upon request*

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# MUTUALLY ADVANTAGEOUS FINANCIAL LEASES

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## ABSTRACT

*This paper determines when differences between lessor and lessee parameters, e.g. asymmetry in tax rates, permit a mutually advantageous financial lease. A single expression that serves as a metric for the extent of mutual gain for the two parties to a financial lease is developed and analyzed. It is shown that if the lessor's tax rate exceeds (is less than) that of the lessee, a mutually advantageous financial lease is feasible only if the present value of depreciation allowances exceeds (is less than) the present value of the lease payments. If the lessor exploits economies of scale and scope that are unavailable to the lessee, a mutually advantageous financial lease is feasible under plausible conditions, i.e., the present value of depreciation tax shields is less than the cost of the asset. Thus, by delineating the conditions when differences in the economic circumstances confronted by the lessor and the lessee allow the possibility of a mutually advantageous financial lease, this paper alerts the practitioner to situations when investigating this financing alternative would be fruitful as well as when it would be fruitless.*

**Keywords:** Financial leases, Mutual gain, Lessor, Lessee, Net advantage of leasing

## 1. INTRODUCTION

In both the textbook as well as the journal literature on financial leases, the topic is typically broached by first adopting the perspective of one party to the contract, say the lessee, and then shifting to the perspective of the second party, say the lessor. Expressions for the wealth gain each entity garners are developed, usually denoted the party's Net Advantage of Leasing or, more succinctly, NAL. These two expressions are then compared in an attempt to delineate situations where mutual gain for the two parties is possible, i.e., where both expressions for NAL are positive. Among others, this approach is exemplified in the textbook literature by Ross et al. (2005) and Brealey et al. (2003) and in the journal literature by Lewellen et al. (1976).

This paper follows in this tradition of emphasizing the mutuality of advantage to ensure the viability of a financial lease, i.e., neither party acquiesces to self-harm. Where it departs from the customary approach is in the latter's use of a two-formula paradigm. Here a single formula that serves as the sole metric for the lease's attractiveness to both lessor and lessee is developed. A positive value of the formula signals a mutually beneficial lease. As the single expression contains distinct parameters that pertain to each of the two parties, the task of searching for situations of mutual gain is facilitated. As will be demonstrated later, this approach becomes especially useful when analyzing the case of tax asymmetry, i.e. where the lessor's tax rate differs from that of the lessee.

The next section sets out the model, culminating in the single expression for mutual wealth gain that is the focus of this paper. The next three sections consider seriatim situations of tax differentials, lessor economies of scale and scope, and finally superior lessor access to financial markets.

## 2. MODEL DEVELOPMENT

Define  $C$  as the cost of acquiring the leased asset,  $S$  as the salvage value realized on the asset, and  $T$  as the tax rate. The subscript OR refers to the lessor whereas the subscript EE refers to the lessee. Thus, for example,  $C_{OR}$  is the cost of the leased asset to the lessor whereas  $T_{EE}$  is the lessee's tax rate.

Since lease contracts typically stipulate that payments are due at the start of each period, the lease contract constitutes an annuity due. In this connection, define  $PVIFAD(K,n)$  as the present value interest factor of an annuity due with a term of  $n$  years and where  $K$  is the discount rate. To simplify the presentation, the customary assumption of annual lease payments is adopted. The length of the lease period is  $n$  years whereas the economic life of the asset is  $m$  years.

Define  $a_t$  as the percent of the asset's original cost that is claimed as depreciation for tax purposes in year  $t$  and  $m$  as the depreciable life of the asset. This formulation has the flexibility to accommodate a wide spectrum of tax depreciation methods. When applied to a three-year asset in the context of the U.S. Modified Accelerated Cost Recovery System, the depreciation allowance schedule is as follows:  $a_1 = 33.33\%$ ,  $a_2 = 44.44\%$ ,  $a_3 = 14.82\%$ ,  $a_4 = 7.41\%$ , and  $m = 4$  as explained in Ross et al. (1998). When applied to an asset with a depreciation rate of 30% in the context of the Canadian System of Capital Cost Allowances, the depreciation allowance schedule is as follows:  $a_1 = 15\%$ ,  $a_2 = 25.5\%$ ,  $a_3 = 17.85\%$ , ... and  $m$  equals infinity as explained in Ross et al. (2005).

Should investment tax credits be available, the sum of the  $a_t$  terms over the depreciable life of the asset will exceed 100%. In addition, if the investment tax credit is immediately available at the time of asset purchased, then the term  $a_0$  will exceed 0. So as not to preclude the latter possibility, the summation of the  $a_t$  terms starts at 0 and the summation of these terms is not restricted to equal 1.

Define  $KT_{OR}$  as the lessor's target post-tax rate of return on the lease contract. For the contract to be lessor wealth enhancing, clearly  $KT_{OR}$  must exceed the lessor's cost of capital. The lessor sets the annual lease payment,  $L$ , to satisfy the following requirement.

$$C_{OR} = L(1 - T_{OR})PVIFA(KT_{OR}, n) + T_{OR}C_{OR} \sum_{t=0}^m \frac{a_t}{(1 + KT_{OR})^t} + \frac{S_{OR}}{(1 + KT_{OR})^m} \quad (1)$$

Observe that on the RHS (right-hand side) of equation (1), the first term is the present value of the post-tax lease payments, the second term represents the present value of the depreciation tax shields, inclusive of any possible investment tax credit, obtained by the lessor, and the third term is the present value of the leased asset's salvage value realized by the lessor.

The Net Advantage of Leasing, or NAL, to the lessee may be depicted as follows.

$$NAL = C_{EE} - L(1 - T_{EE})PVIFA(K_{EE}, n) - T_{EE}C_{EE} \sum_{t=0}^m \frac{a_t}{(1 + K_{EE})^t} - \frac{S_{EE}}{(1 + K_{EE})^m} \quad (2)$$

The RHS terms of equation (2) are respectively, the cost of the leased asset that is saved by the lessee, the present value of the after-tax lease payments made by the lessee, the present value of the depreciation tax shields and the present value of the leased asset's salvage value, both of which are lost by the lessee.

As indicated earlier, much of the existing literature essentially involves a comparison of equations (1) and (2), attempting to determine situations where differences between lessor and lessee parameters lead to the possibility of a lease contract that is mutually beneficial. The tack taken in this paper is to embed equation (1) in equation (2) and then enquire under what conditions NAL is positive. As  $KT_{OR}$  exceeds the lessor's cost of capital, the positivity of NAL ensures that the lease is beneficial to both parties. Stated another way, if the lessor sets a lease rate that satisfies its rate of return requirement and is therefore beneficial to it, will the lease be likewise beneficial to the lessee? More importantly, what differences in lessor and lessee parameters would ensure such an eventuality?

First determining the formula for  $L$  implied by equation (1), then substituting the resulting formula into equation (2) and subsequently simplifying, the following equation is derived.

$$\begin{aligned}
NAL = & (C_{EE} - C_{OR}) + L[PVIFAD(KT_{OR}, n) - PVIFAD(K_{EE}, n)] \\
& + T_{OR} \left[ C_{OR} \sum_{t=0}^m \frac{a_t}{(1 + KT_{OR})^t} - PVIFAD(KT_{OR}, n) \right] - T_{EE} \left[ C_{EE} \sum_{t=0}^m \frac{a_t}{(1 + K_{EE})^t} - PVIFAD(K_{EE}, n) \right] \\
& + \left[ \frac{S_{OR}}{(1 + KT_{OR})^m} - \frac{S_{EE}}{(1 + K_{EE})^m} \right]
\end{aligned} \tag{3}$$

Given the numerous parameters present in equation (3), conditions that ensure that NAL exceed zero are difficult to determine analytically. This task is facilitated by sequentially assuming, in the next section, that the lessor and lessee differ solely in terms of their tax rates. In the subsequent section, it is assumed that the lessor and lessee differ solely in terms of the asset's acquisition cost and salvage value. In the penultimate section of this paper, it is assumed that the lessor's target rate of return differs from the lessee's cost of capital, with all the other parameters for both parties equaling common values. This *ceteris paribus* exercise allows the examination of how tax asymmetry, economies of scale and scope available to the lessor but not to the lessee, and the lessor's superior access to financial markets compared to that of the lessee render feasible a mutually beneficial lease.

### 3. TAX ASYMMETRY

In this section, it is assumed that while  $C_{OR} = C_{EE}$ , equaling a common value of  $C$ ,  $S_{OR} = S_{EE}$ , equaling a common value of  $S$ , and  $KT_{OR} = K_{EE}$ , equaling a common value of  $K$ ,  $T_{OR}$  is not equal to  $T_{EE}$ . Introducing these restrictions into equation (3), the following is obtained.

$$NAL = (T_{OR} - T_{EE}) \left[ C \sum_{t=0}^m \frac{a_t}{(1 + K)^t} - L[PVIFAD(K, n)] \right] \tag{4}$$

Observe that the RHS of equation (4) is the product of two factors. The first factor is the amount by which the lessor's tax rate exceeds that of the lessee, whereas the second factor is the amount by which the present value of depreciation allowances inclusive of any investment tax credit exceeds the present value of the lease payments.

If the lessor's tax rate exceeds that of the lessee, then the lease will be mutually beneficial only if the second factor is positive, i.e., the present value of the depreciation allowances exceeds the present value of the lease payments. The latter requirement is crucial and it is one that is uniformly overlooked in the existing literature.

For example, Ross et al. (2005) articulate the following argument: "The basic logic behind structuring a leasing deal makes a firm in a high tax bracket want to act as the lessor. Low-tax firms will be lessees, because they will not be able to use the tax advantages of ownership." Likewise, Thornton (1993) asserts that "lessors with high marginal tax rates are the clientele for owning the assets, and lessees with lower tax rates are the clientele for leasing them...both parties to the transaction could be made better off at the government's expenses. Miller and Upton (1976) conclude that lessors are entities specialized in the maximum utilization of investment tax incentives due to their higher tax rates. Finally, Damodaran (2001) argues that "the classic reason provided for leasing is that different entities face different tax rates. An entity with a high tax rate buys an asset and leases it to an entity with no or low tax rate. By doing so, the lessor obtains the tax benefits, which are greater because of its higher tax rate."

The overarching theme of the cited passages is the following. As a high tax bracket lessor values the right to claim depreciation on the asset more highly than the low tax bracket lessee, such a transfer of depreciation allowances should be effected via a lease. This transfer would redound to the benefit of both parties. But what this argument ignores and what equation (4) makes clear is the requirement that the present value of depreciation allowances exceed the present value of the lease payments. The intuition that underlies this requirement is clear. Given the lessor's higher tax rate, the lease payments



would generate a tax penalty for the lessor that exceeds the tax savings for the lessee. Thus, focusing solely on the tax consequences of the lease payments, signing the lease contract would increase the total tax liabilities of both parties.

Reintroducing depreciation allowances into the analysis, it is clear that a mutually advantageous lease is possible only if the present value of depreciation allowances exceeds the present value of the lease payments. In this case, the tax reducing effect of transferring the depreciation allowances from the lessee to the lessor exceeds the tax increasing effect of the lessee's payments to the lessor.

To be sure, the fact that a lease may fail to be mutually beneficial in a situation where the lessor faces a higher tax rate has not gone unnoticed in the literature. Lewellen et al. (1976) assert that "the tax effect can go either way." Similarly, Copeland et al. (2005) present a numerical example that "shows a benefit to the lessee given that the lessor's tax rate is higher, however this may not always be the case." Equation (4) highlights a second requirement that must be satisfied to ensure mutual benefit when the lessor's tax rate is higher than that of the lessee.

Equation (4) also clarifies under what conditions a lower lessor tax rate permits a mutually beneficial lease, *viz.* one where the present value of the lease payments exceeds the present value of the depreciation allowances. In this case, the tax penalty associated with transferring the depreciation allowances to the lower taxed lessor is more than offset by the tax benefit associated with the higher tax lessee making payments to the lessor. By ignoring this case of a lower lessor tax rate, the extant literature on leasing suggests that such a tax situation precludes the possibility of a mutually beneficial lease. Equation (4) demonstrates under what conditions a mutually beneficial lease is still possible notwithstanding the lower lessor tax rate.

#### 4. LESSOR ECONOMIES OF SCALE AND SCOPE

In this section, the potential of the lessor to exploit economies of scale and scope in the manufacture or acquisition as well as the disposition of the leased asset is investigated. Lewellen et al. (1976) have plausibly conjectured that "the lessor may be more active or skillful in dealing in the associated second-hand asset market; his specialized knowledge may give him an edge." In addition, Smith and Wakeman (1985) present lessor economies in asset acquisition that are unavailable to the lessee as an important non-tax rationale for leasing. This situation is algebraically depicted by the inequalities  $C_{OR} < C_{EE}$  and  $S_{OR} > S_{EE}$ . The lessor and the lessee are assumed to face the same tax rate, equal to  $T$ , and the lessee's cost of capital and the lessor's target rate of return equal a common value of  $K$ . Introducing these restrictions into equation (3) and simplifying results in the following.

$$NAL = (C_{EE} - C_{OR}) \left[ 1 - T \sum_{t=0}^m \frac{a_t}{(1+K)^t} \right] + (S_{OR} - S_{EE}) \left[ \frac{1}{(1+K)^m} \right] \quad (5)$$

As the second term of Equation (5) is positive by assumption, it is clear that for the situation envisaged here, a mutually beneficial lease is possible if the following inequality is satisfied.

$$T \sum_{t=0}^m \frac{a_t}{(1+K)^t} < 1 \quad (6)$$

The LHS (left hand side) of this inequality is the present value of the depreciation tax shields on a one-dollar investment whereas the RHS is the cost of the one-dollar investment. Thus inequality (6) may be reinterpreted as the requirement that the present value of depreciation tax shields falls short of the cost of the asset. This inequality is likely to hold as fiscal incentives for investment are almost never sufficiently generous to make the tax savings from investment exceed investment cost. For example, assuming a tax rate of 40%, the present value of the depreciation allowances would have to exceed two and a half times

the cost of the asset for inequality (6) to be violated. Thus, under these conditions, equation (5) is positive and a mutually beneficial lease can be structured.

## 5. CONCLUSION

By developing a single expression that captures the extent of mutual wealth gain in a financial lease, the conditions that lead to the feasibility of a lease are determined. The focus here is on the differences between the economic circumstances of the lessor versus the lessee, e.g. differential tax rates, which lead to the possibility of a mutually beneficial lease. In contrast to the extant literature, it is shown that a lessor tax rate that is higher than that of the lessee does not per se guarantee the feasibility of a lease, nor does a lessor tax rate that is lower than that of the lessee preclude the possibility of a mutually beneficial lease. The critical element missing in the existing literature is a comparison between the present value of depreciation allowances and the present value of lease payments. When the former exceeds (is less than) the latter, a higher (lower) lessor tax rate guarantees the feasibility of a mutually advantageous lease.

As well, it is shown that lessor economies of scale and scope that are unavailable to the lessee guarantee the feasibility of a mutually beneficial lease, under plausible assumptions regarding the present value of depreciation tax shields.

## REFERENCES

- Brealey, R. A., Myers, S. C. Marcus, A. J., Maynes, E. M., and Mitra, D. Fundamentals of Corporate Finance (2<sup>nd</sup> Canadian edition), McGraw-Hill, Ryerson, Toronto, 2003.
- Buckwold, W. J. Canadian Income Taxation: Planning and Decision Making (5<sup>th</sup> edition), McGraw-Hill, Ryerson, Toronto, 2001.
- Copeland, T. E., Weston, J. F., and Shastri, K. Financial Theory and Corporate Policy (4<sup>th</sup> edition), Pearson Addison-Wesley, Boston, 2005.
- Damodaran, A. Corporate Finance: Theory and Practice (2<sup>nd</sup> edition), Wiley, New York, 2001.
- Lewellen, W., Long, M. and McConnell, J. "Asset Leasing in Competitive Capital Markets", Journal of Finance, Vol. 31 (3), 1976, 787-98.
- Miller, M. and Upton, C. "Leasing, Buying, and the Cost of Capital Services", Journal of Finance, Vol. 31 (3), 1976, 761-86.
- Ross, S., Westerfield, R. W., Jaffe, J. F. and Roberts, G. S. Corporate Finance (4<sup>th</sup> Canadian edition), McGraw-Hill Ryerson, Toronto, 2005.
- Ross, S., Westerfield, R. W., and Jordan, B. D. Fundamentals of Corporate Finance (4<sup>th</sup> edition), Irwin McGraw-Hill, Boston, 1998.
- Scholes, M. S. and Wolfson, M. A. Taxes and Business Strategy: A Planning Approach Prentice-Hall, New Jersey, 1992.
- Smith, C. W. and Wakeman, L. M. "Determinants of Corporate Leasing Policy", Journal of Finance, Vol. 40 (3), 1985, 895-908.
- Thornton, D. B. Managerial Tax Planning, Wiley, Toronto, 1993.

# MOTIVES OF INTERNATIONAL JOINT VENTURES FORMATION IN INDIA: IDENTIFICATION OF LATENT RESOURCE BASED MOTIVES

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## ABSTRACT

*The study of IJV motives has been helpful in identifying a wide range of motives in different country contexts. However for many potential IJV stakeholders, the range of motives can be daunting. Many potential IJV parent firms prefer to make initial assessment based on a simplified set of motives. This study is an attempt to identify a simple structure of IJV motives that is easy to comprehend. Findings of IJV motives in India are subjected to factor analysis to achieve significant reduction in the range of important motives.*

**Keywords:** International joint venture, motives, factor analysis, and resource-based view

## 1. INTRODUCTION

The study of international joint venture (IJV) motives has attracted consistent attention in business literature. A wide range of motives have been either identified or proposed through studies conducted in different country settings (Tatoglu, 2000; Banai et al, 1999; Chan, 1996, Kale and Anand, 2001, Sharma 2007). While the cumulative findings are important for our understanding of IJV motives, some issues remain unresolved. For instance the IJV motives are often expressed in broad and generic terms. Many motives overlap and therefore present considerable challenges for IJV stakeholders in assessing the relevance of a large number of apparently similar motives.

This study attempts to address the difficulties of dealing with correlated multiple IJV motives. It is an attempt to identify a simple structure of IJV motives. Primary data for this study was obtained through an international survey of IJV parent firms operating in India. Respondents were asked to indicate the importance of various tangible and intangible resources as possible motives of IJV formation in India. The concept of 'resource' in this research is measured by using multiple indicants. The questionnaire identified a list of 31 possible resource-based motives, which were derived from the review of prior literature and discussions with key IJV stakeholders in India (Sharma, 2007). A seven-point, linear numeric scale was used to assess the intensity of agreement and/or importance of resources. Respondents were asked to indicate the levels of importance they attached to various tangible and intangible resources at the time of setting up of IJVs in India. The findings are based on 87 responses. The paper first provides a brief overview of the 'resource based view' (RBV). The aggregated responses of resource seeking motives are considered next. The research findings are simultaneously assessed in the context of the limited evidence provided by prior studies on IJV motives. The interpretation of the analysed data also makes use of in-depth interviews. The last section then explores the underlying factors.

## 2. RESOURCE BASED VIEW

The RBV has become an influential theoretical perspective in international business (Peng, 2001; Hitt et al., 2000; Wright et al. 2001). Spurred by the pioneering work of Penrose (1959) and adopted further by Wernerfelt (1984), Rumelt (1984) and Barney (1991), the resource-based view concentrates on the antecedent role of internal resources and considers firms as heterogeneous entities characterized by their unique resource bases (Barney et al 2001; Peng, 2001). The RBV acknowledges the link between firm resources and performance. It argues that success of strategic alliances such as the IJV depends upon the capacity of each partner to contribute valuable resources. Contrary to the views of strategic approach, competitive advantage according to RBV is derived from two major attributes of resources (1) heterogeneous resource control by firms and (2) imperfect resource mobility (Barney, 1991, 101). To operate successfully, most businesses require multiple resources to gain and sustain competitive advantage. IJVs are formed to achieve superior resource combinations that firms individually cannot achieve (Das and Teng, 2000). Physical assets alone rarely help a firm build sustainable competitive

advantage (Reed and DeFillippi, 1990). Businesses are increasingly reliant on intangible resources such as tacit knowledge of key stakeholders, intellectual property and special skills etc. The competitive advantage of a firm is built upon its unique and difficult-to-transfer resources combinations.

Often firms control a portfolio of strategic resources and may be prepared to contribute them to an IJV. Large organizations particularly have the capacity to provide a wide range of resources including finance, technology, and managerial expertise to other IJV partners. In return the prospective partners are expected to contribute either primarily property-based, knowledge-based or both types of resources to the IJV. The choice of an IJV therefore is conditioned by the desire or motive to access and share key resources of other IJV partners.

At the micro level, the demand for a particular resource is influenced by several resource characteristics: imperfect mobility, inimitability, and substitutability. IJV parent firms regularly examine the relevance of their own resource portfolios in the context of environmental factors including the market and competitor characteristics. A key objective is to assess how prospective IJV partners may assist in overcoming any resource deficit of parent firms. Firms with resources that are valuable, immobile, inimitable and lack substitutes are usually in high demand as potential partners both at home and in host countries. In brief, IJV parents seek resources that (1) they do not own and (2) consider critical for an IJV success.

## 2.1 Important Resource Motives

Consideration of the overall mean scores assesses resource importance. High level of agreement or **high mean score** for a specific resource in this study is interpreted to indicate that (1) the resource is perceived as an important contributor of competitive advantage, and (2) the respondents consider it as a significant motive of IJV governance structure in India. As an ex-post measure of resource importance, the high mean scores also suggest respondents' belief that other IJV partners have a resource portfolio capable of providing that resource in India.

**Motives relating to tangible resources (assets):** As expected the overall mean values in table 1 indicate that not all tangible resources are equally important for IJV parent firms operating in India. The composite scores on tangible resources are clustered in a narrow range of means (4.47 to 2.81).

**TABLE 1: OVERALL IMPORTANCE OF TANGIBLE RESOURCES**

Resources	N	Mean	Std. Deviation
Financial resources	87	4.47	1.964
Global communications network	87	4.46	2.145
Global distribution network	85	4.01	2.249
Office premises	84	3.90	2.290
Production facilities	85	3.88	2.422
Customer database	85	3.60	2.042
R&D facilities	86	3.56	2.344
Advertising and promotional infrastructure	87	3.30	1.918
Sales staff	86	3.26	2.115
Distribution warehouse	87	3.06	2.427
Storage facilities	85	3.00	2.182
Retail outlets	86	2.81	2.359

'Financial resources' and 'global communications network' are the two most important tangible resource-seeking motives. Banai et al (1999, 23) have reported 'accessing financial resources' as a key motive of

IJVs in developing countries. Overall importance of global communications and distribution networks signals the increasing desire of Indian IJVs to participate in global business activities. Since the economic liberalisation of 1991 Indian firms are aggressively exploring business opportunities in international markets. Many Indian firms have established business links in neighbouring countries within the SAARC region (Lal and West, 1997). The overall low importance of tangible resources that relate to the distribution function of marketing in India (sales staff, distribution warehouse, storage facilities, and retail outlets) is interesting and consistent with the findings and prior suggestions of Tatoglu (2000) and Glaister (1996).

**Motives relating to intangible resources (assets):** This research investigated the importance of a wide range of intangibles resources including skills, knowledge, capabilities, brand names, patents, access to technology, and contacts with key participants such as the trade unions, politicians and employees. Respondents considered a total of 19 intangible resources and table 2 provides details of the overall mean scores.

**TABLE 2: OVERALL IMPORTANCE OF INTANGIBLE RESOURCE MOTIVES**

Intangible Resources	N	Mean	Std. Deviation
Skills and competence of managerial staff	87	4.87	1.413
Knowledge of the best management practices	87	4.84	1.684
Knowledge of international customers	86	4.80	1.987
Knowledge of supplier practices	87	4.79	2.058
Production technology	87	4.55	2.415
Market research capabilities	86	4.37	1.708
Knowledge of buyer behaviour	86	4.23	2.274
Access well known brand names	86	4.14	2.126
Knowledge of market structure	87	4.09	2.532
R&D Capabilities	87	4.06	2.104
Knowledge of local rules	87	4.06	2.621
Access to patents	86	4.03	2.298
Knowledge of the competitors	86	4.03	2.313
Local contact in government	87	3.59	2.390
Skills and competence of production staff	87	3.53	2.307
Local political contacts	87	3.48	2.307
Advertising and promotion capabilities	87	3.46	2.016
Distribution technology	87	3.39	2.243
Trade union contacts	87	3.18	2.239

The range of mean scores for intangible and tangible resources is fairly similar (1.66 for tangible and 1.69 for intangibles). The two most important resources relate to (1) the skills and competence of managerial staff and (2) best management practices. The IJV parent firms seem to believe that access to competent managerial staff and application of sound management practices are particularly relevant for IJV success in India. The resource importance pattern is consistent with the arguments of Banai et al (1999) that IJV parents, particularly from developing countries, seek finance and managerial talent from other partners. The other important resources relate to the knowledge of international customers and supplier practices in India. This is also in line with the suggestions from the resource-based literature. Knowledge as an intangible resource is often socially embedded and therefore difficult to imitate.

There is no clear pattern or grouping of less important resources indicated by the overall scores. The limited importance of two 'contact-based' resources: trade unions and local politicians are of particular interest. It is generally assumed that 'contacts' with government officials, politicians and unions are important for successful operations in India. 'Contact' based resources are socially embedded and often lack strategic substitutes in the short time frame. The low importance is therefore difficult to explain. Access to 'distribution technology' is not seen as a critical resource in India. This is consistent with the low importance reported earlier in table 1 for corresponding tangible resources associated with the distribution function. In addition to the mean scores, frequency distribution confirms the above pattern of resource importance. The resource importance indicated by means and frequencies is fairly consistent.

### **3. DATA REDUCTION**

The statistical analysis of overall responses has been helpful in isolating a set of important resources. The resource motives are however fairly extensive and dispersed. Based on mean score of  $>4.00$ , a total of 16 resources emerge as important motives of IJV parents. While this provides useful insight into IJV motives in India, the simultaneous interpretation of the entire range of motives is quite challenging for many prospective firms that are either small or have no prior international business experience. The overall responses are therefore assessed for possible resource structure that is less complicated and simpler to comprehend. Factor analysis is commonly used to reduce a large number of variables into a smaller set of underlying factors that summarize the information and trends contained in the variables (Coakes and Steed, 2001, 155).

There are a number of assumptions that are essential for the application of 'principal components' (PC) and 'principal axis factoring' (PAF) methods of factor extractions. A minimum of 5 subjects is essential for each variable of factor analysis. The achieved sample size of 87 of this study does not fulfill the minimum requirement for all 31 resources to be considered simultaneously. To overcome this limitation, instead of performing factor analysis on the entire set of 31 resources, tangible and intangible resources categories were subjected to separate factor analysis. This section now looks into the application of factor analysis to identify common factors of tangible and intangible resources.

Factorability of several sizeable correlations is a key requirement of factor analysis. Kaiser-Meyer-Olkin Measure of Sampling Adequacy and Bartlett's Test of Sphericity assessed the factorability of correlations matrix and sampling adequacies. An examination of the correlations matrix suggested that matrix for both tangible and intangible resources was suitable for factoring with considerable correlations that exceeded the minimum recommended value of 0.3. Similarly Bartlett's Test of Sphericity was significant ( $p < .05$ ) and that the Kaiser-Meyer-Olkin measure of sampling adequacy were greater than the recommended value of 0.6 (0.701 for tangible and 0.831 for intangible resources). Similarly the measure of sampling adequacy suggested by anti imaging correlations matrix indicated that all measures of sampling adequacy were well above the acceptable level of 0.5.

Based on the eigenvalues, 4 factors each for tangible and intangible resources were extracted (eigenvalues greater than 1). The extracted factors explained more than 76% of tangible and 72% of intangible variance for these resource groups. The 'scree plots' also confirmed 4 factors for tangible and intangible resources respectively.

The initial factor outcome however indicated a complex combination of factors with many factor loading of less than 0.3. Also many resources had loadings on more than one factor, which required their arbitrary allocation to a specific factor and consequent difficulties in interpretation. To overcome these difficulties, correction techniques were implemented. Factors were rotated to achieve results that are easier to understand and interpret.

Varimax rotation of both tangible and intangible resources provided less complex factor loadings. Tables 3 and 4 indicate correlations between the resources and rotated factors. These matrices are different from correlations between un-rotated factors and resources. While substantial improvement was achieved with Varimax rotation, the rotated solutions still included several variables (5 tangible and 6 intangible resources) with loadings on two or three factors.

In order to minimize factor correlations, oblique ration (direct oblmin) procedure was also applied. While there was some improvement in terms of a reduction in multiple loading of factors, the solution was still not entirely satisfactory in providing a neat and exhaustive distribution of variables. The unequivocal statistical separation of factors was still not achieved as some factors, despite their significant eigenvalues, were spread over more than one factor.

**TABLE 3: ROTATED FACTOR MATRIX (A) (TANGIBLE RESOURCES)**

Resources	Factor			
	1	2	3	4
Distribution warehouse	.907			
Storage facilities	.867			
Retail outlets	.775			
Global distribution network		.905		
Global communications network		.833		
Financial resources		.641		
Customer database		.550	.330	
Advertising and promotional infrastructure			.710	
Sales staff	.502		.645	
Office premises		-.322	.427	.364
Production facilities	.471	-.301		.646
R&D facilities		.307		.593

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.  
a Rotation converged in 8 iterations.

After considering all factor extraction options, four relatively well-separated factors representing two tangible (factors 1 and 2) and two intangible (factors 3 and 4) are selected and labelled as:

1. Factor 1: **'Distribution infrastructure'** (factor 1 in table 3)
2. Factor 2: **'Operation infrastructure'** (factor 2 in table 3)
3. Factor 3: **'Knowledge of key participants'** (factor 1 in table 4) and
4. Factor 4: **'Management capabilities'** (factor 2 in table 4)

The four factors explain more than 55% of cumulative variance of tangible and intangible resources. However a large percentage of variance, particularly for resources such as advertising and promotional infrastructure, advertising and promotion capabilities, and distribution technology is not fully explained by these factors. The emerging factors suggest that resources importance in this study is driven by more

than one underlying resource structures. The factor analysis provides a partial yet significant statistical confirmation of common structure of tangible and intangible resources.

**TABLE 4: ROTATED FACTOR MATRIX (A) (INTANGIBLE RESOURCES)**

Resources	Factor			
	1	2	3	4
Knowledge of market structure	.960			
Knowledge of local rules	.928			
Knowledge of buyer behaviour	.911			
Knowledge of the competitors	.858			
Skills and competence of production staff	.790			
Local contact in government	.733			.653
Local political contacts	.714			.666
Trade union contacts	.687			.618
Knowledge of supplier practices	.561			
Skills and competence of managerial staff	.308			
Production technology		.840		
Access to patents		.802		
R&D Capabilities		.758		
Knowledge of the best management practices		.536	.494	
Advertising and promotion capabilities			.670	
Distribution technology			.632	
Market research capabilities			.564	
Knowledge of international customers	-.500	.336	.548	
Access well known brand names		.307	.421	

Extraction Method: Principal Axis Factoring. Rotation Method: Varimax with Kaiser Normalization.  
a Rotation converged in 5 iterations.

The current business environment provides an interesting context to consider these factors. It is widely accepted that since 1991 Indian economy has witnessed significant changes that have had a direct positive impact on foreign direct investment. Overall investment jumped from a meager Rupees 5.1 billion in 1991 to a staggering Rupees 77 billion in 2002 (India Investment Centre, 2007). The economic liberalization policy has removed the constraints of IJV formation (Lal and West, 1997). Over the same period the profile of IJV stakeholders has witnessed two distinct changes: (1) a large proportion of foreign firms come with no prior business experience in India and (2) in addition to global multi-national organizations, a large proportion of IJV parent firms are small with limited resources. The unprecedented FDI growth has also created new opportunities and challenges for businesses in India. Review of



literature and interviews with IJV parent firms in India highlight two major difficulties of doing business including: (1) chronic infrastructural limitations, (2) rampant corruption at various levels of government and public institutions. Despite the lure of Indian market, many IJV parent firms find their resource portfolio inadequate to operate independently. The four factors listed above provide justification and reflect the overwhelming desire of foreign firms to seek the resource clusters as a means of addressing the challenges. Many respondents believe that by joining hands with suitable IJV partners, they stand a much better chance of dealing with both infrastructure limitations and institutionalized corruptions. The four factors are valuable and lack strategic substitutes at least in the short term.

In conclusion, the findings are not intended to replace the comprehensive and detailed findings of resource motives in India. The four factors obtained through data reduction however provide additional information to prospective IJV partners. The knowledge of 4 important factors or resource cluster is helpful particularly for small and inexperienced potential IJV partners in addressing two interrelated issues: (1) relevance of their resource portfolio for IJV operations in India and (2) identifying suitable IJV partners with relevant resource to overcome the resource deficit. As IJV partners have mutual expectations of resource contributions (Hyder and Ghauri, 1989), clearly articulated resource expectations are likely to contribute to IJV stability and superior performance.

## REFERENCES

- Austrade (2004), 'Trade Watch' – [http://www.austrade.gov.au/ci\\_display/0,1257,ContentGroup%3Dcountryindust%26Cor.](http://www.austrade.gov.au/ci_display/0,1257,ContentGroup%3Dcountryindust%26Cor.)
- Banai, M., Chanin, M., and Teng, B., "Russian Managers' Perception of Prospective Russian-US Joint Ventures", *International Business Review*, Vol. 8, 1999, 17-37.
- Barney, J., "Firm Resources and Sustained Competitive Advantage", *Journal of Management*, Vol. 17, 1991, 99-120.
- Bullis, D., *Doing Business in Today's India*, Quorum Books: Westport, Connecticut, 1998.
- Coakes, S. J. and Steed, L. G., *SPSS: Analysis Without Anguish, Version 10.0 for Windows*, Wiley: Brisbane, 2001.
- Das, T. K., and Teng, B., "A Resource-Based Theory of Strategic Alliances", *Journal of Management*, Vol. 26 (1), 2000, 31-61.
- Fahy, J., Shipley, D., Eagen, C. and Neale, B., "Motives and Experiences of International Joint Venture Partners in Hungary", *Journal of Business and Industrial Marketing*, Vol. 13 (2), 1998, 155-65.
- Glaister, K. W., "UK-Western European Strategic Alliances: Motives and Selection Criteria", *Journal of Euromarketing*, Vol. 5(4), 1996, 5-35.
- Hitt, Michael A., Levitas, Edward, Arregle, Jean-Luc and Borza, Anca, "Partner Selection in Emerging and Developed Market Contexts: Resource-Based and Organizational Learning Perspectives", *Academy of Management Journal*, Vol. 43(3), 2000, 449-467.
- Hoskisson, Robert E., Eden, Lorraine, Lau, Chung Ming and Wright, Mike, "Strategy In Emerging Economies", *Academy of Management Journal*, Vol. 43 (3), 2000, 249-267.
- Hyder, A. S. and Ghauri, P.N., "Joint Venture Relationship Between Swedish Firms and Developing Countries: A Longitudinal Study", *Journal of Global Marketing*, Vol. 2(4), 1989, 25-47.
- India Investment Center (IIC), 'Country-Wise Foreign Investment Approved' [http://iic.nic.in/iic2\\_c.htm](http://iic.nic.in/iic2_c.htm), 2007.
- Kale, P. and Anand, J., "Effects of Market Liberalization of Joint Venture Contributions, Control, Stability and Performance: An Empirical Study of International JVS in India", *Academy of Management Proceedings*, 2001 IM: F1-F6
- Lal, B. and West, L. *Joint Ventures in India: Structuring and Managing for Success*, The Economist Intelligence Unit: Hong Kong, 1997.
- Peng, Mike W., "The resource-based view and international business", *Journal of Management*, Vol. 27 (6), 2001, 803.
- Penrose, E., *The Theory of the Growth of the Firm*, New York: Wiley, 1959.
- Peteraf, M., "The Cornerstone of Competitive Advantage: A Resource Based View", *Strategic Management Journal*, Vol.14, 1993, 179-91.

- Reed, R., and DeFillippi, R. J., "Causal Ambiguity, Barriers to Imitation, and Sustainable Competitive Advantage", *Academy of Management Review*, Vol. 15, 1990, 88-102.
- Rumelt, R. P., "*Towards a Strategic Theory of the Firm*", in *Competitive Strategic Management*, R. B. Lamb (Ed.), Prentice-Hall, Englewood Cliffs, NJ, 566-570, 1984.
- Tatoglu, E. and Glaister, K. B., "An Analysis of Motives of Western FDI in Turkey", *International Business Review*, Vol. 7, 1998, 203-230.
- Tatoglu, E., "Western Joint Ventures in Turkey: Strategic Motives and Partner Selection Criteria", *European Business Review*, Vol. 12 (3), 2000, 137-47.
- Transparency International (2004), 'Corruption Perception Index'  
[http://www.transparency.org/policy\\_research/surveys\\_indices/cpi/2004](http://www.transparency.org/policy_research/surveys_indices/cpi/2004)
- Wernerfelt, B., "A Resource-Based View of the Firm", *Strategic Management Journal*, Vol. 5, 1984, 171-180.
- Wright, P., Dunford, B., and Snell, S., "Human Resources and the Resources-Based View of the Firm", *Journal of Management*, Vol. 6, 2001, 701-721.

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## SKILL BASED PAY AND EDUCATIONAL OUTCOMES

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### ABSTRACT

*Skills based pay systems are a popular form of person-based, as opposed to job-based evaluation models. A concern often voiced about skills based systems is that they will lead to an overabundance of highly trained people at the top of a pay scale. This paper examines one example of a skills based system, the pay model used by public school teachers. The questions considered were whether there had been a growth in skills acquisition by K-12 teachers and if increased levels of teacher training produced tangible returns, in terms of student performance. This analysis compared state level findings from 1988 to 2002. It was determined that advanced educational attainment strongly affected pay levels but failed to yield higher student performance.*

**Keywords:** Skill Based Pay, Wage Effects, Productivity, Training

### 1. INTRODUCTION

The early, ground breaking work by Theodore Schultz (1961, 1963) and Gary Becker (1975) on investment in human capital established clear linkage between individual training and market valuation. People could, in short, invest in human capital formation and expect a positive return on those expenditures based on an enhanced stream of earnings. Thurow (1975) concluded that pay was not determined by individual skill so much as the job worth to the organization. These two perspectives are embraced, respectively by the person-based and job-based models of pay setting practices. This paper will focus on one branch of the person-based-approach, skilled based pay policies. The relationship between pay and some measures of organizational performance will be considered.

During the 1990's, some organizations were expressing discontent with traditional job based pay models. Those models often revolved around job evaluation and were deemed essential for creating internally consistent pay systems (Livernash, 1957). This practice had powerful elements of reliability and fairness (Schwab, 1980). In this format, a job is worth what it is worth, irrespective of who performs it. An alternative is the person based approach, where a job value may have considerable range depending upon the attributes of the job holder. Broad banding, which became an area of great interest in the late 1990's is a combination of traditional job based pay grades and person based rewards (Abosch, Hmorovic, 1998). Broad banding is somewhat more consistent with human capital theory in that the wage a person receives would grow with their skill. This assumes that training has an inherently positive effect upon productivity, since the human capital model argues that market wages rise directly with labor productivity.

The skill based pay model allows individuals to increase their income without changing jobs, by adding to their skill base (human capital). This type of pay system is not uncommon in the K-12 education field. Often people are given the opportunity to increase their pay by acquiring additional training, including an advanced degree. It is argued that the higher wages will be justified by performance associated with skill improvement (Southall and Newman, 2000; Gupta and Shaw, 2001). Frequently, the financial inducements are effective and employees seek more training. The result is an upward shift in the pay distribution, as employees move to the top of a pay scale. The question of whether or not this cost can be justified has been an interesting area of research. Parrent and Weber's work (1994) supports the idea of cost justification. Murray and Gerhart's study (1998) did not.

Public school teachers operate in an environment where skill pay base systems are routine (Milkovich and Newman, 2008). In thirty states and the District of Columbia, these systems are codified in collective bargaining contracts. The other twenty states outline these models more informally. Some research (Cabrini, 2002) suggests that union environments are a more favorable setting for such practices and yield positive organizational outcomes. This paper will consider four questions, with respect to these issues.

- 1) Has the number of teachers with Masters Degrees trended upward?
- 2) Is faculty unionism a factor in the use of skill based pay?
- 3) Can the level of faculty graduate training be seen as a factor for teacher pay levels?
- 4) Does advanced teacher training produce improved student performance?

## 2. THE SAMPLE

Analysis in this paper was done at the state level. State measures were included for 1988, 1990, 1994, 2000, and 2002. The source of these data is the *Digest of Educational Statistics*, U.S. Department of Education, National Center for Education Statistics. The reason for starting the sample in the year 1988 is that the data series detailing teacher graduate training commenced in 1988. The District of Columbia is also included, which brings the sample size to 255.

With respect to the first question to be considered, whether up not there is an upward movement in teachers seeking advanced training, Table 1 shows a fairly clear pattern. Although the increases are not huge, they are straightforward and consistent. The data, however, would not support the contention that in a skill based system, almost every employee moves to the top of the scale by acquiring supplemental training.

**TABLE 1**  
**PERCENTAGE OF K-12 TEACHERS WITH MASTERS DEGREES BY YEAR AND UNION STATUS**

	1988	1990	1994	2000	2002
Unionized	38.235	40.665	42.497	42.377	42.016
Not Unionized	36.160	38.820	38.040	38.010	37.857

Table 2 is related to the second question; do salaries move in some correspondence to training? The relationship between educational attainment and earnings seems far from perfect, although not nonexistent. Certainly there is an upward shift over time in both of these measures. A slightly more involved test should yield clearer conclusions

**TABLE 2**  
**AVERAGE SALARIES OF K-12 TEACHERS BY YEAR AND UNION STATUS**

	1988	1990	1994	2000	2002
Unionized	31,010	36,397	38,917	43,512	43,848
Not Unionized	26,768	30,767	34,131	38,030	38,467

### The Models to be Tested

The first issue to be addressed in the empirical analysis is the effect of advanced training on teacher pay. In viewing this topic, a model will be proposed that controls for some broader issues in pay determination. These would include things such general time trends and the amount of funding which schools receive. The inclusion of an aggregate spending variable should serve as a rough adjustment for cost of living factors across venues. Unionization is also considered. The resulting formulation then becomes:

$$(1) \quad \text{Salary}_i = b_0 + b_1 \text{Masters}_i + b_2 \text{Experience}_i + b_3 \text{Spending}_i + b_4 \text{Year}_i + b_5 \text{Unionization}_i$$

where:  $\text{Salary}_i$  = Average teacher salary in the state during the sample year  
 $\text{Masters}_i$  = Percentage of teachers that hold Masters degrees  
 $\text{Experience}_i$  = Average number of years of teaching experience  
 $\text{Spending}_i$  = Average level of spending per pupil in a state that year  
 $\text{Unionization}_i$  = 1 if teachers are allowed to unionize in a state  
 0 otherwise

A similar approach will be taken when examining the effect of training on educational outcomes. In this circumstance, the equation will be estimated three times, using three different measures of student performance: average SAT scores, average ACT and average scores on a math proficiency given to

eighth graders. A poverty variable is also included to adjust for significant factors not otherwise addressed (Reschovsky and Imazeki, 1998). The equation is then:

$$(2) \text{ Outcome}_i = b_0 + b_1 \text{Masters}_i + b_2 \text{Experience}_i + b_3 \text{Spending}_i + b_4 \text{Year}_i + b_5 \text{Poverty Level}_i$$

where: Poverty Level<sub>i</sub> = Percentage of families living below the poverty level in a state during that year

All other variables are defined as in equation (1).

### 3. RESULTS

Table 3 reveals that the individuals can expect to be rewarded for seeking and receiving additional formal education. The coefficient for graduate training is positive and highly significant. This factor retained its importance even when adjustments were made for overall spending patterns and time trends. The average level of experience shows a positive effect, although it was not very large.

**TABLE 3**  
**THE IMPACT OF TRAINING ON AVERAGE TEACHER SALARIES**

Variable	Coefficient
(Constant)	6533.900***
Percent of teachers w/ Masters degrees	100.558***
Average number of years experience	361.046
Average spending per pupil	2.634***
Year	693.207***
Unionization	657.159

Adjusted  $r^2 = 0.634$ ;  $F = 71.196$ \*\*\*

\* = significant at the .05 level

\*\* = significant at the .01 level

\*\*\* = significant at the .001 level

The coefficients for overall spending and time were also positive and significant. The findings suggest that skill based systems provide returns for individual training in both relatively high and low funding environments.

**TABLE 4**  
**THE IMPACT OF TRAINING ON SAT SCORES**

Variable	Coefficient
(Constant)	1038.867
Percent of teachers w/ Masters degrees	-1.149**
Average number of years experience	-0.503
Average spending per pupil	-0.013***
Year	11.183***
Poverty Level	-.044

Adjusted  $r^2 = 0.408$ ;  $F = 35.960$ \*\*\*

\* = significant at the .05 level

\*\* = significant at the .01 level

\*\*\* = significant at the .001 level

Tables 4, 5 and 6 detail the estimates generated for equation (2), which focuses on educational outcomes. Table 4 shows the results for SAT scores, Table 5 for ACT scores and Table 6 for a standardized mathematics test given to eighth graders. An upward time trend is exhibited for SAT and math proficiency scores suggesting that improvements are being made with respect to public education. Poverty levels seem to be a substantial factor with regard to ACT scores. Strikingly, the levels of instructor advanced training and per pupil funding do not exhibit positive effects upon student outcomes. The average level of teaching experience also failed to yield a substantial positive effect, with respect to

these outcome measures. The levels of explanation for SAT and Math proficiency scores were much higher than for the ACT variable.

**TABLE 5**  
**THE IMPACT OF TRAINING ON ACT SCORES**

Variable	Coefficient
(Constant)	20.179***
Percent of teachers w/ Masters degrees	0.006
Average number of years experience	-0.100
Average spending per pupil	0.001
Year	-0.023
Poverty Level	-0.014***

Adjusted  $r^2$  = 0.002; F = .391

\* = significant at the .05 level

\*\* = significant at the .01 level

\*\*\* = significant at the .001 level

**TABLE 6**  
**THE IMPACT OF TRAINING ON MATH PROFICIENCY SCORES**

Variable	Coefficient
(Constant)	254.129**
Percent of teachers w/ Masters degrees	0.007
Average number of years experience	0.698
Average spending per pupil	0.001
Year	0.582**
Poverty Level	0.026

Adjusted  $r^2$  = 0.080; F = 3.327\*

#### 4. CONCLUSION

This paper examined the usage of skills based pay in the public education system. It was found that over the last sixteen years, there has been a pattern of increased skill acquisition in the form of graduate training. This training was positively associated with teacher pay, as would be expected. The analysis suggests that unionization positively affects student outcomes and poverty levels have a negative effect. Increased instructor training was not shown to improve assessed student outcomes.

#### REFERENCES

- Abosch, Kenan S., and Hmurovic, Beverly, "A Traveler's Guide to Global Broadbanding," *ACA Journal*, 1998, 38-47.
- Becker, Gary S., Human Capital: A Theoretical and Empirical Analysis With Special Reference to Education, Chicago, IL: University of Chicago Press, 1975.
- Carini, Robert M., "School Reform Proposals: The Research Evidence", EPRU Archives, 2002, <http://epsl.asu.edu/epru/documents/EPRU%202002-101/epru-2002-101.htm>
- Gupta, N. and Shaw, J. D., "Successful Skill-Based Pay Plans," *The Executive Handbook of Compensation: Linking Strategic Rewards to Business*, ed. C. Fay, D. Knight and M.A. Thompson (New York: Free Press, 2001).
- Livernash, E. Robert, "Internal Wage Structure," *New Concepts in Wage Determination*, ed. George W. Taylor and Frank C. Pierson (New York: McGraw-Hill, 1957).
- Milkovich, George T., and Newman, Jerry M., *Compensation*, 8th Ed., New York: McGraw-Hill, 2005.
- Murray, B. and Gerhart, B., "An Empirical Analysis of a Skill-Based Pay Program and Plant Performance Outcomes," *Academy of Management Journal*, Vol. 41, 1998, 68-78.
- Parrent, K. and Weber, C., "Case Study: Does Paying for Knowledge Pay Off?" *Compensation and Benefits Review*, 1994), 44-50.

- Reschovsky, A. & Imazeki, J., "The Development of School Finance Formulas to Guarantee the Provision of Adequate Education to Low-Income Students, In W. J. Fowler, Jr. (Ed.) *Development in school Finance* 1997) Washington, DC, 1998, 121-148
- Schultz, Theodore W., *The Economic Value of Education*, Columbia University Press, New York, NY, 1963.
- Schultz, Theodore W., "Investment in Human Capital," *American Economic Review*, Vol. 51 (1), 1961, 1-17.
- Southall, Diana and Newman, Jerry, *Skill-Based Pay Development* (Buffalo, NY: HR Foundations, The Consortium for Public Research in Education at the University of Wisconsin, 2000.
- Thurow, Lester C. *Generating Inequality: Mechanisms of Distribution in the U.S. Economy*, Basic Books Inc., New York, 1975, 96-98.
- NCES, 1990, 1992, 1994, 1998, 2000, and 2002, *Digest of Educational Statistics*, U.S. Department of Education, National Center for Education Statistics.

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# THE WHO, WHAT, WHERE, AND HOW OF NON-FINANCIAL METRIC DISCLOSURE: AN EXPLORATORY QUALITATIVE EXAMINATION OF EUROPEAN MULTINATIONAL AND INDIAN COMPANIES' DISCLOSURE OF NON-FINANCIAL METRICS

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## ABSTRACT

*While it is common for companies to analyze both non-financial and financial data for internal decision-making, companies in the United States often choose to keep their non-financial metrics internal, avoiding public disclosure in their financial statements. Without a clear assessment of a company's financial and non-financial state of affairs, it is challenging at best to accurately value companies. However, a handful of European Multinational and Indian companies disclose such data using a combination of the Lev Schwartz (Lev & Schwartz, 1974) and Sveiby (1989, 1997) models. This phenomenon led us to ask why and how some (non-U.S.) disclose non-financial assets while their U.S. counterparts do not. Written in the early stages of a larger study of culture and non-financial metric disclosure, this article qualitatively analyzes the annual reports of six companies from three countries to examine which non-financial metrics they disclose and whether documented cultural differences (Hofstede, 1996) may impact disclosure. Specifically, we analyze the annual reports of one company from Denmark (PLS-Consult A/S), three companies from India (Bharat Heavy Electronics Ltd, Stell Authority of India Ltd, and InfoSys Technologies Ltd), and two companies from Sweden (Skandia AFS and WM-DATA AB). After presenting the findings of our study, implications for disclosing non-financial metrics are discussed.*

**Keywords:** Non-financial metrics, Intangible Assets, non-financial metrics disclosure, international accounting.

## 1. INTRODUCTION

Corporations, regulatory bodies, and professional associations are placing increasing importance on the long-term value of organizations. This requires taking a long-term perspective while analyzing traditional financial data (i.e., assets, liabilities, owners' equity, income, and expenses incurred during the reporting period) and non-financial data. In a special committee report issued in 1994, the American Institute of Certified Public Accountants (AICPA), stated that

"In response to increased competition and changes in their businesses, companies also are changing their information systems and the types of information they use to manage their businesses. For example, they are developing new performance measures often designed to focus on activities that provide long-term value and competitive advantage, including non-financial measures such as product development lead time and financial measures such as economic value added." (AICPA)

Similarly, the Securities and Exchange Commission (SEC) Chairman Cox recently stated to business leaders and investors that

"As the debate over guidance heats up, companies have already begun to change the way they communicate with shareholders. Some have abandoned quarterly [short-term] guidance in favor of annual projections [long-term], or none at all. Others are seeking new ways to draw investors' attention to longer-term strategy and value creation, stressing longer-term goals and nonfinancial measures, and laying out three-to-five-year strategic plans."

The current trend is toward taking longer-term approach to assessing value and incorporating non-financial metrics into the assessment process. In the next section we define non-financial metrics, present our research question, and introduce the six companies we're analyzing in this exploratory study of who, what, where, and how non-financial metrics are disclosed in annual reports.



## **2. WHAT DO WE MEAN BY NON-FINANCIAL METRICS?**

Non-financial metrics are the value drivers of the organization, representing the value of the company's workforce, its customer relations and its ability to innovate. In a special 2001 report, the Financial Accounting Standards Board (FASB) defined non-financial metrics as the indices, scores, ratios, counts and all other information that is not accounted for in primary financial statements (i.e., balance sheet, income statement and statement of cash flows) (Upton, 2001). These non-financial metrics address human resources, customers, technology and internal processes.

While International Financial Reporting Standards (IFRS) account for disclosing non-financial metrics, U.S. Generally Accepted Accounting Principles (GAAP) do not yet require this. Consequently, despite the importance of non-financial metrics, U.S. companies generally keep their non-financial metrics internal, avoiding public disclosure in their financial statements. Without access to these metrics, investors, stakeholders, researchers, and analysts have an incomplete data set. In sum, there is increased realization that non-financial data are important and should be valued.

However, international standards and U.S. GAAP may converge. The Securities and Exchange Commission (SEC) and FASB are bridging the gap between IFRS and GAAP. SEC Chairman Cox recently stated to an audience of investors and business owners that the two reporting standards are moving towards convergence (Dzinkowski, 2007).

Our curiosity regarding why IFRS leads GAAP regarding non-financial metric disclosure leads us to explore how and why some non-U.S. companies disclose non-financial assets while most of their U.S. counterparts do not. In order to address this question, we examine the 2005 annual reports of six non-U.S. companies that disclose non-financial metrics and explore whether cultural differences (Hofstede, 1997) might impact such disclosure.

Next, we introduce these six companies. Using Sveiby's (1997) model, we classify their disclosures into three categories: External Structure, Internal Structure, or Competence. We then end the article with an exploration of how culture may impact the decision to disclose and suggested future research in this area.

## **3. WHO DISCLOSES NON-FINANCIAL METRICS AND WHERE ARE THEY LOCATED?**

While other international companies are likely disclosing non-financial metrics by now, we chose to start our exploration with companies identified by Chandran's (2003) case study. Swedish organizations pioneered the theory of intangible assets. A small group of service companies and accountants developed divided intangible assets into three categories: customer capital, structural capital, and human capital ([www.sveiby.com](http://www.sveiby.com)).

Chandran (2003) identified six European Multinational and Indian companies who disclose non-financial data in their reports. These companies are PLS- Consult A/S, Bharat Heavy Electronics Ltd, Stell Authority of India Ltd, InfoSys Technologies Ltd, Skandia AFS, and WM-DATA AB. Table 1 summarizes each company. For an additional discussion of these six companies, please see (Culpepper & Smith, 2007).

With the exception of Skandia AFS, the remaining companies are knowledge-based, consulting-oriented, and relatively young (founded between 1954 and 1981). Skandia lists its core competencies as fund selection, concept development and market support. WM-Data, also from Sweden, is now part of Logica CMG group which provides IT solutions and consulting. Interestingly WM-Data initially focused on organizational development consulting, which is also consistent with a value for non-financial and/or human-focused measures.

While it can be expected that "new economy" knowledge-based companies such as consulting firms would more likely value their human assets as part of their non-financial metric disclosure, than would "old-economy" manufacturing firms. However, on its website, BHEL lists its greatest strength as its

**TABLE 1: SELECTED EUROPEAN MULTINATIONAL AND INDIAN COMPANIES DISCLOSING NON-FINANCIAL METRICS**

Name	Country	Founded	Industry
PLS-Consult	Denmark	1968	Management & I.T. Consulting
Bharat Heavy Electronics Ltd (BHEL)	India	1962	Engineering & Manufacturing
Stell Authority of India Ltd (SAIL)	India	1954	Steel manufacturing
InfoSys	India	1981	I.T. Consulting
Skandia AFS	Sweden	1855	Financial Consulting/Services
WM-Data AB	Sweden	1969	I.T. Consulting

“highly skilled and committed 42,600 employees.” (<http://www.bhel.com/bhel/about.htm>). SAIL, the other manufacturing firm began reporting its human assets as non-financial metrics in the 1970s.

InfoSys leads all six companies in thorough disclosure of non-financial metrics. Explicitly adopting and combining the Lev & Schwartz (1974), Lev (2001), and Sveiby (1997) models as their bases for disclosure, InfoSys provides a prototype for non-financial metric disclosure. InfoSys is a leader in the area of disclosing non-financial metrics. Since 1993, they have disclosed these metrics using the Dr. Karl-Erik Sveiby intangible asset score sheet as a model. In the following section, we will briefly summarize these models, provide a brief history of InfoSys as our “exemplar” organization, and present the categorization scheme which guided our qualitative analyses of the companies’ annual reports.

#### **4. HOW DO THEY DETERMINE WHICH NON-FINANCIAL METRICS TO DISCLOSE?**

These six companies seem use frameworks such as the Lev Schwartz Model (Lev & Schwartz, 1974), Baruch Lev’s Value Chain Scoreboard, Sveiby’s Intangible Asset Monitor (1997) and/or the Balanced Scorecard (Kaplan & Norton, 1996) models to guide their articulation of non-financial metrics.

Baruch Lev developed the Value Chain Scoreboard. The scoreboard is an aggregation of non-financial metrics that are quantitative, standardized and measurable supported by empirical evidence. Lev categorizes these non-financial metrics into three sections; Discovery Learning; Implementation; Commercialization (Upton, 2001). The Discovery Learning section subdivides into Internal Renewal, Acquired Capability, and Networking. The Implementation section subdivides into intellectual property, technological feasibility, and the Internet. The Commercialization category is subdivided into Customers, Performance, and Growth Prospects. InfoSys cites this model.

Sveiby’s (1997) Intangible Asset Monitor non-financial metrics into three sections: external structure, internal structure, and competence indicators. External Structure focuses upon customers’ relationship with the organization. Internal Structure focuses on activities that develop system processes. Competence Indicators focus upon training and development, maturity, and contributions of the employees.<sup>1</sup> InfoSys uses this model.

Some criticize these models arguing that inconsistency in metric disclosure compromises the reliability of the data. Some investors worry about inability to analyze trends and compare changes in rates (Upton, 2001). Others argue that non-financial metric descriptions vary by organization and by industry which makes comparisons difficult. Finally, find it too costly to calculate non-financial metrics.

Despite these critiques, these models remain our best guides on valuing non-financial metrics. We have chosen to use Sveiby’s (1997) Intangible Asset Monitor to analyze the balance sheets of these companies. We make this choice for two reasons. First, the Internal Asset Monitor (IAM) appear to be well substantiated by research and used in industry. Secondly, while InfoSys employs both the Lev (2001) model and the Sveiby (1997) models, it explicitly uses Sveiby’s (1997) model as its basis for non-financial metric disclosure.

In the next section, we summarize the non-financial metrics disclosed by each of the six companies.

**TABLE 2: NON-FINANCIAL METRICS DISCLOSED BY THE COMPANIES**

<b>Country of Origin</b>	<b>Company Name</b>	<b>External Structure – Clients</b>	<b>Internal Structure – Organization</b>	<b>Competence - People</b>
Denmark	PLS-Consult A/S	--	<ul style="list-style-type: none"> <li>Intangible Assets; Software Licenses and Goodwill</li> </ul>	<ul style="list-style-type: none"> <li>Increase in number of employees 255 - 307</li> </ul>
India	Bharat Heavy Electronics Ltd (BHEL)	<ul style="list-style-type: none"> <li>Repeat Orders</li> </ul>	<ul style="list-style-type: none"> <li>Value Added</li> <li>Economic Value Added</li> </ul>	<ul style="list-style-type: none"> <li>Employee Count</li> </ul>
India	Steel Authority of India Ltd (SAIL)	--	<ul style="list-style-type: none"> <li>Value Added Products</li> </ul>	<ul style="list-style-type: none"> <li>Employee Count</li> </ul>
India	Infosys Technologies Ltd	<ul style="list-style-type: none"> <li>Clients Added</li> <li>Marquee Clients</li> <li>Sales per client</li> <li>Exports/Total Revenue</li> <li>Revenue derived by country</li> <li>Sales and Marketing expenses/revenue</li> <li>Client</li> <li>Concentration</li> <li>Client Distribution</li> <li>Days Sales Outstanding</li> <li>Repeat Business</li> <li>Brand Evaluation</li> </ul>	<ul style="list-style-type: none"> <li>Research and Development</li> <li>Technology Investment</li> <li>Sales per support staff</li> <li>General and Administration expense as a percentage of revenue</li> <li>Support staff as a percentage of total employees</li> <li>Average age of support staff</li> </ul>	<ul style="list-style-type: none"> <li>Total Employees</li> <li>Staff Education Index</li> <li>Average age of employees</li> <li>Value added - Software professionals</li> <li>Employees - No. of Nationalities</li> <li>Gender classification<sup>2</sup></li> </ul>
Sweden	Skandia AFS	<ul style="list-style-type: none"> <li>Number of contracts</li> <li>Savings/Contracts</li> <li>Surrender Ratio</li> <li>Points of Sales</li> </ul>	<ul style="list-style-type: none"> <li>Number of contracts/employees</li> <li>Administration expense/gross premiums</li> <li>Information Technology Expense/gross premiums</li> <li>Value Added Per Employee</li> </ul>	<ul style="list-style-type: none"> <li>Number of Employees</li> <li>Number of Managers</li> <li>Women Count</li> <li>Training expense/employee</li> <li>Human Capital Index</li> <li>Employee Turnover</li> <li>Average years of Service</li> </ul>
Sweden	WM-Data AB/Logica CMG	<ul style="list-style-type: none"> <li>Revenue by market sector</li> <li>Revenue from Outsourcing</li> <li>Brand Names</li> <li>Customer Contracts and Relationships</li> </ul>	<ul style="list-style-type: none"> <li>Process Improvement</li> <li>Internally Generated Assets (Development Costs)</li> <li>Value Added growth by employees</li> </ul>	<ul style="list-style-type: none"> <li>Increase in number of employees</li> </ul>

## 5. WHAT NON-FINANCIAL METRICS ARE THEY DISCLOSING?

As stated in the previous section, using Sveiby's (1997) Intangible Asset Monitor categories, we divided the non-financial metrics into three categories. External Structure (Customers), Internal Structure (Processes) and Competence Indicators (People). Each of these three categories is further divided into Growth/Renewal; Efficiency; Stability. Table 2 contains a summary of the non-financial metrics disclosed by the six companies.

## 6. WHERE ARE THE COMPANIES LOCATED AND WHY MIGHT CULTURE INFLUENCE THEIR DISCLOSURE DECISIONS?

Research (Hofstede, 1980, 1997) shows that countries vary widely in their cultural values. The impact of these patterns in value differences affects business. Hofstede (1980) found 5 dimensions along which nations' values differed. Power Distance (PD) refers to the level of acceptance that there are large power differentials in society. The higher the score, the more acceptance of large power differentials. Individualism-Collectivism (IDV) refers to the tendency to focus upon one's self and immediate family over the clan or society. A higher score indicates more individualism. Masculinity (MAS) measures the degree to which competition and assertiveness is valued in the country. A higher score means more masculine features are valued in the culture. Uncertainty Avoidance (UAI) measures the extent to which society's members are comfortable with ambiguity. The higher the score, the more they seek to avoid it. The last dimension, Long Term Orientation (LTO) measures whether the culture is more short-term oriented (e.g., the U.S.'s value of instant gratification) or more long-term oriented. A higher score on this dimension indicates that the culture focuses more on the long-term.

The six companies above represent three countries: Denmark (PLS-Consult/AS), India (SAIL, BHEL, & InfoSys), and Sweden (Skandia AFS, and WM-Data AB). The national scores of the three home countries (Denmark, Sweden, and India) vary (see Table 3). While India differs from Denmark and Sweden, all three differ from the U.S., which we provide only as a frame of reference.

**TABLE 3: HOFSTEDE CULTURAL VALUE SCORES OF DENMARK, INDIA, SWEDEN, & THE U.S.**

Country	PDI	IDV	MAS	UAI	LTO
Denmark	18	74	16	23	(Not Available)
India	77	48	56	40	61
Sweden	31	71	5	29	33
U.S.	40	91	62	46	29

Of the three countries, India scores closest to the United States, except on Individualism. According to Hofstede, India is far more collective and far more accepting of large power distances than the U.S. Those scores aside, Denmark and Sweden accept less power distance and far less masculinity than either the U.S. or India. Additionally, Sweden and Denmark are far more tolerant of uncertainty (not low uncertainty *avoidance scores*) than India or the U.S. Finally, both India and Sweden are more long-term-oriented than the U.S.

The three countries' lower uncertainty avoidance scores may be most telling in their disclosure of non-financial metrics, which researchers and analysts have admittedly found difficult to standardize and measure. InfoSys discloses the nationalities represented by its workforce. As a pioneer in off shoring, the company realizes that the cultural diversity of its employees is an asset. While access to various markets is a likely advantage (e.g., employees can work in many countries since they speak a multitude of languages), quantifiable advantages are hard to determine. An acceptance of such uncertainty, as well as the uncertainty of the consequences of disclosing this information, may be indicators that low uncertainty avoidance is valued by those disclosing non-financial metrics.

## 6. DISCUSSION AND CONCLUSIONS

Despite our small initial sample size, organizations used various terms to describe their non-financial metrics. This lack of standard definition makes it difficult to compare these data. Nonetheless, InfoSys

was clearly the leader among this group in disclosing non-financial metrics. Skandia, also seen as a leader, also provided useful information for investors. With respect to the Competence: People category, most companies focused on counting employees (number, turnover, etc.). Worth noting was InfoSys's disclosure of the number nationalities and gender ratio of its employees. We would expect that in our increasingly global marketplace more companies will disclose this culturally-related information. Having this information will help to make more clear any links between national culture and a company's disclosure decisions.

This article captures initial findings from phase one of a larger study. Broader studies must be done to capture all organizations that are currently disclosing non-financial metrics. Once this study is done, future studies of U.S. counterpart companies and U.S. industry leaders (e.g., Fortune 100) could provide useful comparative value information for investors.

There are two primary implications from this initial examination of non-financial metric disclosure. Theories of non-financial metrics offer promising ideas for researchers. There is very little operationalization of non-financial variables. Consequently, there are few empirical studies upon which to base research in this area. Managers can benefit from a systemic understanding of non-financial metrics. This understanding can improve their effectiveness in managing highly human driven organizations. Since methods of valuing companies are shifting to include more non-financial metrics, investors need to understand how to better value organizations: especially those that do not carry their professed most valuable asset on the balance sheet.

## REFERENCES

- AICPA, *Improving Business Reporting- A Customer Focus*. (New York: AICPA, 1994)
- Chandran, P. 2003. Human Resources Accounting In Infosys. ICFAI Center for Management and Research, HROB -031
- Culpepper, Anthony J., and Smith, J.G., "To Tell or Not to Tell? How does culture impact corporate disclosure of non-financial metrics?", *Graziadio Business Report*, 10 (3), 2007, <http://gbr.pepperdine.edu/>
- Dzinkowski, R. (2007). Saying Goodbye to U.S. GAAP. *Strategic Finance*. IMA (June)
- Hofstede, Geert., *Culture's Consequences: International differences in work-related values*. Beverly Hills, CA: Sage, 1980.
- Hofstede, Geert. *Cultures and Organizations: Software of the Mind*. London: McGraw-Hill, 1997.
- Kaplan, R.S., Norton, D.P. (1992). The Balanced Scorecard- Measures that drive performance. *Harvard Business Review*, January-February 1992.
- Kaplan, R.S., Norton, D.P. (1996). *The Balanced Scorecard*. Harvard Business School Press: Boston, Massachusetts.
- Lev, Baruch. *Intangibles: Management, Measurement and Reporting*. Washington: Brookings Institution. 2001.
- Lev, Baruch., & Schwartz, A. (1974). On the Use of Economic Concepts of Human Capital in Financial Statements. *Accounting Review*, 71.
- McCafferty, J. (2007). The Long View. *CFO*, 23(5), 48.
- Sveiby, Karl E. (1989). *The Invisible Balance Sheet*. Stockholm: Affarfgarblen. 1989.
- Sveiby, Karl E. (1997). *The New Organizational Wealth*. San Francisco: Berrett-Koehler. 1997.
- Sveiby, Karl E. The Intangible Assets Monitor, *Journal of HRCA*, 2(1), Spring 1997.
- Upton, Wayne. *Business and Financial Reporting: Challenges from the New Economy*. Financial Accounting Series. Financial Accounting Standards Board, No. 219-A. 2001.
- [www.annualreport.logicacmg.com/Downloads/logicacmg-annual-report-2006.pdf](http://www.annualreport.logicacmg.com/Downloads/logicacmg-annual-report-2006.pdf)
- [www.infosys.com/investor/reports/annual/Infosys-AR-07.pdf](http://www.infosys.com/investor/reports/annual/Infosys-AR-07.pdf)
- [www.ramboll-management.com/eng/sites/about\\_us/company\\_history.htm](http://www.ramboll-management.com/eng/sites/about_us/company_history.htm)
- [www.bhel.com/bhel/about.htm](http://www.bhel.com/bhel/about.htm)
- [www.sail.co.in/about-us.asp](http://www.sail.co.in/about-us.asp)
- [www.skandia.com/en/about/index.shtml](http://www.skandia.com/en/about/index.shtml)
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## THE EMPIRICAL INSIGHTS ON THE PROBABILITY OF WINNING: EVIDENCE FROM THE NATIONAL BASKETBALL ASSOCIATION (NBA)

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### ABSTRACT

*In the National Basketball Association (NBA), General Managers continually look to find a “winning formula”. This paper examines the key determinants of winning proportion in the National Basketball Association by using ‘General-to-Specific’ regression analysis with NBA season data sets (2003-2006). The empirical findings show that the most successful factor that contributes to winning is having an All-Defensive 1st Team member. Other factors such as the Coach of the Year and having the league’s top rebounder play an important part in winning. Surprisingly, some variables considered vital to winning are in fact insignificant factors towards team success. The highest spending team is not always the best team. In addition, the phrase, “Offense wins games, defense wins championships,” is not supported by the empirical tests. In fact, offense and defense appear to have similar effects on winning with neither one being more important than the other is.*

**KEYWORDS:** *General-to-Specific Model Selection, Sports Management, NBA Winning Proportion*

### 1. INTRODUCTION

While the National Football League (NFL) and Major League Baseball (MLB) have a revenue sharing system that helps many of the small market franchises in the leagues, because of its absence in the National Basketball Association (NBA), it should mainly rely on ticket sales that relates to other sources of revenue. Simply, winning more games and championships bring higher attendance rates as well as an increase in team revenues from concession and merchandise sales, sponsorships, and others in professional sports. In other words, professional franchises can increase attendance rates through winning more games and it assists in increasing sponsorship, media revenue, and merchandise and concession sales, and then increased revenues are sure to follow.

Even though MLB has a policy like a luxury tax to keep a competitive balance among the teams and to help small market teams, there is still an imbalance in terms of payroll to buy the best and most marketable players in the league. For example, the New York Yankee’s payroll dwarfs all other teams. However, the Yankees have won more World Series titles, 26, than any other team. Due to their past success, the Yankees generate more money than any other team in baseball. To the victors, go the spoils. Many believe those who spend more tend to win more. Our research results will help shed light on that school of thought. Interestingly, the Yankees have not won the World Series since 2000.

As stated earlier, successful teams pave the way to big paydays for owners. This paper focuses on what contributes to winning in the NBA regular season. Many of the NBA’s richest owners have the most successful teams. As will be shown though, high spending does not always lead to high win totals. Given this importance in the winning proportion of professional team sports in general, this paper examines the relationship between the winning proportion and various economic and NBA specific factors.

So what does contribute to a successful team? One could say simply, “It’s obviously the team with the best players.” Is that always true though? As proven each year in the NCAA Tournament, the perceived “best” team does not always win. When teams struggle, many fans blame the coach, not the players for the team’s failures. Is it always the coach’s fault? How much does a coach actually contribute to winning? It seems like each year a new stadium is being built somewhere in professional sports. Does having a new stadium that causes an increase in attendance really matter? If a team sells out at its home games, does it affect their performance and success rate? This paper investigates all of these questions and more. Most importantly, however, we will attempt to find the “winning formula”. It may be impossible to find a surefire route to winning, but some valuable information may be learned along the way. What is

the most important contributing factor to winning? What factors are overrated? What factors are underrated?

The rest of the paper organizes into the following sections: Literature Review, Empirical Framework and Data, Empirical Results and Conclusion.

## 2. LITERATURE REVIEW

Past research on winning in the NBA's regular season is not typically found. In most cases, studies are only conducted to find playoff success. However, teams cannot obtain a playoff seed if not for their success throughout the regular season. In "Blueprint for an NBA Championship Team", Dennis Gallagher (2006) examines the players on each of the last 49 NBA championship teams. Mainly, his examination is a focus on what type of individual players an NBA championship teams has. Gallagher looks at the preceding NBA regular season award winners and league leaders to compare their individual success to their respective team's success in the playoffs that season. The awards include MVP, league scoring leader, All-NBA 1st Team members, All-Defensive 1st Team members, and other individual awards and leaders the NBA honors each year. His findings favor NBA teams with All-NBA 1st Team and All-Defensive 1st Team players. Gallagher's results are given in the form of percentages. For example, 100% of the teams with the current MVP made the playoffs and advanced to the second round. However, Gallagher's research only deals with NBA championship teams and those who make it to the playoffs. Therefore, it ignores contributing factors to success in the regular season. Regular season success and its causes are ignored in past research.

A study performed by Funk, Ridinger and Moorman (2004) shows sports fans display antecedents of involvement that represented four higher order facets of involvement: attraction, self-expression, centrality of lifestyle, and risk. This is an important observation and one that would be of interest to one's managerial understanding of sports consumers. Through the combination of the Funk, Ridinger, and Moorman study and this paper, antecedents of involvement can measure fans that follow winning and non-winning teams. Analysis can now see whether the antecedents vary between winning and non-winning fans. If there is a significant difference in behavior between fans following winning and non-winning teams, managers can apply their team's success to consumer behavior. Through this paper's model, managers can predict sports consumer's behaviors based on our model that can predict win.

## 3. EMPIRICAL FRAMEWORK AND DATA

Following the literature that examines the determinants of winning proportion in NBA, the generic estimation equation for dependent variable, winning proportion (WIN), depicted in Equation (1): is

$$WIN = f(MVP, SIXM, DPOY, TSCOR, TPASS, TREB, TBLK, ROY, SALARY, ASMVP, COY, ATTEN, PEXPER, AGE, ANOT, ADOT, OEFFT, DEFFT) + \varepsilon \quad (1)$$

When the dependent variable, WIN, is a value of .500 in WIN, it would represent a 41-41 regular season record since an NBA season has 82 games. Table 1 defines each of the variables and gives the expected *a priori* sign. The data compiled includes all data from the 2003 season to 2006 season. Therefore, the data is pooled cross-section data including 116 observations. Most of data is from the two websites, [www.databaseBasketball.com](http://www.databaseBasketball.com) and [www.82games.com](http://www.82games.com). Player and team salaries in the NBA are from David DuPree.

The final form of model specifications based upon the general functional form, equation (1), was obtained from 'general-to-specific' specification search, which was popularized particularly by David Hendry (Hendry, 1995; Mizon, 1995; Hendry, 1993; Hendry and Mizon, 1990). Hendry and Krolzig (2001) recommended the use of multiple search paths in the process of moving from a Generalized Unrestricted Model (GUM) to a parsimonious specification. The reason for this recommendation is to avoid the risk of deleting an important variable that should ideally be retained in the final specification along any single search path and to minimize the risk of retaining as proxies for the missing variable with the result that the



final model is overparameterised. In addition, this approach is ideally suited to the analysis in sports-oriented functions because the underlying theory is sufficiently loose to admit a wide range of candidate regressors (Owen and Weatherston, 2002). Therefore, our final form of each team in the generic equation (1) is determined by parsimony, satisfactory performance against diagnostic tests incorporated with Schwarz criterion.

The independent variables that are used for this analysis attempt to cover a variety of possible aspects that may or may not play an important part in winning. In the original model, analysis is done on each variable thought to contribute to team performance. After finalizing the model, some variables conclude there is no effect on winning. In deciding which variables to select, past literature review and researchers discretion is applied.

Many of the independent variables measure individual player performance such as MVP, TSCOR, ADOT, and others. These variables allow analysis of individual performance and its correlation to team success. Other variables like PEXPER, AGE, and OEFFT, look to measure winning from a team perspective. In other words, how does the composition of the team and its efficiency effect winning? Independent variables for which individual players have no control over such as SALARY and ATTEN are also included. By including these variables, analysis looks at the effect owners (SALARY) and fans (ATTEN) have on team success. With this many variables to be used, it is hoped a combination of individual, team, fan, and owner controlled variables will result in a more accurate model which encompasses all possible reasons teams are or are not successful in a winning sense.

#### 4. EMPIRICAL RESULTS

We specify the final model by using various diagnostic test statistics on whether each equation passes the test for first-order serial correlation, functional form misspecification, and non-normality and heteroskedasticity of residuals. Each test statistic was evaluated at the 5% significance level. In addition, we use the Schwarz criterion to select the final model. Table 2 depicts the estimation results on the generic model and the final specified model through the 'general-to-specific' technique. The tests reported constitute residual tests and stability tests on the estimated coefficients, including a Lagrange multiplier (LM) test statistics for first order serial correlation; ARCH, an LM statistics of testing first order autocorrelated squared residuals with the null of no autoregressive conditional heteroscedasticity (Engle, 1982); Jarque-Bera statistic for testing normality; and RESET, the regression specification test proposed by Ramsey (1969), which tests the null of correct specification against the alternative that the residuals are correlated with powers of the fitted values of the regressand.

As might be expected in such a generously parameterized generic model, GUM, many of the coefficients are not statistically significant even though the General Unrestricted Model (GUM) passes the test for first-order serial correlation, functional form misspecification and heteroskedasticity of residuals. *TREB*, *COY*, *ADOT*, *DEFT* and *OEFFT* are the variables with coefficients significant at the 5% level and *SALARY* is statistically significant but almost zero. The signs of the statistically significant coefficients are consistent *a priori* expectations except for *TREB* and *PEXPER* among the significant coefficients.

The final specific model obtained by applying conservative diagnostic tests we report in TABLE 2. The specification of the final models is categorized into three different periods, 2003-2004 season, 2005-2006 season and the entire data set. Not surprisingly, the final form includes fewer variables and all the estimated coefficients are significant at 5% level. The variables selected in the final form for the three different periods include *TREB*, *COY*, *ADOT*, *DEFFT*, and *OEFFT*.

Considering the number of games in an NBA season, 82, each estimated coefficient in the final form can be used to figure out the degree of boosting the winning proportion. The All-Defensive 1st Team member (*ADOT*) consistently has the largest positive affect on the team winning, implying that the win total was increased by 5.6 games for the 2003-2004 seasons and 6.3 games for the 2005-2006 seasons. Overall, in the final model All-Defensive 1<sup>st</sup> Team Members added 5.8 wins per season. The *COY* coefficient

**TABLE 1: DESCRIPTION OF THE VARIABLES**

Variables	Description	Expected Sign
<i>MVP</i>	Most Valuable Player Dummy variable with 1=Yes 0=No	Positive
<i>SIXM</i>	Sixth Man of the Year Dummy variable with 1=Yes 0=No	Positive
<i>DPOY</i>	Defensive Player of the Year Dummy variable with 1=Yes 0=No	Positive
<i>TSCOR</i>	League's Top Scorer Dummy variable with 1=Yes 0=No	Positive
<i>TPASS</i>	League's Top Assister Dummy variable with 1=Yes 0=No	Positive
<i>TREB</i>	League's Top Rebounder Dummy variable with 1=Yes 0=No	Positive
<i>TBLK</i>	League's Top Shot Blocker Dummy variable with 1=Yes 0=No	Positive
<i>ROY</i>	Rookie of the Year Dummy variable with 1=Yes 0=No	Positive
<i>SALARY</i>	Team Salary	Positive
<i>COY</i>	Coach of the Year Dummy variable with 1=Yes 0=No	Positive
<i>ATTEN</i>	Total Home Attendance	Positive
<i>PEXPER</i>	Average Player Experience	Positive
<i>AGE</i>	Team's Average Age	Negative
<i>ANOT</i>	All-NBA 1st team member Dummy variable with 1=Yes 0=No	Positive
<i>ADOT</i>	All-Defense 1st team member Dummy variable with 1=Yes 0=No	Positive
<i>OEFFT</i>	Offensive Team Efficiency	Positive
<i>DEFFT</i>	Defensive Team Efficiency	Negative

Note: Efficiency is found by the formula  $((\text{points} + \text{rebounds} + \text{steals} + \text{assists} + \text{blocks}) - ((\text{field goals attempted} - \text{field goals made}) + (\text{free throws attempted} - \text{free throws made}) + \text{turnovers}))/\text{games played}$ . An efficiency rating of 100 per game is the basis for calculation in the model. The rating of 100 refers to the NBA average for team efficiency both offensively and defensively. For example, if the OEFFT coefficient is 0.054, win will increase by 0.054 if the OEFFT is 101. Simply put, to find the amount of change in win subtract 100 from the OEFFT or DEFFT used. The difference found multiplied by the OEFFT or DEFFT coefficient found in the final model. Therefore, teams desire a high offensive efficiency, above 100, and a low defensive efficiency rating, below 100.

equals 0.016 for the 2003-2004 seasons and increases to 0.084 the following two seasons. Once again, this is a large positive coefficient. The Coach of the Year (COY) adds 1.31 wins for the 2003-2004 seasons but it adds almost 7 winning games the following two seasons. In the final model, the Coach of the Year adds 4.26 wins per season. This shows that good coaching, along with good players, does play a large part in team success. The most surprising positive coefficient is *TREB* (Top Rebounder). This coefficient plays a larger role in team success than expected. In fact, in the 2003-04 seasons the league leading rebounder adds 3.11 wins. The following two seasons the league's leading rebounder adds an impressive 7.2 wins. In the final specific model, the league's leading rebounder adds 5.49 wins, the second largest positive coefficient found. Interestingly, the *MVP* (Most Valuable Player) coefficient is found to not significantly impact teams win totals. This suggests the Most Valuable Player award is given to the best player each year, not the player who is most valuable to team success. Also, Rookie of the Year (*ROY*) is not expected to increase the win total significantly in the final forms of model specification. This also suggests the award is given to the top rookie statistically and is not necessarily influenced by overall team success. It also shows that the NBA Draft does not specifically lead to improved team success in the immediate future.

There is also an interesting finding in the 2004-04 seasons. In these seasons, new variables are found to have a significant impact on winning which are not found to be significant at later dates. In the 2003-04 seasons, both the Sixth Man of the Year award (*SIXM*) and the league's top scorer (*TSCOR*) are found to significantly increase win totals. The Sixth Man of the Year recipient adds 3.03 wins to his team. Surprisingly, the same cannot be said about the league's top scorer. In fact, the model shows the league's top scorer had a negative effect on wins with his team losing 2.46 games per season. This stresses the concept of teams working together rather than relying on an individual star to score all the points.

**TABLE 2: OLS REGRESSION, DEPENDENT VARIABLE IS WIN**

Variable	Coefficient (t-stat)			
	General Unrestricted Model	Final Specific Model		
		2003-2004 season	2005-2006 season	2003-2006 Season
MVP	-0.020 (0.66)			
SIXM	-0.004 (0.19)	0.037 (17.22)		
DPOY	0.020 (0.82)			
TSCOR	0.001 (0.05)	-0.03 (2.54)		
TPASS	-0.011 (0.42)			
TREB	-0.062 (2.70)	0.038 (4.38)	0.09 (2.56)	0.067 (3.1)
TBLK	0.000 (0.04)			
ROY	0.013 (0.63)			
SALARY	0.000 (2.36)			
ASMVP	-0.000 (1.00)			
COY	0.056 (2.25)	0.016 (2.43)	0.084 (2.14)	0.052 (2.45)
ATTEN	0.000 (1.07)			
PEXPER	-0.013 (2.16)			
AGE	0.008 (1.76)			
ANOT	0.017 (1.08)			
ADOT	0.066 (5.00)	-0.068 (6.97)	0.077 (4.43)	0.071 (5.62)
OEFFT	0.027 (19.8)	0.028 (18.2)	0.026 (12.33)	0.028 (24.2)
DEFFT	-0.027 (19.0)	-0.027 (21.2)	-0.028 (14.04)	-0.027 (23)
R <sup>2</sup>	0.97	0.95	0.90	0.92
DW	1.61	2.11	2.41	2.10
REST	0.02	0.76	0.51	1.43
NRM	9.05	27.2	0.09	4.38
ARCH LM	0.96	0.15	0.33	0.17
W	1.20	0.42	0.68	0.47

Note: t-statistics in bracket.  $\Delta$  indicates first difference. REST is Regression Specification Error Test proposed by Ramsey (1969). NRM is the Jarque-Bera statistic for testing normality. ARCH LM is a Lagrange multiplier (LM) test for autoregressive conditional heteroskedasticity (ARCH) in the residuals (Engle 1982). W is a test for heteroskedasticity in the residuals from a least squares regression (White, 1980).

The team efficiency rate on defense and offense are roughly similar in their size and consistent with the expected signs. The TABLE 2 shows that "win" will decrease by about 0.027 for each 1-point increase in *DEFFT* per game and "win" will increase by 0.028 for each 1-point increase in *OEFFT* per game. As stated earlier, 100 points per game is the basis for *DEFFT* and *OEFFT*. For example, a team with a 101 *DEFFT* per game can expect "win" to decrease by 0.028. Teams looking to increase their win total by five games would need to decrease their *DEFFT* by 2.185 points per game assuming no change in *OEFFT*. Assuming no change in *DEFFT*, teams wanting to increase their win total by five games would need to

increase their offensive efficiency rating by 2.15 points per game. Statistical testing on the size of *DEFFT* and *OEFFT* shows that offense has a similar impact on “win”.

## 5. CONCLUSION

Given this importance in the winning proportion of professional team sports in general, this paper examines the relationship between the winning proportion and various economic and NBA specific factors. A generic estimation equation is proposed and the estimation is implemented through ‘general-to-specific’ OLS regression in order to minimize the risk of retaining as proxies for the missing variable in the model specification.

Empirical results show that coaching has the largest effect on team success resulting in adding from 3 to 7 wins per season of 82 games. Often times, four or five victories is the difference between making and missing the playoffs. Some variables such as attendance and salary that may have previously been considered important do not show any statistical significance in increasing winning proportion. This refutes the claim that the best teams spend the most money. Although selling out home games may be of importance to owners, it has no effect on the game outcomes.

Individual success is also found to not be as important of a factor towards winning as some may believe. Although the “team” concept will remain to be very important, its value probably lies in a psychological rather than physical sense. Simply put, each team must have a cohesive bond to work together as one, but teams must have great individual talents. Having an All-Defensive 1st Team member and the league’s top rebounder has a positive influence on “win”. However, past data shows the league’s top scorer in some examples has a negative influence on team wins. Teams with an All-Defensive 1st Team member can expect to have the greatest increase in “win” on an individual accolade basis. Many people consider rebounding to be a larger part of defense than offense in the game of basketball. Keeping this in mind and observing the impact All-Defensive 1<sup>st</sup> Team Members have on team success, one can conclude defense is more important to team success than offense. This strengthens the argument that offense wins games, but ultimately, defense wins championships.

## REFERENCES

- Database Basketball, "Awards Index", April 2006, [DatabaseBasketball.com/Awards](http://DatabaseBasketball.com/Awards).
- Database Basketball, "Leaders Index." April 2006, [DatabaseBasketball.com/Leaders](http://DatabaseBasketball.com/Leaders).
- Database Basketball, "Players Index." April 2006, [DatabaseBasketball.com/Players](http://DatabaseBasketball.com/Players).
- DuPree, David. "USA Today Salaries Database", *USA Today*, April 2006.
- Engle, R. and Granger, C., "Autoregressive Conditional Heteroskedasticity with Estimates of the Variance of U.K. Inflation", *Econometrica*, 50, 1982, 987-1008.
- Funk, Daniel, Ridinger, Lynn, and Moorman, Anita, "Exploring Origins of Involvement: Understanding the Relationship Between Consumer Motives and Involvement with Professional Sport Teams", *Leisure Sciences*, 26, 2004, 35-61.
- Gallagher, David. "Blueprint for an NBA Championship Team", April 2006; [www.82games.com](http://www.82games.com).
- Hendry, D. F., *Econometrics: Alchemy or Science?*, Oxford: Black Well Publishers. 1993.
- Hendry, D. F., *Dynamic Econometrics*, Oxford University Press, 1995.
- Hendry, D.F. and H.M. Krolzig, *Automatic Econometric Model Selection Using PcGets*, Timberlake Consultants Ltd, London, 2001.
- Hendry, D.F. and G.E. Mizon, "Procrustean Econometrics: Or Stretching and Squeezing Data" In: C. Granger (ed.), *Modeling Economic Series: Readings in Econometrics Methodology*, Oxford University Press, 121, 36, 1990.
- Mizon, G. E., "Progressive Modeling of Macroeconomic Time Series: The LSE Methodology, *EUI Working Paper*, ECO No 95/10, European University Institute, 1995.
- National Basketball Association, "NBA Player Survey Results", April 2006; [www.nba.com](http://www.nba.com).
- National Basketball Association, "NBA: Stats and Records Index", April 2006; [www.nba.com](http://www.nba.com).
- Owen, P. D. and C. R. Weatherston, "Uncertainty of Outcome and Super 12 Rugby Union Attendance: Application of a General-to-Specific Modeling Strategy", *University of Otago Working Paper*, June 2002.
- Ramsey, J. B., "Tests for Specification Errors in Classical Linear Least Squares Regression Analysis", *Journal of the Royal Statistical Society, Series B*, 31, 1969, 350-371.
- Sports Illustrated, "Harbingers of Fate." Jan 2006, April 2006; [Sportsillustrated.cnn.com](http://Sportsillustrated.cnn.com).
- White, Halbert, "A Heteroskedasticity-Consistent Covariance Matrix and a Direct Test for Heteroskedasticity", *Econometrica*, 48, 1980, 817-838.

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# PERSONALITY AND ATTITUDE TOWARDS KNOWLEDGE SHARING BEHAVIORS OF BANK OFFICERS IN THAILAND

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## ABSTRACT

*Knowledge sharing has been an importance to keep organizations' sustainable competitive advantages. From literature, the Big Five personality has strong influences on behaviors. As Theory of Reasoned Action (TRA) states that person's behavior is determined by his behavioral intention to perform that behavior and intentions are determined by his attitude towards behaviors. Hence this study examines the relationship between the Big Five personality and attitude towards knowledge sharing behaviors. The results indicate that some Big Five personality dimensions; Conscientious, Extraverted, Emotional stability and Openness to experience will be positively related to the attitude towards knowledge sharing behaviors. Thus, contributions, suggestions and limitations are also provided for further research.*

**Keywords:** Knowledge sharing; The Big Five personality, Attitude towards knowledge sharing behaviors.

## 1. INTRODUCTION

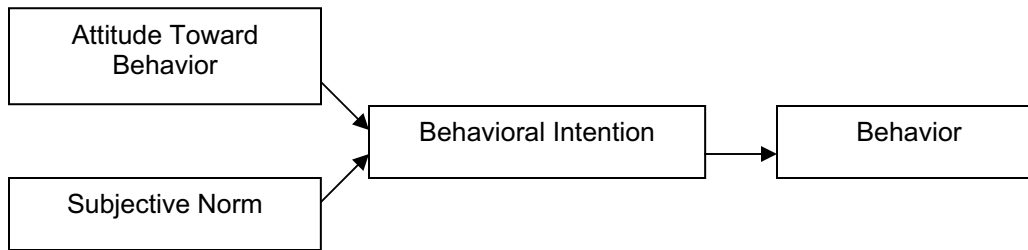
Knowledge sharing has been an importance to keep organizations' sustainable competitive advantages. It is one of the components in various concepts. Base on Resource-Based View of the Firm (Barney, 1991), it can be classified as a resource that is valuable, rare, inimitable and non-substitutable leading to competitive advantage. In organizational learning, it requires knowledge sharing among members (Lukas, Hult, and Ferrell, 1996). In knowledge management, it is a key factor for organization to build and maintain core competencies (Tienne, Dyer, Hoopes and Harris, 2004). These must be knowledge sharing in organization. However, there are various barriers to effective knowledge sharing (Szulanski, 1995). Specially, one of the most importance barrier is people's behaviors to share knowledge (Kwok and Gao, 2006; Ruggles, 1998)

In this study, we focus on Theory of Reasoned Action (TRA) that states person's behavior is determined by his behavioral intention to perform that behavior and intention is determined by his attitude toward behavior (Fishbein and Ajzen, 1975; Samieh and Wahba, 2007). Kwok and Gao (2006) state that persons are likely to act behavioral if they have positive attitude towards behavior. It is interesting to find what factors are influences to person's attitude toward sharing knowledge behaviors. The role of personality can explain variance in work attitudes (Judge, Heller and Mount, 2002). Therefore this paper focuses on the individual who are the source of knowledge. To identify the Big Five personality by relating to knowledge sharing. Recent studies state that the Big Five personality relates to attitudes and behavior in the work setting( Jong, Velde and Jansen, 2001).Due to the previous research studies, there are a few studies to clearly understand what and how the attitude towards knowledge sharing behavior is explained by the Big Five personality dimensions. The aim of present paper is to investigate the relationship between personality in terms of The Big Five personality dimensions and attitude toward knowledge sharing behaviors. To make a clear concept of knowledge sharing, what and how The Big Five Personality is relate to the attitude toward knowledge sharing behaviors.

This article is organized as follows. Section 1 illustrates the theoretical framework. Section 2 presents the theoretical development and hypotheses. Section 3 explains the research method. Section 4 gives the results and discussion and finally contributions and future directions for the research.

## 2. THEORETICAL FRAMEWORK

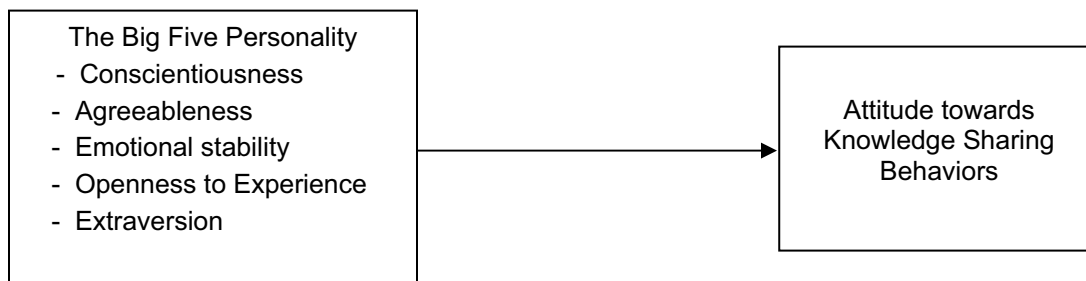
A versatile behavioral theory is called the Theory of Reasoned Action and model is developed by Fishbein and Ajzen (1975).They state the conditions that consist of this model 1) the use of attitudes and subjective norms to predict intentions and 2) the use of intentions to predict the performance of behavior.



**FIGURE 1: THEORY OF REASONED ACTION MODEL**

This theory describes that a person intends to act in a particular behavior is driven by his attitude toward a behavior and their concept of the subjective norm. Attitude toward a behavior is a belief that considers that behavior leads to an outcome as well as evaluation of the desirability of these consequences. If the outcome seems positive, one may intend to act in that behavior. Subjective norm is a person's perception that anyone believe individual who should do. Therefore people around one have influence to participate in that behavior. Finally, one's attitude toward a behavior can lead to an intention to act. This intention may lead to a particular behavior.

This paper focuses on the Big Five personality that is influence to attitude towards knowledge sharing behaviors. As previous work, there are extensively studies about external and internal variable (Kwok and Gao, 2006) such as extrinsic motivation, absorptive capacity, and channel richness. In the next section, we will discuss each of the variables of this study in detail in the following sections.



**FIGURE 2 CONCEPTUAL FRAMEWORK**

### 3. THEORETICAL DEVELOPMENT AND HYPOTHESES

#### 3.1 Personality and Attitude Towards Knowledge Sharing Behaviors

The five-factor model, often termed as the Big Five (Goldberg, 1990), adopts the trait theory. It has recently emerged in the personality literature and is a well-accepted personality dimension (Barrick and Mount, 1991). The Big Five personality dimensions are generally labeled; Conscientiousness, Agreeableness, Emotional stability, Openness to experience and Extroversion. The labels of each dimension may slightly differ among the researchers. In this study, we use the definitions in the following.

Conscientious is to people who tend to be organized, efficient, systematic, and achievement oriented (Dean, Conte and Blankenhorn, 2006). Person with low conscientious tends to be disorganized, careless and irresponsible. Agreeable is to people who tend to be cheerful, adaptable, and cooperative (Truxillo, Bauer, Campion and Paronto, 2006). Person with low agreeable tends to be uncooperative, short-tempered and irritable. A person high in emotional stability indicates lack of positive psychological adjustment (neuroticism) vs. emotional security. High scorers are low in anxiety and other negative affects, and have a high tolerance for stress, secure and calm (Gelissen and Graaf, 2006). Person with low emotional stability tends to be fear and embarrassment and greater reactivity and poorer in coping to encountered stressors (Costa and McCrae, 1992). Openness to experience is to people who tend to be active, imaginative, be aware of their own feelings, and have high intellectual curiosity (Costa and

McCrae, 1992). Person with low openness to experience tends to be resistant to change, less open to new idea and fixed in their ways. Extraverted is to people who tend to be active, gregarious, sociable, and assertive (Watson and Clark, 1997). Person with low extraverted tends to be quit, shy, and cautious and lack social skill.

Theoretically, a personality trait is rather to be lasting for a long time as a characteristic of an individual. It describes certain personality traits predict certain work-related behaviors and relate to a person's positive attitudes. The Big Five traits have strong influences on behavior (Costa and McCrae, 1992; Komarraju and Karau, 2005). Personality describes individual's differences in likelihood to behave in a particular way (Nyhus and Pons, 2005). Recent empirical work has found support for the hypothesis that an individuals learning orientation is relate to their personality (Busato, Prins, Elshout, and Hamaker, 2000; Duff, Boyle, Dunleavy and Ferguson, 2004). Prior studies suggest that Big Five factors are related to attitudes and behaviors ( Jong, Velde and Jansen, 2001). In addition, the Big Five traits are important predictors of interpersonal performance (Barrick, Parks and Mount, 2005).

From our literature review, it has not studied the relationship between Big Five personality dimensions and attitude towards knowledge sharing behaviors. Hence, we have been some studies closely to our context. In setting hypothesis, we study from these previous studies and analysis characteristic in each dimension.

Mount, Barrick and Stwar (1998) find individuals who score high on conscientiousness are typically dependable and responsible that point important predictors of interpersonal performance. Conscientiousness is positive experiences in social and achievement situations (Gutierrez, Jimenez and Hernandez, 2005). We believed conscientious person should have positive attitude toward sharing knowledge. We purpose the first hypothesis:

Hypothesis 1: Conscientiousness will be positively related to attitude toward sharing knowledge.

Agreeableness is positive experiences in social and achievement situations (Gutierrez, Jimenez and Hernandez, 2005). It is positive related to interpersonal interaction (Tsaousis and Nikolaou, 2001) also associated with positive beliefs about others (Truxillo, Bauer, Campion and Paronto, 2006). We believed agreeableness person should have positive attitude toward sharing knowledge.

Hypothesis 2: Agreeableness will be positively related to attitude towards knowledge sharing.

High Emotional stability persons tend to experience positive affects such as fear and embarrassment and greater reactivity and poorer coping to encountered stressors (Costa and McCrae, 1992). From characteristic in this dimension, high Emotional stability persons are easier to build attitude towards sharing knowledge than low emotionally stable persons. We believe that persons with high Emotional stability should have positive attitude towards knowledge sharing.

Hypothesis 3: Emotional stability will be positively related to attitude towards knowledge sharing.

Komarraju and Karau (2005) indicate openness to experience to enjoy exposure to new ideas and are likely to be engaged in the educational experience and may benefit from discussion and interactive learning. Finn (1997) states that openness to experience positive effects conversing with others. Openness to experience is positive related to interpersonal interaction (Tsaousis and Nikolaou, 2001). We believe openness to experience person should have positive attitude toward sharing knowledge.

Hypothesis 4: Openness to experience will be positively related to attitude towards knowledge sharing.

It is widely agreed (e.g., Botwin and Buss, 1989; McCrae & Costa, 1985) Extraversion has traits such as sociable, gregarious, talkative, and active (Botwin and Buss, 1989) is a valid predictor for social interaction (Barrick, Stewart, Neubert and Mount, 1998) that is a driver of knowledge sharing (Wah, Menkhoff, Loh and Evers, 2005). We believed extroversion person should have positive attitude toward sharing knowledge.



Hypothesis 5: Extraversion will be positively related to attitude toward knowledge sharing.

## **4. RESEARCH METHODS**

### **4.1 Sample and Procedure**

The sample for this study was taken from 300 bank officers who have worked in commercial banks located at 2 provinces, Roi-Et and Mahasarakham, Thailand. . We told all members in each bank that individual responses were confidential. This study were collected using questionnairesThe valid questionnaires were 293 respondents.

### **4.2 Variables**

All of the variables were obtained from the survey. Attitude towards knowledge sharing behaviors was a dependent variable. This construct was measured using the scale items adopted from Kwok and Gao (2005/2006) and Bassili (2006) in order to fit the context of this study. It consists of 6 items that employed can express bank officers' feeling, belief and opinion about how level they are and think sharing knowledge with others. Participants were asked to mark their opinion on the five point Likert scales ranging from 1 (the least strongly agreement) to 5 (the most strongly agreement).

Independent variable is the Big Five personality dimensions; Conscientiousness, Agreeableness, Emotional stability, Openness to Experience and Extraversion. Each dimension consists of 6 items. Bank officers were asked to mark their opinion in their personality in each dimension on the five point Likert scales ranging from 1 (the least strongly agreement) to 5 (the most strongly agreement).

As control variables, we employ three controls for which previous research has shown that they matter in knowledge sharing behaviors in organizations ( Wah, Menkhoff, Loh and Evers, 2005). They consist of sex, age and work experiences. Work experience was measure by number of vears that he/she has work in his/her organization now.

### **4.3 Method**

Factor analysis was firstly utilized to investigate the underlying relationship of a large number of item and to determine whether they can be reduced to a smaller set of factors. The factor analyses conducted were done separately on each set of the items representing a particular scale due to limited observations. With respect to the confirmatory factor analysis, this analysis has a high potential to inflate the component loadings. Hence, a higher rule-of-thumb, a cut-off value of 0.4, was adopted (Nunnally and Bernstein, 1994). All factor loadings are greater than 0.4 cut-off and are statistically significant. The Cronbach's alpha was used as the indicator of internal consistency. The internal consistency reliabilities for all constructs were ranging from .426 to .872. The constructs, the Big Five dimensions, were deleted two items from each constructs because Cronbach alpha were less than .35. Cuieford (1965) states that Cronbach's a value greater than 0.7 indicates high reliability but the reliability is acceptable when Cronbach's a value is between 0.7 and 0.35, or not acceptable when the Cronbach's a value is less than 0.35. Table 1 shows the results for both factor loadings and Cronbach alpha for multiple-item scales used in this study.

## **5. RESULTS AND DISCUSSION**

The results of analysis are summarized in Table 2. This table shows the descriptive statistics and correlation matrix for all variables. With respect to potential problems relating to multicollinearity, variance inflation factor (VIF) were used to provide information on the extent to which non-orthogonality among independent variables inflates standard error. The VIFs range from 1.08-1.93, well below the cut-off value of 10 recommended by Neter, Wasserman and Kutner (1985), meaning that the independent variables are not correlated with each other. Therefore, there are no substantial multicollinearity problems encountered in this study.

**TABLE 1**  
**RESULTS OF MEASURE VALIDATION**

Item	Factor Loadings	Cronbach Alpha
Conscientiousness	.71-.81	0.75
Agreeableness	.54-.69	0.44
Emotional stability	.63-.79	0.54
Openness to Experience	.51-.85	0.62
Extraversion	.56-.74	0.55
Attitude	.75-.83	0.87

The ordinary least squares (OLS) regression analysis is used to test the hypothesis.

**TABLE 2**  
**DESCRIPTIVE STATISTICS AND CORRELATION METRIX**

Variable	AT	CO	AG	EM	OP	EX	SE	AGE	WO
Mean	4.13	3.68	3.81	3.49	3.25	3.62	1.44	36.80	6.01
Standard deviation	0.58	0.67	0.58	0.54	0.62	0.53	0.50	0.94	1.05
Attitude toward Knowledge Sharing Behavior (AT)									
Conscientiousness (CO)	.387**								
Agreeableness (AG)	.348**	.536**							
Emotional stability (EM)	.391**	.458**	.513*						
Openness to experience (OP)	.378**	.392**	.376*	.472*					
Extraversion (EX)	.452**	.503**	.538*	.501*	.557**				
Sex (SE)	.091	.046	.042	.030	-.162**	-.006			
Age (AGE)	.007	.141*	.139*	.124*	.095	.044	-.197**		
Work experience (WO)	-.147*	-.116*	-.085	.059	-.063	-.113	-.140	.102	

\* p < .05

\*\* p < .01

According the results, the overall the relationship between the Big Five personality dimensions and attitude toward sharing knowledge behaviors is supported significantly. Adjusted R square (.268) indicates that the variance in the attitude toward knowledge sharing behaviors is substantially explained by the Big Five personality. Among the five dimensions relationships tested in the model, the link between Conscientiousness and attitude ( $\beta = .147$ ;  $p < .022$ ), the link between Extraversion and attitude ( $\beta = .208$ ;  $p < .001$ ), the link between Emotional stability and attitude ( $\beta = .140$ ;  $p < .019$ ) and Openness to Experience and attitude ( $\beta = .137$ ;  $p < .034$ ) are found significant. Whereas the link between Agreeableness and attitude ( $\beta = .027$ ;  $p < .687$ ) are not statistically significant. Considering the three hypotheses raised earlier in this study, Since the results state that Conscientiousness, Emotional stability, Openness to experience and Extraversion will be positively significant coefficients related to attitude toward sharing knowledge, therefore, H1 and H3-H5 is supported by the analysis. However, H4 are not supported.

**TABLE 3**  
**RESULTS OF OLS REGRESSION ANALYSIS**

Independent Variables	Models
Conscientiousness	.134 **

	(.056)
Agreeableness	.027
	(.067)
Emotional stability	.154**
	(.071)
Openness to Experience	.137**
	(.061)
Extraversion	.208 ***
	(.077)
Sex	.083
	(.063)
Age	-.310
	(.033)
Work experience	-.091*
	(.029)
Adjusted R square	(.268)
* p < .10	
** p < .05	
***p < .01	

## 6. CONTRIBUTIONS AND FUTURE DIRECTIONS FOR RESEARCH

### 6.1 Theoretical Contributions and Future Directions for Research

This study is intended to provide the understanding of The Big Five Personality that has significant influence on attitude toward sharing knowledge behaviors. This study provides important The Big Five Personality contributions expanding on previous studies that are a few studies in this issue. From the results, it has four dimensions to effect on attitude, it fuels new ideas for the relationship between the Big Five Personality and attitude.

According to the results of this study, the need for future research is apparent. Because this study finds that some of The Big Five Personality dimensions have no effect on attitude toward sharing knowledge behaviors. It is interesting for future research that is needed to find out how to encourage these dimensions to effect on the attitude towards sharing of knowledge behaviors. Although this study proposes a job design to moderate the Big Five Personality, but it is not significant. Inspired by this implication, it is meaningful to study the moderator of other potential variables such as leadership style, co-workers on attitude toward sharing knowledge behaviors.

### 6.2 Managerial Contributions and Limitations

Our findings suggest a number of implications for research and practice. Results from our study, Conscientiousness, Emotional stability, Openness to experience and Extraversion are positively related to attitude towards knowledge sharing behaviors. It attest helps managers identify and understand the personality of person in order to encourage person to conduct knowledge sharing. In addition, it has implications for selection for organizations that recognize that knowledge sharing is an effective approach to maintaining organizations' sustainable competitive advantage.

The limitations in this study, it was conducted in the context of commercial banking where employees were used as the sample. It is difficult to generalize the results obtained to other organizations. In this study, we only examined the effect of The Big Five Personality, it may not effect on attitude in these dimensions. In addition, this study is unable to control the effect of other variables on the attitude towards knowledge sharing behaviors. Therefore, it is expected that the current relationships between The Big Five personality and attitude toward sharing knowledge behaviors could vary substantially if other variables were controlled in the analysis.

## 7. CONCLUSION

This study attempts to investigate the relationship between personality trait and attitude toward sharing knowledge behavior. Knowledge sharing behavior is essential for business firms to develop competitive advantage. It can realize potential gains and is critical to survive and prosper in competitive environments (O'Dell and Grayson, 1998). The result of this study finds the relationship among conscientiousness, emotional stability, openness to experience and extraversion and attitude toward sharing knowledge behavior. However, agreeableness is not effect to attitude toward sharing knowledge behavior. This study will contribute significantly toward understanding how the personality promotes the sharing knowledge behavior in organization.

## REFERENCE

- Barney, J.B., "Firm resources and sustained competitive advantage", *Journal of Management*, Vol. 17, 1991, 99–120.
- Barrick, M.R. and Mount, M.K., "The big five personality dimensions and job performance: A meta-analysis", *Personnel Psychology*, Vol. 44, 1991, 1-26.
- Barrick, M.R., Stewart, G.L., Neubert, M.J. and Mount, M.K., "Relating member ability and personality to work-team processes and team effectiveness", *Journal of Applied Psychology*, Vol. 83(3), 1998, 377–391.
- Barrick, M.R., Parks, L. and Mount, M.K., "Self-monitoring as a moderator of the relationships between personality traits and performance", *Personnel Psychology*, Vol. 58, 2005, 745–767.
- Bassili, J.N., "Promotion and prevention orientations in the choice to attend lectures or watch them online", *Journal of Computer Assisted Learning*, Vol. 22, 2006, 444–455.
- Botwin, M.D. and Buss, D.M., "Structure of act-report data: Is the five-factor model of personality recaptured?", *Journal of Personality & Social Psychology*, Vol. 56, 1989, 988–1001.
- Busato, V.V., Prins, F.J., Elshout, J.J. and Hamaker, C., "Intellectual ability, learning style, personality, achievement motivation and academic success of psychology students in higher education", *Personality and Individual Differences*, Vol. 29, 2000, 1057–1068.
- Costa, P.T. Jr. and McCrae, R.R., *NEO PI-R: Professional manual: Revised NEO personality inventory NEO PR-R and NEO five-factor inventory NEO-RR1*, Odessa, FL: Psychological Assessment Resources Inc., 1992.
- Cruieford J.P., *Fundamental statistics in psychology and education (4th ed.)*, McGraw Hill, New York, 1965.
- Dean, M.A., Conte, J.M. and Blankenhorn, T.R., "Examination of the predictive validity of Big Five personality dimensions across training performance criteria", *Personality and Individual Differences*, Vol. 41, 2006, 1229–1239.
- Duff, A., Boyle, E., Dunleavy, K. and Ferguson, J., "The relationship between personality, approach to learning and academic performance", *Personality and Individual Differences*, Vol. 36, 2004, 1907–1920.
- Fishbein, M. and Ajzen, I., *Belief, attitude, intention and behavior: an introduction to theory and research*, Addison-Wesley, Reading, MA., 1975.
- Gelissen, J. and Graaf, P.M. de., "Personality, social background, and occupational career success", *Social Science Research*, Vol. 35, 2006, 702-726.
- Goldberg, L.R., "An alternative 'description if personality': The Big Five factor structure", *Journal of Personality and Social Psychology*, Vol. 59, 1990, 1216-1229.
- Gutierrez, J.L.G., Jimenez, B.M., Hernandez, E.G. and Puente, C.P., "Personality and subjective well-being: big five correlates and demographic variables", *Personality and Individual Differences*, Vol. 38, 2005, 1561–1569.
- Jong, R.D. de, Velde, M.E.G. van der and Jansen, P.G.W., "Openness to Experience and Growth Need Strength as Moderators between Job Characteristics and Satisfaction", *International Journal of Selection and Assessment*, Vol. 9 (4), 2001, 350-356.
- Judge, T.A., Heller, D. and Mount, M.K., "Five-factor model of personality and job satisfaction: A meta-analysis", *Journal of Applied Psychology*, Vol. 87, 2002, 530–541.

- Komaraju, M. and Karau, S.J., "The relationship between the big five personality traits and academic motivation", *Personality and Individual Differences*, Vol. 39, 2005, 57–567.
- Kwok, S.H. and Gao, S., "Attitude Towards Knowledge Sharing Behavior", *The Journal of Computer Information Systems*, (Winter) Vol. 46 (2), 2005/2006, 45-51.
- Lukas, B.A., Hult, G.T.M. and Ferrell, O.C.A., "Theoretical perspective of the antecedents and consequences of organizational learning in marketing channels", *Journal of Business Research*, Vol. 36, 1996, 233– 244.
- Mount, M.K., Barrick, M.R. and Stewart, G.L., "Five-factor model of personality and performance in jobs involving interpersonal interactions", *Human Performance*, Vol. 11, 1998, 145–165.
- Neter, J., William W. and Michael H.K., *Applied Linear Statistical Models: Regression, Analysis of Variance, and Experimental Design*, 2<sup>nd</sup> Edition, Homewood: Richard D. Irwin, Inc., 1985.
- Nunnally, J.C. and Bernstein, I.H. *Psychometric Theory*, McGraw-Hill, New York, 1994.
- Nyhus, E.K. and Pons, E., "The effects of personality on earnings", *Journal of Economic Psychology*, Vol. 26, 2005, 363–384.
- O'Dell, C., and Grayson, C.J., "If only we knew what we know: identification and transfer of internal best practices", *California Management Review*, Vol. 40 (3), 1998, 154–174.
- Ruggles, R., "The State of the Notion: Knowledge Management in Practice", *California Management Review*, Vol. 40 (3), 1998, 80-89.
- Samieh, H.M. and Wahba, K., "Knowledge Sharing Behavior From Game Theory And Socio-Psychology Perspectives", *Proceedings of the 40th Hawaii International Conference on System Sciences*, 2007.
- Szulanski, G., "Unpacking Stickiness: An Empirical Investigation of the Barriers to Transfer Best Practice Inside the Firm", *Academy of Management Journal*, 1995, 437-441.
- Tienne, K.B.D., Dyer, G., Hoopes, C. and Harris, S., "Toward a Model of Effective Knowledge Management and Directions for Future Research: Culture, Leadership, and CKOs", *Journal of leadership & Organizational Studies*, (Spring) Vol. 10 (4) 2004, 26-43.
- Truxillo, D.M., Bauer, T.N., Campion, M.A. and Paronto, M.E., "A Field Study of the Role of Big Five Personality in Applicant Perceptions of Selection Fairness, Self, and the Hiring Organization", *International Journal of Selection and Assessment*, (September) Vol. 14 (3) 2006, 269- 277.
- Tsaousis and Nikolaou, I.E., "The Stability of the Five-Factor Model of Personality in Personnel Selection and Assessment in Greece", *International Journal of Selection and Assessment*, Vol. 9 (4), 2001, 290-301.
- Wah C.Y., Menkhoff, T., Loh, B. and Evers, Hans-Dieter., "Theorizing, Measuring, and Predicting Knowledge Sharing Behavior in Organizations- A Social Capital Approach", *Proceedings of the 38<sup>th</sup> Hawai International Conference on System Sciences*, 2005.
- Watson, D. and Clark, L.A. *Extraversion and its positive emotional core*, In R. Hogan, J. Johnson, & S. Briggs (Eds.), *Handbook of personality psychology* (pp. 767–793), San Diego, CA: Academic Press. 1997.

# GLOBAL PROJECT IMPLEMENTATION IS AN EDUCATIONAL PROCESS

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## ABSTRACT

*In a recent panel, Scott Adams, the creator of Dilbert, has the pointy-haired manager asking Dilbert if his plan is consistent with the corporate strategy. Dialogue ensues that show neither of them even know the corporate strategy. The final panel has the pointy-haired manager expressing to the human resources cat, "There's no point in having a corporate strategy if you aren't going to pretend to follow it. Projects; if they are not the life blood of today's corporate strategy, then they are the blood vessels that carry the corporate strategy to fruition. As we are learning more and more, projects become the building blocks in the foundation of corporate strategies if they are implemented correctly. And, with more and more projects being conducted on the international stage in order to implement the strategies of more and more corporations around the world, global projects are becoming the norm for industry. According to Clifford Gray and Erik Larson, projects are viewed by industry as being domestic, overseas, foreign, or global. While most project implementation can benefit from prescribed processes, the intent of this paper is to provide a systematic process for global project implementation, one that follows both educational and international standards set forth by the Project Management Institute (PMI). By their very nature, global projects require specific actions to be taken in order to achieve optimal implementation. This need for understanding on how to implement global projects can be addressed by the following proposed process of implementation actions.*

## 1. INTRODUCTION

In a recent panel, Scott Adams, the creator of Dilbert, has the pointy-haired manager asking Dilbert if his plan is consistent with the corporate strategy. Dialogue ensues that show neither of them even know the corporate strategy. The final panel has the pointy-haired manager expressing to the human resources cat, "There's no point in having a corporate strategy if you aren't going to pretend to follow it." (Adams, 2007) Projects; if they are not the life blood of today's corporate strategy, then they are the blood vessels that carry the corporate strategy to fruition. As we are learning more and more, projects become the building blocks in the foundation of corporate strategies if they are implemented correctly. And, with more and more projects being conducted on the international stage in order to implement the strategies of more and more corporations around the world, global projects are becoming the norm for industry. According to Clifford Gray and Erik Larson, projects are viewed by industry as being domestic, overseas, foreign, or global. (Gray & Larson, p. 489) While most project implementation can benefit from prescribed processes, the intent of this paper is to provide a systematic process specifically for global project implementation that follows both educational and international standards as set forth by the Project Management Institute (PMI). By their very nature, global projects require specific actions to be taken in order to achieve optimal implementation. This need for understanding how to implement global projects can be addressed by the following proposed process of implementation actions:

- Identify the project need and feasibility as perceived by each country and culture.
- Select the project according to prescribed criteria that has buy-in from global stakeholders.
- Identify the project sponsor and the project manager with background and experience working in the global arena.
- Define the project charter and the preliminary scope statement according to global standards with cultural perceptions taken into account.
- Communicate the project implementation according to the prevalent communications vehicles utilized across the global community.

## 2. IDENTIFY THE PROJECT NEED AND FEASIBILITY AS PERCEIVED BY EACH COUNTRY AND CULTURE

In many global organizations today, a project is not formally implemented until after completion of a feasibility study, a preliminary plan, or some other equivalent form of analysis has been separately conducted, usually by a marketing or planning group. Possible alternatives to a proposed project must be

considered and this requires the acting organization to perform some form of alternatives analysis based on the organization's strategic and operational fit, return on investment (ROI) (Wideman), the marketability of the project's product or service over time, and a various other factors. There are different forms of project quantitative and qualitative selection models that can be used to aid the organizational project sponsor or sponsors in accomplishing this. These decision models often include generalized techniques (decision trees, forced choice, payback period, Q-sort, scoring models, and others) along with programmable algorithmic modeling such ones (Linear Programming, Analytic Hierarchy Process, Logical Framework Analysis, to name a few) (Wideman).

Many organizations today are continually faced with making difficult choices about alternative courses of action as a result of diverse global challenges to their goals and objectives. Each alternative requires a commitment of limited organizational resources and makes the identification of major competing alternatives a requirement prior to deciding on the most effective project for the organization. Alternatives might include:

- New products or services that are needed to ensure a competitive advantage
- Product improvements that must first be implemented for customer satisfaction
- Organizational systems that need to be upgraded or re-engineered in order to keep pace with technology demands or efficiency of process.

During the late 1990's and early 2000's, MCT Telecommunications implemented a firmware program that provided Digital Touch Modulated Frequency (DTMF) capability on existing switches as a marketing opportunity for existing business customers. DTMF is the capability for a business to have existing phones answer with, "Press one if you want..." While we now think of this as somewhat repulsive, back at the turn of the century this capability, once it was in place, was well received by our business customers. What worked well in the U.S. must work well elsewhere. So, we took this native capability to Canada as a foreign project (U.S. implementation in Canada by a U.S. project team). While the program (multiple projects across Canada for Stentor Alliance) had some issues with differing culture and environmental processes, the implementation of the DTMF capability was successful enough to provide the impetus for global implementation first into Europe and then into the Pacific Rim. I had the honor of managing these programs during the initiation phase and learned that native processes, and techniques will not work on a global level as they did in the native country.

Evaluating the best alternative is complicated by the diverse cultural or even conflicting political requirements placed on decision-makers by various international project stakeholders. Competing global demands represent different project choices for the organization to choose from before one of them can be authorized and project work be initiated. In order to properly identify the best project alternatives, the organization needs to:

- Solicit input from all stakeholders concerning potential projects to meet the organizational requirements including varying cultural and environment applications of project processes in the countries affected by the project.
- Develop a list of all potential projects with recommendations from each global stakeholder to capture differing cultural and political processes and nuances.
- Validate the list with all affected stakeholders to ensure completeness of cultural and political considerations.
- Prioritize the list based on maximizing the organizational opportunities while mitigating any risks resulting from differing cultural-processes processes.

"Everything that can be invented has been invented." --attributed to Charles H. Duell, Commissioner, U.S. Office of Patents, 1899 (Moncur).

### **3. SELECT THE PROJECT ACCORDING TO PRESCRIBED CRITERIA THAT HAS BUY-IN FROM GLOBAL STAKEHOLDERS**

An effective project selection process must be established in order to ensure it is in alignment with the organization's strategy and plans. Key stakeholders from all countries affected by the project must be

involved and buy into any resulting decisions. Finally, the selection decisions need to be made in a timely manner and immediately communicated to the affected stakeholders with explanation as to how and why the decisions were made. The key to effectively choosing among the various project alternatives is to build a selection benchmark capability that defines the project selection criteria, weight the importance of that criteria and addresses a minimum of three alternative options.

Each alternative project can then be objectively judged by representatives of the stakeholder groups according to its expected ability to satisfy project selection criteria. These criteria typically include such considerations as: the degree of strategic alignment, impact on the customer, impact on the business, market positioning, financial return, and feasibility. A benchmarking matrix can then be constructed, in which the alternative projects can be evaluated against the defined criteria.

Each alternative can be judged on a simple scale from low to high, multiplied with the weight factor and then totaled to determine its relative importance or priority to the organization. Michael Greer has developed a couple of templates along these lines that are used in industry today. These templates are called Demonstrating Project Need and Feasibility and Is This Project Authorized. (Greer, p. 55, 59) Organizations are then challenged to respond more quickly to the constantly shrinking windows of opportunity for their new products, services, or improvements in operational efficiency.

Entering the market before the competition provides an organization with many advantages to include increased market share resulting in greater profitability. The window of opportunity for assessing, evaluating, authorizing, and implementing new products or services often consumes a significant portion of the overall marketing process. Being first to market has a direct correlation to the timely completion of the initiation process. Selecting a project requires:

- Identifying project selection criteria provided by global stakeholders as they relate to individual native cultural and political environments.
- Ensuring acceptance of criteria by all project stakeholders.
- Creating a project selection matrix.
- Meeting with all global stakeholders to evaluate project alternatives.
- Calculating the highest value project alternative through a system of weights.
- Checking for acceptance for the project selection decision from all stakeholders

New [projects] will always introduce new [challenges]. (Tyler, p. 44)

#### **4. IDENTIFY THE PROJECT SPONSOR AND THE PROJECT MANAGER WITH BACKGROUND AND EXPERIENCE WORKING IN THE GLOBAL ARENA**

Organizations attempt to accomplish many things at the same time with limited resources. Competing demands make it difficult for project teams to get management attention and commitment of resources needed for their projects to succeed. The role of the project sponsor is to ensure timely decision making, advocate for needed resources, and overcome organizational conflicts and barriers to project performance. This requires that the sponsor be a member of the top management team of the performing organization with the ability to make key decisions and influence key stakeholder groups. The project sponsor is also responsible for appointing and coaching the project manager. Identifying the project sponsor requires:

- Identify the member of management, in the performing organization, with the greatest stake in the project outcome
- Make sure the candidate has a track record of success sponsoring similar projects
- Check with candidate to ensure availability and commitment to the project
- Get concurrence among members of the management team
- Announce sponsorship to key project stakeholders

One person with the necessary knowledge, experience, and skills should be appointed to serve as the project manager by the project sponsor. Studies have shown that the single factor that has the greatest impact on the success of any project is the selection and appointment of a suitable project manager. Key considerations in the decision include the candidates':



- Integration skills
- Leadership ability
- Project management experience
- Knowledge of the organization
- The ability to gain the cooperation of key stakeholders

The project manager should be identified and assigned as early in the project as possible, and should always be assigned before the actual execution of the project plan begins. The role of the project manager is directly tied to the type of organization structure chosen for the project, which is discussed in more detail in the Organizational Planning process. In the case of a projectized organization, team members report directly to the project manager. In the more typical case of a matrix organization, team members will have dual reporting relationships to their functional and project managers. In either case, the project manager will be held accountable for ensuring project success. As such, the project manager is responsible for leading the project team to achieve its objectives, ensuring effective communications with management and other non-project organizations, and making sure that project problems are identified and resolved in a timely manner. Appointing the project manager requires:

- Determining the qualifications needed to manage the project
- Identifying potential candidates that meet the qualifications
- Checking for potential availability with candidates' management (if within the performing organization)
- Evaluating potential candidates based on their suitability
- Checking for interest and commitment of the most suitable candidate
- Confirming selection with the candidate's manager (if within the performing organization)
- Announcing project manager appointment to project stakeholders

The degree of technical competence is inversely proportional to the level of management. (Tyler, p. 26)

## **5. DEFINE THE PROJECT CHARTER AND THE PRELIMINARY SCOPE STATEMENT ACCORDING TO GLOBAL STANDARDS WITH CULTURAL PERCEPTIONS TAKEN INTO ACCOUNT**

The implementation of the selected project is formally documented and communicated through the project charter. The project charter provides the project manager with the authority to apply organizational resources to begin project activities. Templates for the project charter may be standard to an organization, but where they are not, the document should include, as a minimum:

- Concisely define the purpose of the project with a justification statement that encompasses the input from all global stakeholders.
- Identify the specific deliverables that the customer or user is expecting.
- State the management objectives of the project to include when the project start and finish.
- Determine the priority of the project as compared to other ongoing organizational initiatives.
- Define the extent and limits to the project manager's authority.
- Establish the roles and responsibilities of the stakeholders that will provide resources to the project.
- Document any known assumptions and constraints that have the potential to impact the project especially those related to native cultural-political processes.
- Document the buy-in with signatures of the necessary stakeholders representing each of the locales where activities of the project will be conducted.

Michael Greer has a good template to use and generally follows these requirements but care must be given to ensure all chartering points are addressed (Greer, p.61). Additionally, Lynn Stuckenbruck developed a template for industry back in the early 1980's that is still used today (Stuckenbruck, p.222).

The promulgation of a preliminary scope statement is necessary prior to the implementation of the selected project. Whereas the charter is a communications document, external, for the most part, to the project team, the preliminary scope statement is a more detail communications vehicle that mainly addresses those project stakeholders that will be working on the project under the leadership of the

project manager. The preliminary scope statement in an abbreviated version of the full scope statement that will be developed later in the planning process to lock the project's scope and establish the baseline for execution. The preliminary scope statement is similar to the charter and addresses many of the same aspects of the project but it is more detailed in order to provide the potential team members and their supervisors the necessary information for their areas of responsibility and to allow for detailed resource allocation for the project. Obtaining buy-in from the global team members is a big step towards achieving lock-in with the full scope statement later in the planning process. As a minimum the preliminary scope statement should include:

- The purpose of the project with a justification statement.
- The specific deliverables to the customer or user with enough detail (usually the immediate activities required to complete the deliverables).
- The management objectives of the project to include when the project needs to start and finish as well as projected durations of each of the project tasks.
- The priority of the project compared with other projects and where the focus will be regarding scope, time, cost and quality.
- The extent and limits to the project manager's authority and responsibilities.
- The roles and responsibilities of the stakeholders working on the project (usually by skill set).
- Any known constraints and assumptions that impact the project especially focused on team member involvement. The assumptions should be supported with analysis and cover both explicit and implicit assumptions.

Document the buy-in with signatures of the necessary stakeholders representing each of the locales where activities of the project will be conducted.

Expect the best from your people. They will never fail to live up to or down to your expectations of them. (Tyler, p.21)

## **6. COMMUNICATING THE PROJECT IMPLEMENTATION**

The last step in the implementation process is to effectively communicate the project charter and project manager appointment to all affected organizations, globally. This paves the way for inter-organizational cooperation across international boundaries and cooperative interactions that will be required for the project to succeed. This communication should minimally take the form of a memo or electronic mail from the project sponsor to everyone who will contribute to or be impacted by the project. Further, the project sponsor and project manager should meet directly with all affected managers and key contributors in the affected organizations to obtain buy-in for the project. The communication of the project must additionally take into consideration the organization's linkage, reach, people and time according to John Thorp of DMR's Center for Strategic Leadership. (Thorp. p.26) Communicating the project authorization will require:

- Identify all the stakeholders and organizations potentially affected by the project.
- Formally communicate the project authorization in writing or electronically utilizing the common native communications vehicles.
- Follow-up by meeting with key project stakeholders in person to discuss expectations and concerns.

Communication, to be effective, must allow for a two-way flow. One way communication is defined as disaster. (Tyler, p.3)

## **7. CONCLUSION**

The biggest problem that can face any international project is not meeting the customer/user expectations: It has been widely said that delivering on time is the most important issue and that customers/users will sacrifice functionality in order to meet their deadlines. Imagine the project manager's ideal: a beautifully designed project plan, which will deliver, early and under budget, all the functionality the user has requested. Why does it seem never to happen that way? When customers initiate a project, they do so with a certain concept of the end result. If the project manager does his job

well, that idea will be translated into a charter and a scope document of some kind. However, once things get started:

- The customer starts to learn more, and realizes that what he originally asked for is not what he needs, so he initiates a scope change or a change request.
- The business needs or cultural-political processes emerge over the course of the project so that what was originally contracted for requires major changes.
- The marketplace changes and what was originally contracted for must be delivered early in order to be first to market even if the product has bugs or deficiencies.

With this in mind, the challenges we face in implementing global projects are to:

- Collaborate with all global stakeholders. Studies show the more all the stakeholders are involved in the process, the less likely it is that there will be surprises. Coordinate with all supporting global organizations. The more they are involved up front with the implementation of the project the greater the success will be. This may require a change in the original approach to project implementation and afterwards in the planning of the project but it will reduce the risk of major implementation changes as the project matures and,
- Understand all stakeholders' expectations. Requirements definition is the basis of scope definition but it must be conducted with an understanding of cultural differences and differing countries' business and political practices. Remember, customers do not define requirements. They define expectations, what they expect to see as a result of the project. All the organizations contributing to the project processes will define the requirements and the resources necessary to meet those requirements. Ensure that proper coordination and that all cultural, political, and business considerations are addressed before moving forward in the implementation process.

## REFERENCES

- Adams, Scott, Dilbert, June 10, 2007, <http://comics.com/comics/dilbert/index.html> .
- Gray, C. F. and Larson, E. W., Project Management: The Managerial Process, McGraw-Hill, New York, NY, 2006.
- Wideman, R. Max, Max's Project Management Wisdom. PM Glossary, June 6, 2007, <http://www.maxwideman.com/>.
- Moncur, Michael, The Quotations Page. Quotation #22779 from Classic Quotes, June 6, 2007, <http://www.quotationspage.com/quote/22779.html> .
- Greer, Michael, The Project Manager's Guide to Project Management, HRD Press, Amherst, MA, 1999.
- Tyler, M. Jeffery, True Sayings about Project Management, Webster University, St. Louis, MO, 1998.
- Stuckenbruck, Lynn C., The Implementation of Project Management: The Professional's Handbook, Addison-Wesley, Reading, MA, 1981.
- Thorp, John, The Information Paradox, McGraw-Hill Ryerson, Toronto, 1998.

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## IN SEARCH OF PROFITABLE GROWTH: STRATEGIC PRIORITIES PUT TO A META-ANALYTIC PERFORMANCE TEST

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### ABSTRACT

*Two global surveys on corporate strategic priorities report that CEOs consider sales- and market share growth key to boosting financial performance in the next years. In this paper, we take up this growth agenda and put executives' top two strategic priorities to a meta-analytic performance test. We seek to answer which strategic goal, if any, more likely promises the profitable growth firms are so desperately in search of today. For this purpose, we quantitatively meta-analyze the two relationships between absolute firm size and financial performance and between relative firm size and financial performance. We use Hunter/Schmidt-techniques and test causality versus mere association in the linkages in combination with accounting for the multidimensionality of the financial performance construct. To date, our analysis comprises 131 primary studies totalling 58,158 empirical observations. Results indicate that neither absolute size in terms of total sales, total assets, and/or total number of employees nor relative size in terms of market share causes accounting-returns. Thus, absolute- and relative firm size growth appear to not constitute valid strategic goals in themselves. Our findings also entail implications for the design of future meta-analyses in strategic management research.*

**Keywords:** Firm Size; Firm Growth; Market Share; Financial Performance; Meta-analysis.

### 1. INTRODUCTION

Growth is back to the top of corporate executives' agendas. Two global surveys of senior executives on their strategic priorities for the next years reveal that growth has superseded the focus on cost-cutting which dominated past years. The Global CEO Study 2004 conducted by IBM's Business Consulting Services reports that 80% of 456 interviewed CEOs believe that revenue growth is the most important path to boosting financial performance (IBM Corporation, 2004). Concordantly, the Economist Intelligence Unit's 2006 CEO Briefing – a research programme involving surveying and interviewing 555 senior executives from around the world – reports that market share growth and revenue growth have become executives' strategic priorities number one and number two. Cost containment has been relegated to position number three in the ranking (Palmer, 2006). In this paper, we take up the current growth agenda and put the top two strategic priorities – revenue growth and market share growth – to a meta-analytic performance test. What does it mean for firm profitability and firm value when senior executives direct their firms' operations by setting these strategic goals? What is the difference in impact on performance between pursuing revenue growth versus market share growth? And, which strategic goal, if any, more likely promises the profitable growth firms are so desperately in search of today?

We embed answering these questions into two quantitative Hunter/Schmidt-based meta-analyses that we conduct – the first one on the relationship between absolute firm size (total sales, total assets, total number of employees) and financial performance and the second one on the relationship between relative firm size (market share) and financial performance. Thus, we tackle two relationships that have been extensively researched (Markell, Strickland, and Neeley, 1988; Powell, 1992; Prescott, Kohli, and Venkatraman, 1986). While both absolute and relative firm size have commonly been associated with significant performance impacts (Buzzell, Gale, and Sultan, 1975; Zajac, 1990), the true nature of the linkages has traditionally been disputed, however (Gooding and Wagner, 1985; Szymanski, Bharadwaj, and Varadarajan, 1993).

Our study is methodologically unprecedented in that we use meta-analytic techniques to test *causation* versus *association* in the two relationships while simultaneously accounting for the multidimensionality of the performance construct (Combs, Crook, and Shook, 2005; Orlitzky, Schmidt, and Rynes, 2003). This is necessary simply because statistical association does not mean causation – a fact that has largely been

neglected by prior meta-analyses. In the absence of additional information, any effect size, such as a Pearson correlation, observed between two variables *a* and *b* can imply that variable *a* causes variable *b*, that variable *b* causes variable *a*, and/or that the relationship between variable *a* and *b* is caused by other unobserved variables influencing both. Prior meta-analyses on the size-performance relationships as well as the majority of meta-analyses conducted in the field of performance-predictor research actually fail to verify causality in the linkages examined. As a consequence, the results of these analyses are severely limited and theory development becomes difficult as often a number of theories does still fit the findings. In our study, we draw on different types of measurement strategies applied in primary research to separate causation from mere association. We accomplish this by testing for the moderating effects of temporal sequence of variable measurement on the nature of the absolute and relative size-performance relationships empirically observed.

Thus, we correct the relationships between absolute and relative firm size and financial performance for sampling- and measurement error and test for actual causality between the variables of interest. This allows us to identify the true nature of the size-performance relationships and to provide corporate executives concrete advice to prevent setting growth agendas to the detriment of the firm. To date, our two meta-analyses build on the information contained in 209 effect sizes from 131 primary studies that altogether total 58,158 empirical observations.

## 2. THEORETICAL BACKGROUND AND HYPOTHESES

Following a narrow definition, firm growth refers to increasing firm size – in absolute and/or in relative terms (Cronin and Page, 1988). Absolute firm size is usually measured in empirical research by total sales, total assets, and/or total number of employees and relative firm size by (average) market share. Market share is a measure of relative size as it indices a firm's size relative to competitors within a specific industry (Lenz, 1981). Following Zajac (1990: 225), “[absolute firm size has a] ... long standing reputation in the economics literature as a potentially important determinant of firm profitability (Porter, 1979)”. In effect, absolute firm size is one of the most analyzed context variables in strategic management research (Powell, 1992). With a view to relative firm size, some authors have equated market share with profitability (Buzzell, Gale, and Sultan, 1975; Henderson, 1979) which, in turn, led others to assert that market share is one of the primary factors explaining variations in profitability (Markell, Strickland, and Neeley, 1988). Moreover, as indicated by the two CEO surveys cited in the introductory section and further research (Armstrong and Collopy, 1996; Ferrier 2001; Song, DiBenedetto, and Zhao, 1999), corporate managers often believe both market share growth and sales growth to be associated with higher profits. Ultimately, the nature of the effect of absolute and relative firm size on financial performance will emerge as a function of the sum of benefits and costs attributable to firm size that actually materialize in practice.

In terms of absolute size, theory points at benefits such as shorter and longer term economies of scale (Haldi and Whitcomb, 1967; Scherer 1980; Steindl, 1945; Stigler, 1958), resource access and certainty (Pfeffer and Salancik, 1978; Williamson, 1975), investor benevolence (Weiner and Mahoney, 1981), and capital structure advantages (Samuels and Smyth, 1968). Simultaneously, absolute firm size is associated with increasing costs of organization. Coordination and motivation problems mount as the direction and monitoring of employees' actions becomes more difficult (Hart and Banbury, 1994; Lawrence and Lorsch, 1967). Increasing information asymmetries and opportunism jointly produce behaviours detrimental to overall performance, such as free-riding, shirking, and loafing. Additional management layers are created to cope with these problems but add to complexity (Chandler, 1962). Also, management being a scarce resource, larger firms run the risk of diluting managerial and other specialized resources (Besanko, Dranove, Shanley, and Schaefer, 2004). Increasing firm size may make senior executives increasingly dependent on external constraints (Boone and de Brabander, 1993). Larger companies are assumed to be characterized by inertial forces; people become resistant to change, and the discretion of senior executives diminishes (Hambrick and Finkelstein, 1987). Desirable behaviours such as entrepreneurship, innovativeness, and creativity may be lost. Eventually, larger firms may have to pay higher wages (Brown, Hamilton, and Medoff, 1990).

With a view to empirical research, a number of studies have found absolute firm size growth to be

important to profitability (e.g., Hall and Weiss, 1967; Higgins and Kerin, 1983; Sheperd, 1972). In addition, using meta-analytic techniques, Gooding and Wagner (1985) find absolute organizational size to be positively related to what they call 'productivity measures' and to be not significantly correlated to 'efficiency measures'. Gooding and Wagner use operationalizations such as total employees and total assets to reflect absolute firm size, measures such as, for instance, total profits and number of clients to indicate performance in terms of productivity, and, profitability measures, amongst others, to indicate performance in terms of efficiency. Most importantly, Gooding and Wagner also use the measure of total sales as an indicator of productivity and not as a measure of firm size. Using total sales as a dependent variable explains in part already their finding of a positive association between absolute size and productivity performance. Measures of total sales, total assets, and total number of employees have frequently been found to be highly correlated (e.g., Hitt, Hoskisson, Johnson, and Moesel, 1996), and, also our own meta-analytic data suggests a very strong mean correlation among the three measures ( $\bar{r} = 0.81$ ). Moreover, total profits is actually not an adequate performance measure as it varies to a greater degree with firm size than with firm performance (Weiner and Mahoney, 1981). In addition, however, Gooding and Wagner report a non-significant association between absolute size and performance in terms of efficiency measures. This finding may suggest the absence of any size-related scale economies. However, Gooding and Wagner do not verify causality in the linkages and do not include market-based measures of performance in their meta-analysis.

In general, the results of meta-analyses that fail to verify causality in the relationships examined are severely limited because association found does not imply the existence of a causal relationship. In the absence of additional information, any effect size, such as a Pearson correlation, observed between two variables *a* and *b* can imply that variable *a* causes variable *b*, that variable *b* causes variable *a*, and/or that the relationship between variable *a* and *b* is caused by other unobserved variables influencing both. A number of theories does still fit the findings (Hunter and Schmidt, 2004). In primary studies, researchers respond to the informational limitation inherent in mere cross-sectional associations by making increasing use of longitudinal and lagged variable measurements which allow for making causal inferences (Bergh, 1995; Keats, 1990). Wan (1998: 211), for instance, uses time lags in performance measurements to "capture the long term effect of strategy". The time lags usually used in strategy research range essentially from one to five years as these periods are deemed to reflect typical planning cycles (e.g., Geringer, Tallman, and Olsen, 2000; Gomez-Mejia and Palich, 1997; Grant, Jammine, and Thomas, 1988; Hill, Hitt, and Hoskisson, 1992; Keats and Hitt, 1988; Palich, Carini, and Seaman, 2000; Wan and Hoskisson, 2003). In our meta-analyses, we draw on different types of measurement strategies applied in primary research and distinguish types of effect sizes observed in terms of temporal sequencing of variable measurement. In so doing, we separate causation from mere association and overcome the limitation that is inherent in the design of large parts of prior meta-analytic strategy research.

Recall that there is conflicting theory on the true nature of the absolute firm size and financial performance relationship. As indicated by the corporate priority rankings presented in the introductory section, corporate managers, however, appear being convinced of positive performance caused by sales growth. For this reason, and, given the strong positive correlation commonly reported for total sales, total assets, and total number of employees as indicators of absolute firm size, we formulate the hypothesis that

*Hypothesis 1a. Absolute firm size is positively related to subsequent accounting-based performance.*

With a view to performance dimensions, accounting-based measures of corporate financial performance reflect historical performance, whereas market-based measures reflect shareholders' expectations of future performance. Thus, market-based measures may capture performance effects of firm size (of the expected kind) in concurrent measurements. While past performance may be a good predictor of future expected performance, and firm size may indirectly – through accounting-based performance – impact market-based performance (Hoskisson et al., 1993), the market may well have a different view of the performance effects of firm size (Lang and Stulz, 1994). Building on Combs, Crook, and Shook's (2005) meta-analytic evidence on the multi-dimensionality of financial performance and assuming that market-based assessments of performance reflect expected future cash-flows, we formulate the hypothesis that

*Hypothesis 1b. Absolute firm size is positively related to concurrent market-based performance.*

According to Cronin and Page (1988), largely as a result of the findings of the PIMS project (Profit Impact of Market Strategy) and often disappointing financial results in practice, firms' initial focus on sales growth strategies somewhat shifted towards embracing market share growth as corporate priority. Put differently, next to absolute firm size growth, relative firm size growth emerged as a promising alternative in terms of strategic goal setting. The PIMS data suggested, among others, that a ten per cent growth in market share could be expected to result in a five per cent increase in pre-tax return on investment (Buzzell, Gale, and Sultan, 1975).

In terms of relative firm size, theory that identifies market share as a cause of performance points at benefits in terms of cost efficiencies (Demsetz, 1973), market power (Montgomery, 1982), and product quality signalling (Smallwood and Conlisk, 1979). While the cost aspect of market share often goes unnoticed, some authors argue that those firms that increase market share at all costs will underperform (Armstrong and Collopy, 1996; Ferrier, 2001). In addition, Bloom and Kotler (1975) suggest that higher market share exposes firms to higher risks in terms of becoming the target of competitive and legal actions by competitors, consumers, and governments.

While indeed it is frequently held that market share has value in and of itself (Rumelt and Wensley, 1981), there is also a considerable part of the market share literature that suggests that market share has a very limited influence on performance, if it matters at all (e.g., Markell, Strickland, and Neeley, 1988). Some authors have found that the relationship between market share and profitability is made up of both a direct and a spurious component (Jacobsen, 1988; Jacobson and Aaker, 1985; Prescott, Kohli, and Venkatraman, 1986). Rumelt and Wensley (1981) go as far as arguing that the market share-performance relationship is entirely due to third variables simultaneously impacting on both variables, and that market share consequentially has no intrinsic value at all.

In fact, a considerable number of studies has found market share (Cronin and Skinner, 1984; Gale, 1972; Kwoka, 1979; Page, 1979; Schoeffler, Buzzell, and Heany, 1974; Shepherd, 1972; Venkatraman and Prescott, 1990) to be associated with profitability. Following Markell, Strickland, and Neeley (1988), at least three studies (Buzzell, Gale, and Sultan, 1975; Buzzell and Wiersema, 1981; Catto, 1980) report not only a strong positive relationship, but a causal one as well. And, according to Rumelt and Wensley (1981), the impact of market share on profitability has become what is virtually a dogma in the literature of strategic management. Finally, Szymanski, Bharadwaj, and Varadarajan (1993) find in a meta-analytic integration of the market-share literature that "[...], on average, market share has a significant [...] and positive effect on business profits". Accordingly, we test the hypotheses that

*Hypothesis 2a. Relative firm size is positively related to subsequent accounting-based performance.*

*Hypothesis 2b. Relative firm size is positively related to concurrent market-based performance.*

### **3. METHOD, SAMPLE, AND CODING**

Meta-analysis is an analysis of analyses (Glass, 1976). Integrating potentially conflicting findings on focal relationships from a multitude of primary studies, the goal of meta-analysis is to elicit true relationships between variables of interest. We employ the meta-analytic techniques suggested by Hunter and Schmidt (2004) as applied in Orlitzky, Schmidt, and Rynes (2003). Effect-size meta-analysis generates more valid results than narrative reviews or vote-counting methods. It allows to correct for effect-size variation caused by study artifacts such as sampling and measurement error (Hunter and Schmidt, 2004). Sampling error causes observed correlations to vary randomly from the true-score correlation (Koslowsky and Sagie, 1994; Orlitzky, Schmidt, and Rynes, 2003) and measurement error systematically attenuates observed correlations (Nunnally and Bernstein, 1994). The true-score correlation  $\bar{\rho}$  between firm size and performance is estimated by accumulating observed effect-sizes from primary studies, converting them to Pearson correlations if necessary and possible (Rosenthal and DiMatteo, 2001), and calculating a sample size-weighted mean correlation, which is subsequently corrected for an average attenuation factor (Hunter and Schmidt, 2004; Schmidt and Hunter, 1977). We correct for measurement error using artifact

distribution (Hunter, Schmidt, and Jackson, 1982) because primary studies in the majority of cases do not report reliabilities that could be used to correct correlations individually. Following Orlitzky, Schmidt, and Rynes (2003), we approximate reliabilities by interpreting the correlations between alternative measures of size and performance as coefficients of generalizability. As these coefficients are underestimates of reliability our analysis draws on conservative estimates. If sampling and measurement error account for 75% or more of the variance of observed correlations, the remaining variance is likely to be due to artifacts not corrected for (Hunter and Schmidt, 2004). In this case, the population of correlations can be considered homogenous. It is unlikely that methodological or substantive moderators have caused variation in the correlations, and results are generalizable across studies. Otherwise, an analysis of theoretically predicted moderators is warranted. Specific moderators are confirmed if true-score correlations differ meaningfully across meta-analytic subsets (e.g., Ketchen et al., 1997) and if, on average, a higher percentage of variance is accounted for by artifacts in subsets than in superordinate sets (Orlitzky, Schmidt, and Rynes, 2003). We start from the entire set of size-performance correlations, and whenever heterogeneity is detected, we conduct a hierarchical analysis of the theoretically derived moderators. We verify the significance of true-score correlations by means of 95% confidence-intervals. We establish the confidence interval around the mean true-score correlation using the standard error estimates provided by Hunter and Schmidt for artifact distribution meta-analysis (2004: 207).

The primary studies included in the analyses were identified in the databases reported by Gooding and Wagner (1985) and Szymanski, Bharadwaj, and Varadarajan (1993) and by means of electronic keyword searches using a combination of “size” or “market share”, “performance”, and “empiri\*” in Business Source Premier. To be included in the analysis, it was not necessary for the size-performance relationship to be the main focus of the analysis; in this way we sought to reduce potential problems of availability bias. Following Hunter and Schmidt (2004), there is evidence that availability bias is relatively unimportant in meta-analyses that integrate empirical results on the nature of relationships that are not the major focus in primary studies. To be included in the meta-analysis, studies had to report product-moment correlations between size and corporate accounting- and/or market-based performance. Following Combs, Crook, and Shook (2005), accounting-based measures of performance included, amongst others, return on assets, return on equity, return on investment, and return on sales, and market-based measures included Tobin’s Q, market-to-book ratios, and Sharpe-, Jensen-, and Treynor-indices. The analysis comprised English-language literature and was limited to material published by 2005. An array of studies that analyzed samples already used in other studies was not considered for the meta-analytic integration in order to avoid dependencies. The sample of correlations comes from 116 primary studies in the case of the absolute size-performance meta-analysis and from 20 primary studies in the case of the relative size-performance meta-analysis. To date, we accumulated 209 size-performance correlations that we included in the two meta-analyses. Whenever more than one correlation was reported between the same operationalization of size and operationalizations of performance within the same performance dimension, we averaged the correlations to reduce dependencies (Hunter and Schmidt, 2004). However, whenever more than one operationalization of firm size and/or more than one dimension of financial performance were used, we treated respective correlations as if coming from different samples. This introduces some non-independence into the data, but facilitates testing for the moderating effects of alternative operationalizations. This proceeding parallels other meta-analyses (e.g., Huber, Miller, and Glick, 1990; Orlitzky, Schmidt, and Rynes, 2003; Palich, Cardinal, and Miller, 2000). In addition to effect-size estimates, we collected from the studies sample sizes, temporal sequence of variable measurement, operationalization of size, and operationalization of performance. Sample sizes were coded as the number of firms and not as the number of observations (Camisón-Zornosa, Lapiedra-Alcami, Segarra-Ciprés, and Boronat-Navarro, 2004). Proceeding in this manner is particularly important when pooled time-series data with multiple observations per firm is included in the meta-analysis. Pooled time-series data nonetheless tends to overstate correlations; however, we included the studies of this type of analysis in our meta-analysis since a later countercheck indicated that their exclusion would have changed results only marginally. We coded temporal sequence of variable measurement into the group “prior performance” if measurement of performance preceded measurement of firm size; into “concurrent performance” if cross-sectional data was used; and into “subsequent performance” whenever performance measurement was lagged (time period is years). Operationalizations of size were coded into the three dimensions sales, assets, and employees, operationalizations of relative size into absolute and relative market share, and operationalizations of performance into the two dimensions accounting- and



market-based performance. We used a coding form that specified the information to be extracted from primary studies in order to reduce coding error (Lipsey and Wilson, 2001). The form was developed by reading a random subset of 10 studies.

#### 4. RESULTS

The meta-analytic results are shown in tables 1 and 2. Table 1 indicates the results of the meta-analysis of the relationship between absolute firm size (total sales, total assets, total number of employees) and financial performance. The first line of table 1 indicates for the entire set of 179 correlations and a total sample size of 44,653 empirical observations an observed mean correlation of  $\bar{r}_{obs} = 0.005$  with an observed variance of  $s_r^2 = 0.015$ . Sampling and measurement error in absolute firm size and performance operationalizations account for 26.64% of the observed variance, indicating the existence of at least one moderator. Correcting the observed correlation for these artifacts, the true-score correlation is  $\bar{\rho} = 0.008$  with a variance of  $s_\rho^2 = 0.032$ . As the confidence interval includes zero, the mean true-score correlation is not significantly different from zero.

Table 1 also shows that the relationship observed between absolute size and performance is a function of measurement strategy in terms of temporal sequence of variable measurement and of operationalization of firm size. The respective correlations differ across meta-analytic subsets, and artifacts explain more variance in subsets than in superordinate sets. Despite these moderating effects, the meta-analytic results on the subset correlations suggest that in the majority of cases the correlations between absolute firm size and performance are not significantly different from zero. In order to be able to test our hypotheses, we hierarchically break down the subsets of temporal sequence of variable measurement into performance dimensions. This proceeding is warranted as less than 75% of the variance in observed correlations is explained by artifacts. Results indicate that absolute firm size is not significantly correlated with subsequent accounting returns ( $\bar{\rho} = 0.021$ ). Thus, *hypothesis 1* suggesting that absolute firm size is positively related to subsequent accounting-based performance is rejected. In addition, *hypothesis 2* is rejected. Absolute firm size is not significantly related to concurrent market-based performance ( $\bar{\rho} = 0.029$ ).

Table 2 shows the results of the meta-analysis of the relationship between relative size (market share) and financial performance. The first line of table 2 indicates for the entire set of 30 correlations and a total sample size of 13,505 empirical observations an observed correlation of  $\bar{r}_{obs} = 0.144$  with an observed variance of  $s_r^2 = 0.023$ . Sampling and measurement error in relative firm size and performance operationalizations account for 19.52% of the observed variance. Correcting the observed correlation for these artifacts, the true-score correlation is  $\bar{\rho} = 0.272$  with a variance of  $s_\rho^2 = 0.065$ . As indicated by the confidence interval, the mean true-score correlation is significantly different from zero.

The meta-analytic results in table 2 also show that the nature of the relationship observed between relative size and performance is moderated by temporal sequence of variable measurement, operationalization of relative size, and operationalization of financial performance. Again we hierarchically break down the subsets of temporal sequence of variable measurement into performance dimensions in order to test our hypotheses. The results suggest that market share is not significantly correlated with subsequent accounting-based performance ( $\bar{\rho} = 0.093$ ). Thus, *hypothesis 2a* suggesting that relative firm size is positively related to subsequent accounting-based performance is rejected. However, market share is significantly associated with concurrent market-based performance ( $\bar{\rho} = 0.322$ ). *Hypothesis 2b* is confirmed, accordingly. Relative firm size is positively related to concurrent market-based performance. With a view to the meta-analysis as a whole, we find that despite the hierarchical moderator analysis, population heterogeneity continues to prevail in many subsets. This means that moderators other than the ones tested in the analyses at hand are contributing to the variance of observed correlations.

**TABLE 1**  
**OVERALL ABSOLUTE FIRM SIZE-CORPORATE FINANCIAL PERFORMANCE (CFP)**  
**RELATIONSHIP AND MODERATOR ANALYSIS<sup>A</sup>**

Relationship between...	K	N	$\bar{r}_{obs}$	$s_r^2$	$s_e^2$	$s_m^2$	% of $s_r^2$ explained	$\bar{\rho}$	$s_\rho^2$	95% C.I.
Size and CFP (entire Set)	179	44,653	0.005	0.015	0.004	0.000	26.64	<b>0.008</b>	0.032	-0.018 : 0.034
Size and Prior CFP	20	3,705	0.003	0.020	0.006	0.000	28.28	<b>0.006</b>	0.041	-0.083 : 0.095
Size and Concurrent CFP	121	32,524	0.005	0.015	0.004	0.000	25.58	<b>0.009</b>	0.031	-0.023 : 0.040
Size and Subsequent CFP	38	7,940	0.009	0.010	0.005	0.000	47.10	<b>0.015</b>	0.016	-0.055 : 0.025
Sales and CFP	72	17,042	0.006	0.009	0.004	0.000	45.79	<b>0.010</b>	0.015	-0.018 : 0.037
Assets and CFP	60	17,572	0.016	0.018	0.004	0.000	19.67	<b>0.028</b>	0.041	-0.079 : 0.024
Employees and CFP	47	10,039	0.039	0.018	0.005	0.000	26.85	<b>0.067</b>	0.038	0.011 : 0.123
Size and Accounting-based CFP	148	34,664	0.003	0.015	0.004	0.000	29.44	<b>0.005</b>	0.029	-0.023 : 0.032
Size and Market-based CFP	31	9,989	0.012	0.017	0.003	0.000	18.98	<b>0.019</b>	0.039	-0.050 : 0.089
Concurrent Accounting-based CFP	102	25,179	0.002	0.015	0.004	0.000	27.66	<b>0.003</b>	0.031	-0.031 : 0.037
Subsequent Accounting-based CFP	29	6,208	0.013	0.010	0.005	0.000	48.62	<b>0.021</b>	0.015	-0.023 : 0.065
Concurrent Market-based CFP	19	7,345	0.017	0.014	0.002	0.000	19.48	<b>0.029</b>	0.033	-0.053 : 0.110
Subsequent Market-based CFP	9	1,732	0.086	0.005	0.006	0.001	100.00	<b>0.145</b>	0.005	-0.145 : 0.145

<sup>A</sup> K: number of correlation coefficients meta-analyzed; N: total sample size;  $\bar{r}_{obs}$ : sample size-weighted mean observed correlation;  $s_r^2$ : observed variance;  $s_e^2$ : sampling error variance;  $s_m^2$ : measurement error variance;  $\bar{\rho}$ : mean true score r (corrected);  $s_\rho^2$ : true score variance; C.I.: Confidence Interval

## 5. DISCUSSION AND IMPLICATIONS

The results of the two meta-analyses suggest that, on average, neither absolute firm size nor relative firm size *cause* subsequent accounting performance. While absolute firm size is not correlated at all with financial performance, relative firm size in terms of market share is positively associated with concurrent market-based performance. From these findings we derive that any value intrinsic to absolute and relative firm size either does not exist, or, does, on average, not translate into superior accounting-returns in practice. Absolute and relative bigness per se do not systematically matter to accounting-based performance.

This means that absolute firm size does fall short of its long standing reputation as an important predictor of profitability. In fact, the true-score correlations found are as close to zero as one can imagine. Thus, there is no systematic positive impact on performance as has been argued by some authors. Increasing

**TABLE 2**  
**OVERALL RELATIVE FIRM SIZE-CORPORATE FINANCIAL PERFORMANCE (CFP)**  
**RELATIONSHIP AND MODERATOR ANALYSIS<sup>A</sup>**

Relationship between...	K	N	$\bar{r}_{obs}$	$s_r^2$	$s_e^2$	$s_m^2$	% of $s_r^2$ explained	$\bar{\rho}$	$s_{\rho}^2$	95% C.I.
Market Share and CFP (entire Set)	30	13,505	0.144	0.023	0.002	0.002	19.52	<b>0.272</b>	0.065	0.180 : 0.363
Market share and Prior CFP	21	352	0.000	0.011	0.009	0.000	76.10	<b>0.000</b>	0.000	0.000 : 0.000
Market share and Concurrent CFP	9	9,524	0.180	0.021	0.002	0.003	26.19	<b>0.340</b>	0.055	0.235 : 0.445
Market share and Subsequent CFP	9	3,629	0.049	0.017	0.003	0.000	17.73	<b>0.093</b>	0.050	-0.053 : 0.239
Absolute Market Share and CFP	19	10,918	0.169	0.021	0.002	0.003	23.08	<b>0.319</b>	0.057	0.212 : 0.426
Relative Market Share and CFP	11	2,587	0.037	0.017	0.005	0.000	27.91	<b>0.071</b>	0.044	-0.053 : 0.195
Market share and Accounting-based CFP	28	12,692	0.142	0.024	0.002	0.002	18.20	<b>0.269</b>	0.070	0.171 : 0.366
Market share and Market-based CFP	2	813	0.170	0.001	0.004	0.003	100.00	<b>0.322</b>	0.000	0.322 : 0.322
Concurrent Accounting-based CFP	17	8,711	0.181	0.022	0.002	0.003	24.10	<b>0.342</b>	0.061	0.225 : 0.459
Subsequent Accounting-based CFP	9	3,629	0.049	0.017	0.003	0.000	17.73	<b>0.093</b>	0.050	-0.053 : 0.239
Concurrent Market-based CFP	2	813	0.170	0.001	0.004	0.003	100.00	<b>0.322</b>	0.000	0.322 : 0.322
Subsequent Market-based CFP	0	-	-	-	-	-	-	-	-	-

<sup>A</sup> K: number of correlation coefficients meta-analyzed; N: total sample size;  $\bar{r}_{obs}$ : sample size-weighted mean observed correlation;  $s_r^2$ : observed variance;  $s_e^2$ : sampling error variance;  $s_m^2$ : measurement error variance;  $\bar{\rho}$ : mean true score r (corrected);  $s_{\rho}^2$ : true score variance; C.I.: Confidence Interval

sales, assets and/or employees does not mean that profitability will follow. The benefits commonly associated with absolute firm size such as economies of scale, resource availability, investor benevolence, and capital structure advantages do not at all materialize and/or not in a way that would systematically overcompensate the costs of firm size. At the same time, absolute firm size does not entail negative performance consequences as has been argued by other authors. Arguments on diverse types of organizational costs associated with firm size that would necessarily be detrimental to firm performance appear not to apply. These findings may also put an end to what appears having become a real habit in strategic management research - the use of absolute firm size as a control variable in performance-predictor research. With a view to relative size, our findings indicate that those who have equated market share with higher profitability may have been ill-advised. We identify market share to be far from being a primary factor in predicting profitability. This means that – similar to the case of absolute firm size – the benefits commonly pointed at to explain the performance effects of market share, such as cost efficiencies, market power, and quality signalling, do not systematically overcompensate the costs of gaining share.

Within the framework of our analysis, we also find that the market share-accounting performance association is likely to be spurious in nature. While there is concurrent association, there is no evidence for any causation between the variables market share and accounting-performance. Thus, our results

lend support to those authors who emphasized that part, if not all, of the positive correlation between market share and profitability is due to some third factors simultaneously impacting on both market share and profitability (Jacobsen, 1988; Jacobson and Aaker, 1985; Markell, Strickland, and Neeley, 1988; Prescott, Kohli, and Venkatraman, 1986; Rumelt and Wensley, 1981). In line with Rumelt and Wensley (1981), we have no evidence for any direct effect of market share on profitability. Szymanski, Bharadwaj, and Varadarajan (1993), in their meta-analysis on the market share-profitability linkage, do not moderate for temporal sequence of variable measurement and conclude that, on average, market share has a significant and positive effect on business profits. Our meta-analytic results dispute the existence of any such effect.

Nonetheless, we find market share to be positively correlated with concurrent market-based performance. This could mean that investors expect higher market share to yield superior accounting-returns in future periods. This appears unlikely, however, in the light of the meta-analysis showing the absence of any such causality. Instead, the correlation between market share and concurrent market-based performance is likely to be rooted in the concurrent (spurious) association between market share and accounting performance. Investors most likely value those third factors that produce both market share and profitability and do not assign a premium to market share per se.

Our analyses have strong implications for corporate strategy and growth agendas. The key implication for top executives and corporate priority formulation is as simple as it is fundamental: Neither sales-growth nor market share growth will guarantee profitable growth. In the absence of net benefits materializing, absolute and relative firm size growth are not in themselves valid strategic goals. In sales-, asset-, employees-, and market share-growth we do not find the profitable growth we are in search of.

In the context of discussing relative size growth, it is Rumelt and Wensley who hit the spot. They argue that "[market share] is a measure of success otherwise created, but business plans and strategies that have no entrepreneurial content than share-gain tactics are empty" (1981: 6). Our results lend support to this assertion. It is not market share itself that produces competitive advantage. Instead, market share has to be understood as the outcome of competitive edges as has superior performance. It is for this reason that market share parallels superior performance (Jacobson, 1988). Thus, market share is a performance measure rather than a growth strategy.

Our results imply that growth strategies must be dealt with at more subtle levels than simply specifying sales- versus market share growth as strategic goals. First, corporate executives should direct their attention to identifying levers that impact financial performance directly and not levers that affect absolute or relative firm size growth. Second, corporate executives are well-advised to consider growth strategies that are more specifically defined than absolute versus relative size growth options. Strategies such as, for instance, innovation, internationalization, and diversification have all been shown to be correlated with (absolute) firm size (e.g., Camisón-Zornosa et al., 2004; Haines, 1970) and to exhibit idiosyncratic relationships with financial performance (e.g., Palich, Cardinal, and Miller, 2000). It is at this, or even more fine-grained levels that the performance impacts of alternative growth strategies must be assessed. If we understand the reasons underlying the performance impacts of these and other specifically defined growth strategies, only then may we be in a position to identify the levers that directly affect financial firm performance. It is via this loop way that we might isolate the success factors that make firm growth profitable in fact.

In summary, our analyses point out the vitality of verifying causality in primary empirical studies as well as in meta-analyses. In contrast to conventional wisdom, we found meta-analytic evidence for absolute firm size not to *cause* accounting- and market-based financial performance and relative firm size not to *cause* accounting-based performance. Our study implies that future meta-analyses must be used to test association versus causality. Also, future empirical studies require measurement strategies that are more precisely defined than is the case in a large part of the performance predictor research available to date.

## 6. LIMITATIONS

Meta-analytic results are generalizable across studies in all cases in which 75% or more of the variance in

observed correlations can be explained by artifacts (Hunter and Schmidt, 2004). In our analyses to date, this level is, in the majority of cases, not achieved. This means that methodological and/or substantive moderators other than the ones tested in this analysis are still contributing to the variance of observed correlations. A further meta-analytic breakdown to test additional moderators has not been possible yet due to the break up of sets of correlations causing decreasing subset sizes. The use of too small subset sizes would undermine the very idea of meta-analysis. In addition, though we speak about growth, we do actually look at levels of absolute and relative size at points in time. In order to properly measure growth, delta size should be measured. As this is not the case in the majority of empirical research, our analysis is as limited as is empirical research. Finally, with a view to the relationship between absolute firm size and performance we assume a linear instead and not a curvilinear relationship. This is for two reasons. First, empirical research usually tests the impact of size on performance and not of a squared term of size on performance, and, second, meta-analysis does not allow to test curvilinear relationships except for the case in which empirical studies could be broken up into (size-) range-restricted sub-samples. The latter does not apply to primary size-performance studies, however.

## REFERENCES

- Armstrong, J. S., and Collopy, F., "Competitor orientation: Effects of objectives and information on managerial decisions and profitability", *Journal of Marketing Research*, 33, 1996, 188-199.
- Bergh, D.D., "Problems with repeated measures analysis: Demonstration with a study of the diversification and performance relationship", *Academy of Management Journal*, 38, 1995, 1692-1708.
- Besanko, D., Dranove, D., Shanley, M., and Schaefer, S., *Economics of Strategy* (3<sup>rd</sup> ed.). Wiley, New York, 2004.
- Bloom, P. N., and Kotler, P., "Strategies for high market-share companies", *Harvard Business Review*, Vol. 53(6), 1975, 63-72.
- Boone, C., and de Brabander, B., "Generalized vs. specific locus of control expectancies of chief executive officers", *Strategic Management Journal*, 14, 1993, 619-635.
- Brown, C., Hamilton, J., and Medoff J., *Employers large and small*, Harvard University Press, Cambridge (MA), 1990.
- Buzzell, R. D., Gale, B. T., and Sultan, R. M., "Market share – a key to profitability", *Harvard Business Review*, 53(1), 1975, 97-106.
- Buzzell, R. D., and Wiersema, F. D., "Modeling changes in market share: A cross-sectional analysis", *Strategic Management Journal*, 2, 1981, 27-42.
- Buzzell, R. D., and Wiersema, F. D., "Successful share-building strategies", *Harvard Business Review*, 59(1), 1981, 135-144.
- Camisón-Zornosa, C., Lapiedra-Alcami, R., Segarra-Ciprés M., and Boronat-Navarro, M., "A meta-analysis of innovation and organizational size", *Organization Studies*, 25, 2004 331-361.
- Catto, V., "Market share and profits", *Business Economics*, 15(3), 1980, 39-44.
- Chandler, A. D., *Strategy and structure: Chapters in the history of the industrial enterprise*, MIT Press, Cambridge (MA), 1962.
- Combs, J. G., Crook, T. R., and Shook, C. L., "The dimensionality of organizational performance and its implications for strategic management research", In Ketchen D. J., Bergh D. D. (eds.), *Research Methodology in Strategy and Management*, Vol. 2: 259–286, JAI Press, Greenwich (CT), 2005.
- Cronin, J. J. Jr., and Page, T. J., "An examination of the relative impact of growth strategies on profit performance", *European Journal of Marketing*, 22(1), 1988, 75-68.
- Cronin, J. J. Jr, and Skinner, S. J., "Marketing outcomes, financial conditions, and retail profit performance", *Journal of Retailing*, 60(4), 1984, 9-22.
- Demsetz, H., "Industry Structure, Market Rivalry, and Public Policy", *Journal of Law and Economics*, 16(1), 1973, 1-10.
- Ferrier, W. J., "Navigating the competitive landscape: The drivers and consequences of competitive aggressiveness", *Academy of Management Journal*, 44, 2001, 858-877.
- Gale, B. T., "Market share and rate of return", *The Review of Economics and Statistics*, 54, 1972, 412-423.
- Geringer, J. M., Tallman, S., and Olsen, D. M., "Product and international diversification among Japanese multinational firms.", *Strategic Management Journal*, 21, 2000, 51–80

- Glass, G. V., "Primary, secondary, and meta-analysis", *Educational Researcher*, 5(10), 1976, 3-8.
- Gooding, R. Z., and Wagner, J. A. III., "A meta-analytic review of the relationship between size and performance: The productivity and efficiency of organizations and their subunits", *Administrative Science Quarterly*, 30, 1985, 462-481.
- Gomez-Mejia, L. R., and Palich, L. E., "Cultural diversity and the performance of multinational firms", *Journal of International Business Studies*, Second Quarter, 1997, 309-335.
- Grant, R. M., Jammine, A. P., and Thomas, H., "Diversity, diversification, and profitability among British manufacturing companies", *Academy of Management Journal*, 31, 1988, 771-801.
- Haines, W. W., "The profitability of large-size firms", *Rivista internazionale di scienze economiche e commerciali*, 17, 1970, 321-351.
- Haldi, J., and Whitcomb, D., "Economies of scale in industrial plants", *The Journal of Political Economy*, 75, 1967, 373-385.
- Hall, M., and Weiss, L., "Firm size and profitability", *Review of Economics and Statistics*, 49, 1967, 319-331.
- Hambrick, D. C., and Finkelstein, S., "Managerial discretion: A bridge between polar views of organizational outcomes", In L. L. Cummings and B. M. Staw (Eds.), *Research in Organizational Behavior*, Vol. 9: 369-406, JAI Press, Greenwich (CT), 1987.
- Hart, S., and Banbury, C., "How strategy-making processes can make a difference", *Strategic Management Journal*, 15, 1994, 251-269.
- Henderson, B. D., *Henderson on Corporate Strategy*, Abt Books, Cambridge (MA), 1979.
- Higgins, R. C., and Kerin, R. A., "Managing the growth-financial policy nexus in retailing", *Journal of Retailing*, 59(3), 1983 19-48.
- Hill, C. W. L., Hitt, M. A., and Hoskisson, R. E., "Cooperative versus competitive structures in related and unrelated diversified firms", *Organization Science*, 3, 1992, 501-520.
- Hitt, M., Hoskisson, R., Ireland, D., and Harrison, J. S., "Effects of acquisitions on R&D inputs and outputs", *Academy of Management Journal*, 34, 1991, 693-706.
- Hoskisson, R. E., Hitt, M. A., Johnson, R. A., and Moesel, D.D., "Construct validity of an objective (entropy) categorical measure of diversification strategy", *Strategic Management Journal*, 14, 1993, 215-235.
- Huber, G. P., Miller, C. C., and Glick, W. H., "Developing more encompassing theories about organizations: The centralization-effectiveness relationship as an example", *Organization Science*, 1, 1990, 11-40.
- Hunter, J. E., and Schmidt, F. L., *Methods of meta-analysis: Correcting error and bias in research findings*, 2<sup>nd</sup> ed., Sage, Thousand Oaks (CA), 2004.
- Hunter, J. E., Schmidt, F. L., and Jackson, G. B., *Meta-analysis: Cumulating research findings across studies*, Sage, Beverly Hills (CA), 1982.
- IBM Corporation, *Your turn: The global CEO study*, 2004.
- Jacobsen, R., "Distinguishing among competing theories of the market share effect", *Journal of Marketing*, 52 (4), 1988, 68-80.
- Jacobson, R., and Aaker, D. A., "Is market share all that it's cracked up to be?", *Journal of Marketing*, 49(4), 1985, 11-22.
- Keats, B. W., "Diversification and business economic performance revisited: Issues of measurement and causality", *Journal of Management*, 16, 1990, 61-72.
- Ketchen Jr., D. J., Combs, J. G., Russell, C. J., Shook, C., Dean, M. A., Runge, J., Lohrke, F. T., Naumann, S. E., Haptonstahl, D. E., Baker, R., Beckstein, B. A., Handler, C., Honig, H., and Lamoureux, S. "Organizational configurations and performance: A meta-analysis", *Academy of Management Journal*, 40, 1997, 223-240.
- Kimberly, J. R., "Organization size and the structuralist perspective: A review", *Administrative Science Quarterly*, 21, 1976, 571-597.
- Koslowsky, M., and Sagie, A., "Components of artifactual variance in meta-analysis", *Personnel Psychology*, 47, 1994, 561-574.
- Kwoka, J. E. Jr., "Market shares, concentration, and competition in manufacturing industries", *Review of Economics and Statistics*, 61, 1979, 101-109.
- Lang, L. H. P., and Stulz, R. M., "Tobin's q, corporate diversification, ad firm performance", *Journal of Political Economy*, 102, 1994, 1248-1280.
- Lawrence, P., and Lorsch, J., "Differentiation and integration in complex organizations", *Administrative*

- Science Quarterly*, 12, 1967, 1-30.
- Lenz, R. T., "Determinants of organizational performance: An interdisciplinary review", *Strategic Management Journal*, 2, 1981, 131-154.
- Lipsey, M. W., and Wilson, D. B., *Practical meta-analysis*, Sage, Thousand Oaks (CA), 2001.
- Markell, S. J., Strickland, T. H. and Neeley, S. E., "Explaining profitability: Dispelling the market share fog", *Journal of Business Research*, 16(3), 1988, 189-196.
- Montgomery, C. A., "The measurement of firm diversification: Some new empirical evidence", *Academy of Management Journal*, 25, 1982, 299-307.
- Nunnally, J. C., and Bernstein, I. H., *Psychometric theory* (3<sup>rd</sup> ed.). McGraw-Hill, New York, 1994.
- Orlitzky, M., Schmidt, F. L., and Rynes, S. L., "Corporate social and financial performance: A meta-analysis", *Organization Studies*, 24, 2003, 403-441.
- Page, A. L., "A test of the share/price market planning relationship in one retail environment", *Journal of the Academy of Marketing Science*, 7 (Winter), 1979, 25-39.
- Palich, L. E., Cardinal LB, Miller CC., "Curvilinearity in the diversification-performance linkage: An examination of over three decades of research", *Strategic Management Journal*, 21, 2000, 155-174.
- Palich, L. E., Carini, G. R., and Seaman, S. L., "The impact of internationalization on the diversification-performance relationship: A replication and extension of prior research", *Journal of Business Research*, 48, 2000, 43-54.
- Palmer, A., *CEO briefing: Corporate priorities for 2006 and beyond*. The Economist Intelligence Unit, 2006.
- Pfeffer, J., and Salancik, G. R., *The external control of organizations*. Harper and Row, New York, 1978.
- Porter, M. E., "The structure within industries and companies' performance", *The Review of Economics and Statistics*, 61(2), 1979, 214-227.
- Powell, T., "Organizational alignment as competitive advantage", *Strategic Management Journal*, 13, 1992, 119-134.
- Prescott, J. E., Kohli, A. K., and Venkatraman, N., "The Market Share-Profitability Relationship: An Empirical Assessment of Major Assertions and Contradictions". *Strategic Management Journal*, 7, 1986, 377-394.
- Rosenthal, R., and DiMatteo, M. R., "Meta-analysis: Recent developments in quantitative research methods for literature reviews", *Annual Review of Psychology*, 52, 2001, 59-82.
- Rumelt, R. P., and Wensley, R., "In search of the market share effect", *Proceedings of the Academy of Management*, 41, 1981, 2-6.
- Samuels, J. M., and Smyth, D. J., "Profits, variability of profits, and firm size", *Economica*, 35, 1968, 127-139.
- Sheperd, W. G., "The elements of market structure", *Review of Economics and Statistics*, 54, 1972, 25-37.
- Scherer, F. M., *Industrial market structure and economic performance*. Chicago: Rand McNally, 1980.
- Schmidt, F. L., and Hunter, J. E., "Development of a general solution to the problem of validity generalization", *Journal of Applied Psychology*, 62, 1977, 529-540.
- Schoeffler, S., Buzzell, R., and Heany, D. F., "Impact of strategic planning on profit performance", *Harvard Business Review*, 52(2), 1974, 173-145.
- Smallwood, D., and Conlisk, J., "Product quality in markets where consumers are imperfectly informed", *Quarterly Journal of Economics*, 93, 1979, 1-23.
- Song, X., DiBenedetto, C., and Zhao, Y., "Pioneering advantages in manufacturing and service industries: Empirical evidence from nine countries", *Strategic Management Journal*, 20, 1999, 811-836.
- Steindl, J., *Small and big business: Economic problems of the size of firms*. Oxford: Basil Blackwell, 1945.
- Stigler, G., "The economies of scale", *Journal of Law and Economics*, 1, 1958, 54-71.
- Szymanski, D. M., Bharadwaj, S. G., and Varadarajan, P. R., "An analysis of the market share-profitability relationship", *Journal of Marketing*, 57(3), 1993, 1-18.
- Venkatraman, N., and Prescott, J. E., "The market share-profitability relationship: Testing temporal stability across business cycles", *Journal of Management*, 16, 1990, 783-805.
- Wan, C., "International diversification, industrial diversification and firm performance of Hong-Kong MN's", *Asia Pacific Journal of Management*, 15, 1998, 205-217.
- Wan, W. P., and Hoskisson, R. E., "Home country environments, corporate diversification strategies, and firm performance", *Academy of Management Journal*, 46, 2003, 27-45.

Weiner, N., and Mahoney, T.A., "A model of corporate performance as a function of environmental, organizational, and leadership influences", *Academy of Management Journal*, 24, 1981, 453-470.

Williamson, O. E., *Markets and Hierarchies: Analysis and Antitrust Implications*. The Free Press, New York, 1975.

Zajac, E. J., "CEO selection, succession, compensation, and firm performance: A theoretical integration and empirical analysis", *Strategic Management Journal*, 11, 1990, 217-230.

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## CELL PHONE ATTACHMENT: A MEASURE AND ITS BENEFITS

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### ABSTRACT

*Cell phone use in the US has continued to grow and applications for using the cell phone to connect with customers are also growing. This research has developed a scale potentially useful in identifying those individuals who are highly attached to their cell phone, displaying increased usage and involvement with their phones. This scale could be useful in identifying targets for mobile advertising, PR, and other communication methods. The scale demonstrates a good reliability of  $\alpha = .852$ .*

**Keywords:** Scale development, addiction, cell phones, consumer behavior

### 1. INTRODUCTION

With the continued growth in cell phone ownership and use, improved technology and cell phone applications, and a consumer who is a moving target, marketers are viewing the cell phone as the next potential means of reaching those consumers. One method of utilizing the cell phone is to distribute promotional material via the phone. Already, "nearly 60% of brands" have attempted a mobile campaign (Kurtyka, 2007) through SMS or MMS. SMS (short message service) allows short text message delivery and MMS (multimedia message service) delivers text along with various media such as audio, images and video.

The movement to capture potential consumers with promotional material through cell phones was an obvious extension of communications materials for many outlets. "Mobile media engage people in interactive dialogue, which is building value for a brand," says Jack Philbin, president of Vibes Media. "No other media can engage people one-on-one at an event." (Cuneo, 2005, p. S7). As a result, Nextel now offers a service that allows fans to dial into conversations between Nascar drivers and their pit crews. Coors plans to include text-messaging elements into all of their promotions for the upcoming year. And Major League Baseball is allowing Chicago White Sox fans to respond to trivia questions by text messaging answers to questions that flash on the scoreboard at U.S. Cellular Field (Cuneo, 2005). Not to be left behind, MTV has begun pushing specifically tailored music and video to fans with cell phones and high-speed Internet connections (Garritty, 2005). "That's where the audience lives. We need to reach them there," says MTV president Christina Norman (p. 14). A PBS pilot study even found that parents used Elmo video clips on their cell phones to help teach preschoolers their ABCs ("Can Elmo Help Kids Learn Their ABCs?", 2006). An amazing 75 percent of families living at or below the poverty level said that the video clips helped their children, while 50 percent of the families living above the poverty level reported similar results.

### 2. PURPOSE OF STUDY

As marketers explore ways to establish communications with consumers via their cell phones, the question remains as to whether this is an effective communication tool via which to reach prospective customers. The first question to be addressed is the degree to which consumers are attached to their cell phones; that is, how strong is the bond between the individual and their phone? While the preponderance of observational evidence indicates that most U.S. adults seem to constantly be using their cell phones, there is little empirical evidence to support this supposition. In addition, consumers may hold differing views as to how, when, and for what their phones are to be used.

This exploratory study seeks to develop and evaluate a scale to measure individual's cell phone attachment and to evaluate cell phone attachment with various measures of cell phone use. As marketing organizations are seeking new methods to reach the consumer, including via the cell phone, a tool to measure the attachment a consumer has to his/her cell phone may be valuable to marketers in determining cell phone promotional strategy.

With the many examples of organizations reaching out to consumers via the mobile phone, it may be beneficial to identify those cell phone users that are more likely to always be connected via their phone. Although visible evidence would suggest that cell phone use seems to be universal, there are cell phone users that are comfortable without their phone in their constant possession, and still others that may never use the cell phone for other than making and receiving calls. Targeting these individuals with promotional or relationship material would be useless and quite possibly have a negative impact. Cell phone users may resent being contacted directly on a number that they view as being "commercial free", and/or not want promotional messages to impinge on their allotted contractual minutes. On the other hand, identifying cell phone owners that are always connected, or highly attached to their cell phones, would likely increase the effectiveness of the promotional campaign or other marketing activity. Those users who are more attached to their cell phones may be more receptive to promotional messages delivered via their cell phones. This paper reports preliminary efforts at developing a scale that will identify an individual's level of attachment with their cell phone.

Cell phone attachment is defined as a strong bond an individual has with their cell phone. Undoubtedly, the cell phones have made most individuals lives more convenient with the abilities to almost always be able to place and receive phone calls. The additional features that even the lower-end cell phones are equipped with increase the convenience of communication with text messaging, Internet connections and pictures, as well as everyday simple tasks, like time management with the use of the calendar, clock and alarm functions, information management with the address storage, along with the ability to engage in other activities like calculate and entertain with games.

Specific hypotheses being tested relate to the anecdotal gender difference in general phone use. Females have been widely viewed as more communal in nature than males, focusing on maintaining strong interpersonal relationships. Theoretically, that tendency to maintain contact with others may translate to greater use and/or involvement with their cell phones.

H<sub>1</sub>: Females will exhibit more cell phone use and higher involvement, as well as attachment to their cell phones, than male respondents.

Age differences will also be examined. It is felt that there will be no significant difference between ages in usage, involvement or attachment between traditional college aged respondents. Any differences will occur between the traditional students and older, non-traditional students.

H<sub>2</sub>: No age difference will exist in the traditional college student age groups for cell phone use, involvement and attachment.

To further test the attachment scale, comparisons will be made between self-reported cell phone usage behaviors and the cell phone attachment score, as well as a cell phone involvement scale.

H<sub>3</sub>: Respondents with high usage rates will be measured as more attached to their cell phone using the cell phone attachment scale.

H<sub>4</sub>: Respondents measuring a high attachment to their cell phones will also measure a high involvement level with their cell phones.

### **3. BACKGROUND**

Cell phone ownership and use in the United States is perceived as a necessity by many people. A recent study by the Pew Research Centre reports that 49% of the respondents replied that a cell phone was a necessity, surprisingly more than the 35%, 33%, and 29% reporting that having a dishwasher, cable TV, and high speed Internet, respectively, were necessities (Anonymous, 2007). It has been reported that 80% of Americans, 18 and older, own a cell phone and predicted that this number will continue to increase. Many Americans will be utilizing only their cell phones for communications, giving up the land line phone system (Bryan, 2007).

Seventy percent of phone users report using the text messaging features on their phone with 44% using the feature daily. Mobile Campus, working with universities, uses text messaging to reach students and faculty with promotional material. The material is targeted to recipients based on profiles collected during the opt-in sign up. The university benefits by using the same system to send campus announcements, news and updates (Enright, 2007).

Besides promotional activities, many organizations are using the cell phone as a tool in their CRM tool kit, using mobile networks to connect with their customers. For example, Starbucks will provide store location information to customers seeking a local outlet when they text a zip code. Joe Das Gupta, product manager of digital services, reports that Starbucks “gets thousands of calls every year from Starbucks customers asking us to help them find the closest Starbucks locations” (Hein, 2007). Starbucks also uses the text messaging features to connect with its customers letting them know about special promotional deals, like free cups of coffee.

Even non-profit organizations are using cell phone techniques to connect with customers and gain support for their respective causes. The Center for Biological Diversity, in an effort to raise awareness for endangered species, provides free ring tone downloads of rare and endangered species vocalizations. The Center hopes that the ring tones will make people curious and help educate them about endangered and rare species (Bryan, 2007).

Television programming is also available via the cell phone, creating another means of reaching consumers with advertising. Carriers are experimenting with providing links to TV programming over cell phones, complete with advertising. Channels to be provided include FOX, Disney, Comedy Central and MTV. Other providers are tailoring content to cell phones based on owner preferences (Kharif, 2007).

#### **4. METHODOLOGY**

Attachment scale items were identified by researchers and members of a student research team. The attachment scale content reflected the research team’s cell phone experiences. The cell phone addiction scale consisted of 12 items with a 5-point Likert scale ranging from strongly agree to strongly disagree. The attachment scale was included in a survey along with other measures of cell phone usage such as minutes used per month, calls made and received per day, and specific features used. An involvement measure was also utilized.

#### **5. RESULTS**

The survey was administered to undergraduate students of a medium sized university,  $n = 101$ . Of the sample, 43.6% and 56.4% were male and female, respectively. All student ranks, from freshmen to graduate students were represented. Ages of the respondents ranged from 18 to 49, with 92.1% of the respondents being 23 years or younger.

Cell phone ownership was very high as expected; 100 respondents indicated owning a cell phone, leaving only one survey respondent who did not own a cell phone. When self reporting cell phone usage on a 1 to 5, very low to very high scale, the average rating for all respondents was 4.09 with 70% of the respondents rating their usage as high or very high.

When analyzing specific usage, 75% of the sample reported using 501 minutes or more per month and sending/receiving at least 6 calls per day. Cell phone features with the highest usage were identified as text messaging, alarm clock, phonebook, and voice mail. Moderately utilized features included camera, calendar, and games. The least utilized features were instant messaging, email, and voice command dialing.

When tested for reliability, the attachment scale scored an alpha of .848. This reliability measured increased minimally when the items related to using the cell phone in class and using the cell phone when driving were deleted. See Table 1 for item identification and scale statistics. Not surprisingly,

those highly “attached” to their cell phones demonstrate more overall use of the phone via measures of minutes used, calls made and received as well as features utilized.

The mean attachment score for the sample was 2.37 with a s.d. of .82 with lower means indicating higher levels of attachment. The mean score for female respondents was 2.34, s.d. of .88 and for male respondents was 2.39 with a s.d. of .74. There was no significant difference between the attachment scores of male and female respondents. Again, see Table 1 for individual scale items and means.

When analyzing self-reported rating of cell phone usage between male and female respondents, there was a significant difference. Using a scale from 1 (My usage is very low) to 5 (My usage is very high), female respondents averaged a rating of 4.25, while the male average rating was 3.28. This represents a significant difference at  $p = .084$ , partially supporting  $H_1$ . In continuing the significance testing for  $H_1$ , no difference was found between genders when examining the minutes used, number of calls received, or number of calls made.

No age effects were found when analyzing usage rate, calls made, received and minutes used. Non-traditional aged students did report lower overall usage. However, their usage rate was not significantly different from the traditionally-aged students’ rates. As a result,  $H_2$  is supported.

To further test the scale, it was tested against involvement and cell phone usage measures. To analyze cell phone attachment with usage rates and involvement measures, the sample was split into three groups: highly attached with an attachment mean of 2 or less, moderately attached with an attachment mean of 2.10 to 2.67 and the non-attached with an attachment mean of 2.68 to 5. This method of splitting the group is based on equal percentages for the three categories.

Individuals classified as cell phone “attached” demonstrated significant differences in use of cell phones, including number of minutes used, number of calls made, and number of calls received. Using cross tabulation and the chi square statistic, the highly attached group demonstrated significant differences in all the usage measures: number of minutes used ( $p = .043$ ), number of calls received ( $p = .08$ ), and number of calls made ( $p = .01$ ). More cell phone usage is demonstrated when the attachment level increases. Thus,  $H_3$  is supported.

When comparing involvement with the cell phone along with the attachment category, there is a significant difference in the involvement ratings for the highly attached and moderately attached groups, compared to the non-attached groups. The involvement mean for each group respectively is 1.22, 1.54, and 2.37. Increasing measures of involvement with the cell phone are found with increased attachment to the cell phone.  $H_4$  is supported.

## 6. CONCLUSIONS

This study found that seventy percent of the survey respondents considered themselves to be high or very high users of their cell phones. Approximately 75 percent of the sample reported using 501 or more minutes per month and sending/receiving six or more calls per day. The results were consistent across gender and age, with there being no significant differences in usage between males and females, or age categories. In addition, when the sample was split into thirds based on reported cell phone usage, there were significant differences reported between the groups based upon the degree of involvement the subjects reported with their cell phones. As a result, this study found that individuals who were moderately or highly attached to their phones reported using more minutes and making and receiving more calls than did non-attached users.

Implications of this study to marketers could be important in their future communication attempts with consumers. The vast majority of American adults have cell phones (in addition to a strong percentage of minors) and seventy percent of the adults surveyed are high users of their phones. Of these subjects, those who reported being moderately or highly attached to their phones are likely to use more minutes and make or receive more calls than average. This finding would appear to support current marketing efforts by companies to integrate consumers’ cell phones usage into their promotional campaigns. For

**TABLE 1: CELL PHONE ATTACHMENT SCALE ITEMS**

(Cronbach's Alpha = .852 for entire scale)

Scale Item	Item Mean	Alpha if deleted
If I left my phone at home, I would go back to get it.	2.0316	.831
My cell phone is turned on 24/7.	1.68	.833
As soon as I leave class, I check my phone for missed calls and/or messages.	1.63	.829
I never check for missed class and/or messages while in class (R).	2.27	.849
I answer my phone during class.	4.00	.851
I feel "naked" without my cell phone.	2.36	.825
I have my cell phone with me at all times.	1.82	.823
I never talk on my cell phone while driving.	1.77	.859
I will talk on my cell phone while in a restaurant.	2.35	.833
I talk on my cell phone while shopping.	1.99	.827
I make or receive calls while in the restroom.	3.17	.835
I will discuss personal information on my cell phone while in public.	3.08	.844

those consumers who are moderately or highly attached to their phones, the use of cell phones by corporations to establish a form of interpersonal communication with the current or prospective consumer may be a welcome form of contact, especially if the contact involves possible rewards or prizes to the consumer. This communication may also be a cost-effective means of contact to the company when compared with other forms of media.

## 7. FUTURE RESEARCH

Future research should be utilized to refine the addiction scale with further tests of validity and reliability. Some scale items would need to be adjusted to be relevant to additional samples other than college students. Extensions of the scale could also be developed which would apply to personal media devices, such as the iPod. Additional work should address sample limitations (e.g. sample size and representativeness). Of specific interest, future studies could evaluate differing age cohorts to determine if the high degree of attachment that college students have for their cell phones applies to other age groups. Given that this study's findings may also be skewed by education (using college students as the sample pool), subjects with varying levels of education should also be surveyed regarding their attachment level to their cell phones.

This study could be extended by determining consumers' attitudes and perceptions regarding marketers using their cell phone numbers to contact them for promotional activities. Attitudes may differ, even among moderately-to-highly attached consumers, depending upon the type of contact initiated by the marketer. For instance, consumers may react positively or negatively to the communication based on whether they have agreed beforehand ("opting in") to be contacted versus being contacted without permission---especially if using their limited minutes. Therefore, prior to initiating cell phone communications with consumers, marketers should try to ensure that the communication will be positively

received by the individual in order to not negatively impact their company or brand name by unwanted and unwelcome communications.

## REFERENCES

- Anonymous (2007), "Needful Things", *The Atlantic Monthly*, March, 30.
- "Can Elmo Help Kids Learn Their ABCs?" (2006), *T H E Journal*, 33, 17, 8.
- Bryan, Susan M. (2007), "Call of the Wild," *Marketing News*, March 15, 2007, 21.
- Cuneo, Alice Z. (2005), "Let's Watch Game Together... on Cell Phones," *Advertising Age*, 76, 7, S7.
- Enright, Allison (2007), "(Third) Screen Tests: Mobile Growth Offers Targeted Connection Opportunities," *Marketing News*, March 15, 2007, 17-18.
- Garrrity, Brian (2005), "Wireless, Broadband Drive MTV's Spankin' Promotion," *Billboard*, 117, 46, 14-15.
- Hein, Kenneth (2007), "Aren't They Everywhere?" *Brandweek*, 48, 10, 46.
- Kharif, Olga (2007), "Wireless Rivals Primed for Mobile TV," *Business Week Online*, March 1, 2007, 15.
- Kurtyka, Nathan (2007), "Web 3.0: Get Prepared for the Mobile Revolution," *Marketing News*, March 15, 2007, 18-20.

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# CONTINGENT APPROACHES TO THE EFFICIENT FORMATION OF VIRTUAL TEAMS

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## ABSTRACT

*I integrate theories on situational leadership, time-driven decision-making, and stages of group formation to propose a model of how contingent approaches to leadership influence the efficient formation of virtual teams. Efficient formation is defined as the minimal expenditure of leader effort (e.g.: time, energy, thought, etc.) associated with amassing members capable of interdependent performance. Drawing on group development theory, the model posits that the leader's assessment of individual and collective ability, skill, confidence and commitment influences the efficiency with which they commandeer team member experts and forge feelings of connectedness. These choices impact both leader and member participation styles and ultimately efficiency in virtual team formation. Formation is the first step of group development. It requires that members first join the group and second participate in defining its purpose, structure and function. Beyond formal work assignments and informal self motivation (e.g.: status, self-esteem, power, etc.), I predict that the leader's ability to accurately assess potential member readiness will impact the efficient, effective recruitment of experts. Assessment of individual readiness allows for the selection of appropriate leader participation styles (i.e.: telling, selling, participating, and delegating) which enhance experts' availability and willingness to commit. Once initial virtual team membership is established, the leader must determine how decisions regarding group purpose, structure and function will be made. Doing this efficiently requires that the appropriate decision-making style (i.e.: decide, consult individually, consult group, facilitate, or delegate) be enlisted. I predict that efficient virtual team formation will be influenced by the leader's accurate assessment of the problem: significance of the decision, importance of team commitment, leader expertise, likelihood of commitment, group expertise and team competence.*

**Keywords:** Virtual teams, Group Formation, Contingent Leadership, Efficiency, and Effort.

## 1. INTRODUCTION

Although "efficiency is generally considered to be one of the greatest management virtues", little attention is given to the painstaking and often varied effort required to be successful within virtual environments. Moreover, team leaders are thrust into these situations and expected to do "what ever it takes" to achieve results. This has led to undue focus on effectiveness without exploring the factors required for optimal performance. Rarely have virtual team researchers engaged in discover which addresses the need for both the efficient and effective attainment of results (Ratcheva and Vyakarnam, 2001). This study proposes a model of efficient virtual team formation based upon contingent leadership. It considers situational factors (e.g., member readiness, designation approach, etc.) in proposing strategies for recruiting and facilitating interdependencies among virtual members.

Contingent approaches to leadership will be enlisted to hypothesize their impact on the effort required to develop teams whose members perceive themselves as part of a collective. Propositions will offer insight into the relationships between designation approach to membership, candidate readiness and leadership participation style on efforts to efficiently formulate virtual teams. The model draws upon theories of group formation (Tuckman, 1965), situational leadership (Hersey and Blanchard, 1982), and time-driven decision making (Vroom, 2000; Vroom and Jago, 1988) to explain the relationship between leader efforts to find, recruit and retain critical experts both efficiently and effectively.

In the following, I define and review literature on group formation, situational leadership, and time-driven decision making. I present a framework for understanding the impact that leader recruitment and formation efforts have on the efficiency with which virtual teams are formed. This framework focuses first on designated candidacy. After which, determining potential member readiness is explored to devise the appropriate leadership recruitment strategies. Next, focus is moved toward selecting the appropriate level of inclusion necessary to generate cohesion and team member interdependence. I then develop

propositions that hypothesize the relationship between effort and the stages of virtual team formation. Finally, I conclude by offering suggestions for research and practice.

## **2. LITERATURE REVIEW**

I follow Martins and colleagues' (2004) definition of virtual teams as those "whose members use technology to varying degrees in working across locational, temporal, and relational boundaries to accomplish an interdependent task" (2004:808). By emphasizing interdependence, this definition highlights the importance of group formation and the creation of a sense of belonging. These linkages, facilitated by leader effort, reflect the strongest association to both virtual team performance and member satisfaction (Lurey and Raisinghani, 2001). According to Kayworth and Leidner (2000), the leader's ability to maneuver the multi-faceted challenges plaguing virtual teamwork is key to differentiating performance and a high premium should be placed upon leaders who are flexible enough to accommodate a variety of situations.

Much of virtual team research places heavy emphasis on leadership traits (e.g., Horwitz et al., 2006) as predictors of performance. Although important to distinguishing personal characteristics of virtual team leaders, this tends to be prescriptive in nature and fails to accurately assess the relationship between leadership and performance. This universalistic approach to the study of virtual teamwork is not sufficient. Instead, scholars should investigate the relationship between leadership and performance from a contingency perspective. This involves considering the impact of 1.) Leadership styles, traits, behaviors, and positions; 2.) followership needs, maturity, training, and cohesion; and 3.) situational tasks, structures, systems, and environments on performance. Accepting that what works in one situation may not work in another is the best way to explore factors impacting efficient performance.

Researching contingent approaches to virtual team leadership allows us to propose strategies for managing virtual team processes, including formation, efficiently and effectively. In other words, contingent leadership helps ascertain ways of "doing things right ... the first time." Previous emphasis on effectiveness as the primary measure of performance, does not consider the exhaustive, time consuming, iterative effort often expended to "get it right." A dialogue of efficiency is strangely absent from studies of virtual team performance. Aubert and Kelsey's (2003) research on understanding trust and performance within virtual teams concludes that research must be conducted to understand the complex relationship between effort exerted, ability, trust and final performance. This paper theorizes the relationship between contingent leadership and effort to suggest strategies for the timely formation of virtual teams.

### **2.1 Group Development and Formation Theory**

Tuckman (1965) presents the preeminent theory on stages of group development. His theory suggests that groups evolve over time in order to achieve interdependent performance objectives. Groups progress through five stages of development: forming, storming, norming, performing and adjourning. During the formation stage members join and purpose, structure and function are established. Next, storming involves active engagement in intra-group conflict. This conflict results in the establishment of norms which are characterized by close relationships and member cohesion. After which, performing is made possible. Finally, once interdependent tasks are complete the group adjourns or disbands.

Although the stages of group development are considered ideal (e.g., Buchanan and Huczynski, 1997), they have considerable validity as a sequence of steps embarked upon by members attempting to address problems collectively. Virtual team researchers have used this theory to study social interaction (Lee-Kelley et al., 2004), creative leadership processes (Rickard and Moger, 2000), interaction styles (Potter and Balthazard, 2002), and group support systems (Caouette and O'Conner, 1998) to name a few. Group formation, Stage1, represents the first step in the development a collective. This paper enlists it as a framework for understanding virtual team formation.

During group formation, leaders assess competencies needed to complete performance objectives, designate members to fulfill requirements, recruit participation, and engage in defining team purpose, structure and function. This process can be broken into three separate and distinct leadership tasks: membering, recruiting and connecting. Membering is where leaders identify candidates possessing the



necessary ability, skill, confidence and willingness to engage in interdependent work. According to Tuckman (1965), members join because they are assigned by some higher authority or volunteer because of some desired benefit (e.g., power, affiliation, etc.). Virtual team research (Weems-Landingham, 2004) denotes a third approach to membering, recruitment. Recruiting occurs when experts can neither be assigned nor find benefit in participating. Therefore, leaders must develop strategies which enable availability and commitment by critical experts. Only then can connections be forged. Finally, decisions regarding purpose, structure and function are made collectively. This, however, requires that the leader enlist the appropriate decision-making style to ensure the timely efficient performance.

## **2.2 Leadership Contingency Theories**

The notion that situations dictate behavior is not new to the literature on leadership or management. Two contingency research contributions stand out as important to the efficient formation of virtual teams: situation theory (Hersey and Blanchard, 1982) and Vroom-Jago Contingency Model (1988). The following sections review each and discuss their relevance to virtual team formation.

### **2.2.1 Situational Theory**

Hersey and Blanchard (1982) propose that appropriate leadership styles can be ascertained by assessing the characteristics of followers. They advocate evaluating the degree of readiness (e.g., skill, experience, self-confidence, and work attitude) exhibited by members to determine the optimal leadership style and ultimately how efforts should be expended. Diagnosing readiness allows the leader to vary efforts associated with task (guidance) and relationship behavior (support). Low-level readiness suggests greater emphasis and energy directed toward tasks. Moderate and Higher-level readiness suggests reliance on supportive behaviors. Finally, very-high level readiness suggests emphasizing leadership styles which require little guidance and support.

Membering and recruitment strategies should be targeted according to readiness. Candidates exhibiting low-level readiness due to inability, unwillingness or insecurity should be provided specific directions regarding participation and closely supervised. Efficiency is sacrificed; however, this telling style will facilitate effectiveness. Candidates exhibiting moderate levels of readiness may demonstrate high self-confidence but lack other skills. In these situations, leaders should give some direction regarding participation yet allow member input to ensure optimal performance. Those candidates willing, able and confident enough to engage in interdependent performance should be allowed to participate fully. Leader efforts should only be enacted when deemed necessary. Finally individuals demonstrating very high levels of readiness should be delegated responsibilities. Here leaders should simply provide general guidelines and sufficient authority to ensure performance.

Strategies for determining appropriate leadership styles are important to research on the efficient formation of virtual teams because they provide a theoretical basis for study. They inform as to the importance of task and relations behavior in differentiating approach and measuring effort. Finally, they signify the need to understand social network theory and varying approach in accordance with theories on individualized leadership (Danereau, 1995; Manzoni and Barsoux; 1988; McClane, 1991)

### **2.2.2 Vroom-Jago Contingency Model**

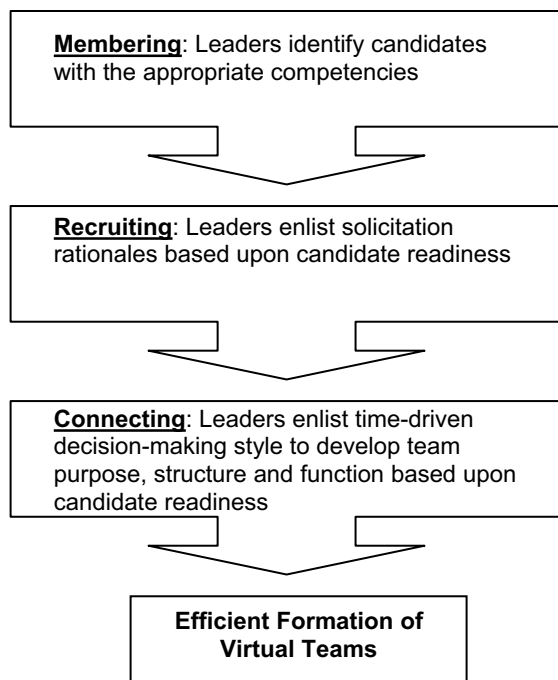
Vroom-Jago's contingency model (1988) also concludes that situational factors are critical to understand the relationship between leadership and performance. The model suggests that leadership styles vary along a continuum from autocratic to participative and provides step-by-step instructions for helping determine the appropriate decision-making style (time-driven or development driven). Three major components: leader participation style, diagnostic questions designed to analyze situations, and a series of decision rules drive the degree of inclusion sought by leaders. That inclusion ranges from the leader making the decision alone (decide) to the delegation (delegate) of decisions to the group with limited prescription. Seven diagnostic questions direct the leader's choice of decision-making style: decision significance, importance of commitment, leader expertise, likelihood of commitment, group support for goals, goal expertise, and team competence. Finally, decision rules for each situational factor funnel through to the appropriate participation style.

Two approaches to decision making are offer, time-based and development-based. The time-based model addresses concern for time and effort. Therefore, it is used and a means for hypothesizing the effort associated with connecting members. The time-driven model for determining an appropriate decision-making style is relevant to study in that it provides leaders with inclusion strategies for determining group purpose, structure and function. The leader's ability to ascertain the appropriate degree of inclusion, in turn, will be instrumental to forming efficient and effective virtual teams. Without it, leaders are left struggling to determine the correct decision styles to facilitate group cohesion.

### 3. LEADER CONTINGENCY APPROACHES AND THEIR EFFECT ON EFFICIENT VIRTUAL TEAM FORMATION

In this section I present my model of efficient virtual team formation. I contemplate the relationship between leader behavior (i.e., recruiting members, developing purpose, defining structure, and fostering cohesion) and the effort required for the efficient formation of virtual teams. I first consider the effect if membership designation on effort. Next, I propose the relationship between readiness and recruitment effort. Finally, I hypothesize the effect of decision-making style on efforts to create a sense of belonging.

**FIGURE 1: MODEL OF EFFICIENT VIRTUAL TEAM FORMATION**



#### 3.1 The Effect of Membership Designation Approach on Membering Effort

The model of efficient virtual team formation (Figure 1) is derived from Tuckman's (1965) work on stages of group development. I integrate contingent leadership strategies to consider the effect of leader behavior on effort and ultimately efficient virtual team formation. Considering the approaches to membership designation reviewed earlier (i.e., work assignments, voluntary participation and recruitment), it seems reasonable to assert that a relationship will be found between designation approach and leader effort. When comparing approaches, work assignments dictated by the organization should require less leader effort than recruitment. As well, voluntary participation based upon self-motivating interests should require less leader effort. In contrast, situations which dictate the use of recruitment efforts will result in higher levels of leader effort exhibited. Thus, I hypothesize the following:

Proposition1: A relationship will be found between designation approach and membering effort.

Proposition 1a: A negative relationship will be found between work assignment and effort.

Proposition 1b: A negative relationship will be found between voluntary participation and effort.

Proposition 1c: A positive relationship will be found between recruitment and effort.

### **3.2 The Effect of Candidate Readiness on Recruiting Effort**

According to Hersey and Blanchard (1982) there are four categories to readiness. Each category requires that varying degrees of effort be expended upon task and/or relationship activities. It stands to reason that solicitation efforts requiring high relationship-oriented support would result in increased recruitment effort. As well, high-task behaviors which are relatively unfamiliar and complex would result in increased effort. Comparatively, familiar simplistic high task behaviors would require less effort. I hypothesize the following:

Proposition 2: There is a relationship between readiness and recruiting effort.

Proposition 2a: A positive relationship will be found between high-relationship behaviors and effort.

Proposition 2b: A positive relationship will be found between high-task behaviors and effort when tasks are complex or relatively unfamiliar to the leader.

Proposition 2c: A negative relationship will be found between high-task behaviors and effort when tasks are simple or relatively familiar to the leader.

### **3.3 The Effect of Leader Decision Style on Connecting Effort**

According to Vroom and Jago (1988), correctly answering the diagnostic questions found in the time-driven decision-making model would result in efficient approaches to developing group purpose, structure and function. Each style requires varying degrees of leader influence and group freedom. Therefore, it can be asserted that effort would be dependent upon the decision-making style selected. I hypothesize the following:

Proposition 3: There is a relationship between decision style and effort to generate group purpose, structure and function.

Proposition 3a: A positive relationship will be found between developing group purpose, structure and function and group formation.

## **4. SUMMARY**

A review of virtual team research yields comparatively few contributions to our understanding of leadership behaviors and their effect on the efficient team formation (Ratcheva and Vyakarnam, 2001). This research investigates contingent leadership approaches contributing to efficient formation. I develop a model of efficient virtual team formation to illustrate the leadership activities (membering, recruiting and connecting) leading to in virtual team formation. This approach offers several benefits. It allows us to focus on leadership activities impacting efficiency (i.e., time, iteration, thought, and energy). Particular approaches can then be determined base upon the task and other contingent factors like follower readiness and participation styles. Finally, testing this theory is likely to shed light on the complex relationship between virtual team leadership, effort exerted, and performance outcome.

Bridging research on group formation and contingent leadership is a new frame of reference for virtual team research. It opens new perspectives for understanding the management of individuals and activities leading to efficient virtual team performance. For researcher, this represents an opportunity to craft new knowledge. The relevance of this theory for the practice of management lies in the ability to predict obstacles to performance, member needs, responses to solicitation, appropriate decision-making styles and optimal degrees of participation. It offers organizations the chance to enhance efficiencies and counteract virtual teamwork's destructive effects (i.e., workaholism, burnout, apathy, etc.). Possibilities for virtual teams include enhanced relations and optimized work situations. Finally, it holds promise for organizations attempting to support and advocate virtual teamwork.

## REFERENCES

- Aubert, B.A and Kelsey, B.L., "Further understanding of trust and performance in virtual teams", Small Group Research, Vol. 34 (5), 2003, 575-618.
- Buchanan, D. and Huczynski, A., Organizational Behaviour: An introductory text (3<sup>rd</sup> Ed.), Prentice-Hall, London, 1997.
- Caouette, M.J. and O'Conner, B.N., "The impact of group support systems on corporate teams' stages of development", Journal of Organizational Computing and Electronic Commerce, Vol. 8 (1), 1998, 57-81.
- Danereau, F. , "A dyadic approach to leadership: Learning and nurturing this approach under fire", Leadership Quarterly, Vol. 6 (4), 1995, 479-490.
- Hersey, P. and Blanchard, K.H., Management of Organizational Behavior: Utilizing Human resources (4<sup>th</sup> Ed.), Prentice-Hall, Englewood Cliffs, NJ, 1982.
- Horwitz, F.M., Bravingon, D. and Silvis, U., "The promise of virtual teams: identifying key factors in effectiveness and failure", Journal of European Industry Training, Vol. 30 (6), 2006, 472-494.
- Joy-Matthews, J. and Gladstone, B., "Extending the group: a strategy for virtual team formation", Industrial and Commercial Training, Vol. 32 (1), 2000, 24-29.
- Kayworth, T. and Leidner, D., "The global virtual manager: A prescription for success", European Management Journal, Vol. 18 (2), 2000, 183-194.
- Lee-Kelley, L.; Crossman, A., and Cannings, A., "A social interaction approach to managing the 'invisibles' of virtual teams", Industrial Management & Data Systems, Vol. 104 (8), 2004, 650-657.
- Lurey, J.S. and Raisinghani, M.S., "An empirical study of best practices in virtual teams", Information and Management, Vol. 38, 2001, 523-544.
- Manzoni, J. and Barsoux, J., "The set-up-to-fail syndrome", Harvard Business Review, Vol. March-Aprile, 1988, 101-113.
- Martins, L.L., Gilson, L.L., and Maynard, M.T., "Virtual teams: What do we know and where do we go from here?", Journal of Management, Vol. 30 (6), 2004, 805-835.
- McClane, W.E., "Implications of member role differentiation: Analysis of a key concept in the LMX model of leadership", Group and Organization Studies, Vol. 16, 1991, 102-113.
- Potter, R.E. and Balthazard, P.A., "Virtual team interaction styles: assessment and effects", International Journal of Human-Computer Studies, Vol. 56 (4), 2002, 423-443.
- Ratcheva, V. and Vyakarnam, S., "Exploring team formation processes in virtual partnerships", Vol. 12 (7), 2001, 512-523.
- Rickard , T. and Moger, S., "Creative leadership process in project team development: An alternative to Tuckman's stage model", British Journal of Management, Vol. 11, 2000, 273-283.
- Tuckman, B.W., "Development sequence in small groups", Psychological Bulletin, Vol. 63, 1965, 1-13.
- Vroom, V.H. and Jago, A.G., The New Leadership: Managing Participation in Organizations, Prentice-Hall, Englewood Cliffs, NJ, 1988.
- Vroom, V.H., "Leadership and the decision-making process", Organizational Dynamics, Vol. 28 (4), 2000, 82-94.
- Weems-Landingham, V., "The Role of Project Manager and Team Member Knowledge, Skills and Abilities in Virtual Team Effectiveness," ProQuest Dissertations & Theses. Doctoral dissertation, Case Western Reserve University, May 2004
- Witzel, M., "A short history of efficiency", Business Strategy Review, Vol. 13 (4), 2002, 38-47.

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## STRESS MANAGEMENT DESIGNED FOR HIGH ACHIEVERS

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### ABSTRACT

*The high achievers are the very individuals that corporations want to retain in a positive, productive relationship; yet, these are often the most stressed employees. Although there have been thousands of research articles dealing with job stress generally, there is relatively little written in the literature concerning this particular group. Following an extensive review of the literature, it was found that the high-need achiever responds more positively to autonomous relationships, performance routines, full engagement in the company's direction, and by having flexible working arrangements. Since these high-need achievers are often workaholics, they do not need to be in a long-hours culture. Rather, corporations addressing the needs of high achievers provide for overtime with time off rather than pay, have policies that do not allow for sick leave to be carried over, force mandatory vacations, and adopt other policies that require the individual to take time away from the job. Self-improvement is often a goal of the high achiever; therefore, a sabbatical program can work especially well with him/her. With the research revealing that the high-need achiever does not recognize that they are indeed stressed, the initial step for the manager of high-need achievers is to help these top performers to recognize when they have become stressed and to begin to apply the strategies and programs to handle their stress.*

**Keywords:** high achievers, CEOs and stress, key employees and stress, top managers and stress, top salespeople and stress, and Type-A employees.

### 1. INTRODUCTION

High achievers possess extraordinary qualities (Stanley, 2004); these are the very individuals corporations want to retain. In *Stress Management for the Healthy Type A*, Roskies, who has studied these individuals states that their mental alertness and rapid pace of thought comes out even in very short interactions with them. Because these high achievers constantly drive themselves to succeed in all aspects of their lives, they subject themselves to on-going stress. Likewise, individuals with Type A personalities, who are often the high-need achievers, become slaves to time. The Type A constantly checks watches, calendars, daily diaries, etc. "Evidence that a Type A mentality is flourishing in today's society can be seen in the success of such books as *The One-Minute Manager*, *The One-Minute Mother*, and *The One-Minute Father*" (Minirth, Hawkins, and others, 1990). This paper will present ideas garnered from the literature that have been used to successfully help the high achiever control their environment and, thus, reduce their stress. Since these are some of the most valuable individuals in our corporations, this research should prove of value to managers today by assisting them in preventing burnout of their top performers.

### 2. LITERATURE REVIEW

Stanley states that high achievers in the field of management are driven to succeed by an abundance of energy and intelligence. "These dynamic employees can propel organizations to accomplish the remarkable" (Stanley, 2004). But, stress must be controlled in order for these individuals to solve complex problems and be highly productive.

However, the high achiever is usually the last person to recognize that they are stressed. Atkinson who has studied the area of stress management for chief executive officers states that CEOs "seem to feel that, if they admit they need help managing stress, it's somehow a sign of weakness" (Atkinson, 2004). One executive of a consulting firm states that executives will schedule seminars dealing with communications, negotiations, time management, and conflict resolution; however, these same executives have to be convinced of the value of scheduling seminars dealing with stress management. Therefore, the first step is to convince high achievers such as top management, top salespeople, etc. that they are stressed and could learn how to handle stress in a productive way.

Following a dinner presentation by Professor Cary Cooper of Lancaster University Management School relating to executive health and wellbeing that emphasized the negative impact of long hours on relationships and productivity, feedback from many revealed that “they had felt inhibited from revealing how stress was affecting them to their peer group of high achievers out of fear of being perceived as wimps” (Cooper, 2006). This was a group which included dozens of executives and chairmen of major companies. It is almost as though these high level executives who are high achievers are in a state of denial concerning the effects of stress in their lives. However, the Quality of Working Life Survey 2006 that was sent to over 1,500 managers including the CEO/Chairman level, revealed that 46 percent of the managers believed that stress undermined their productivity and 56 percent said it affected their health (Cooper, 2006).

In the research several references were made to “wimps”. Goodwin reported that you have macho cultures in some workplaces where you are seen as a wimp if you take time off (Goodwin, 2004). Many times the implication is that one is not a team player or is not pulling his own weight if time off is taken. This type of environment is most conducive to stress development.

One former dean of a business school who has interacted with many CEO's of corporations through an annual Executive-in-Residence program sponsored by the College of Business found that when these executives were asked how they have managed to accomplish so much, the executives would invariably list such items as the following:

I come in one Saturday morning each month to get everything in my office updated and organized.

I get up at 5:00 a.m. and read until 7:00 a.m. daily to stay current via environmental scanning.

I make sure my desk is clean before I leave for the day so I will be ready for work the next day (White, 2007).

Note that all of these responses involve working longer which is typical of the high-need achiever.

This negative way to adapt is, many times, exemplified in the job of CMO, chief marketing officer. “The job of CMO has become one of the highest-stressed, shortest-tenured in American industry” (Macarthur, 2006). Currently, CMOs can expect to remain in their positions only 23.2 months. The current senior Vice President of Strategic Marketing for Samsung Electronics America stated that “I don't go to lunches, and I don't go to dinners and I don't play golf” (Macarthur, 2006). This seems to be a prescription for stress and eventual burnout.

When Alcan Inc. of Montreal, Canada, acquired one of their major rivals and employees at this world's second largest aluminum producer began to suffer from burnout due to long days and non-conventional schedules, managers in the human resource area grew concerned. They rightly knew that the stress was coming from the top—those high-need achievers. The company implemented coaching for top executives and instituted mandatory no-work hours (Gulli, 2006). The program was referred to as a structured change in mindset and included “regular sessions with balance experts on how to be better role models” (Gulli, 2006). These high achievers at the top are becoming better role models as far as handling stress is concerned for their employees at Alcan, Inc., which is quite a switch from the normal role played by high-level, high-need achievers.

Further, several leading psychologists believe that much can be learned from the psychology of sports concerning dealing with stress. Since many in the sports area are indeed high-need achievers, perhaps, some of their research could be applied to high-need achievers in industry. For example, “performance routines . . . can be particularly useful in assisting employees to initiate and maintain a healthy and high-performance work style” (Lloyd and Foster, 2006). These routines promote the establishment and maintenance of work patterns that allow an employee to successfully structure time, tasks, and mental effort. In addition, these performance routines also incorporate strategies for recovery from intense periods of exertion to avoid overload. Since high achievers in the business arena are involved in these

intense periods of exertion in carrying out their work such as during mergers or expansions, these sports strategies could successfully be implemented by industry.

High-need achievers want to do things to perfection. Donato states that “If you don’t have the time to do something well, let your boss or client know (Donato, 2006). This takes education and training in order for these individuals to admit to any deficit. These high achievers do not need to work in a “long-hours” cultural environment (Dempsey, 2006). They are inclined to work long hours by nature of their personalities and a “long-hours” culture would simply exacerbate the situation and add further to their stress levels.

In addition, a recent *Harvard Business Review* research publication revealed that the “multi-tasking” mentality has added to stress and underperformance” (Hallowell, 2005). Caused by brain overload, the attention deficit trait is now epidemic in organizations. The following section will reveal what leading managers are doing to deal with the high-need achiever.

### **3. WORK DESIGNS AND CORPORATE CULTURE FOR SUCCESS OF HIGH ACHIEVERS**

In designing jobs for the high achievers, several considerations should take prominence. First, the job should provide the individual with autonomy. A demanding high pressure job need not be stressful. “There is a considerable body of research demonstrating that individuals can manage sustained high workload without negative effects if they have control” (Moyle, 2006). This could include the autonomy provided by flexible work time or working from home and many other strategies, depending on the individual differences of the employees.

This autonomy or control by employees is demonstrated by Trillium Health in Canada. Their vice president of people support, Caroline Brereton, reveals that they have the usual programs from time management to fitness programs. However, Brereton states that Trillium Health views stress management from a broader perspective ensuring that employees are engaged in the organization’s direction. “Make sure they’re fully engaged, developed, supported and encouraged” (Cakebread, 2006). Trillium Health depends on these top people to help problem-solve and for help in providing direction to the company. Repeatedly, we find that “actively involving employees in the decision-making processes” works as a solution to reducing stress (Urbaniak, 2006).

Second, the long-hours culture should be changed (Cooper, 2006). Cooper continues that if people are our most valuable resource, the workplace must reflect this belief through truly flexible working arrangements whenever possible. High achievers are often the workaholics in the organization; therefore, a culture such as that of SAS (the computer software company located in Cary, North Carolina, and always on the 100 Best Companies to Work For List) would be desirable for these employees. SAS encourages employees to take time out during the work-day; they provide a nap room and fitness center. SAS is careful about overtime. It offers unlimited sick days but does not allow them to be carried over. Overtime is rewarded by time off; thus, SAS has avoided developing the long-hours culture that is prevalent in many corporations (Cakebread, 2005). It is caring, supportive relationships such as SAS has established with its employees that helps build resilience in the employees and this resilience helps employees manage the stress in their lives. (Spiers, 2005).

This long-hours culture is supported by research from the United Kingdom, as well, where 97% of senior HR professionals believe stress is the biggest threat to the future health of the UK workforce (Fuller, 2006). The two key causes of stress according to research in the United Kingdom are working longer hours and not taking enough holidays. Companies must institute healthier working practices such as mandatory vacations and encouragement of shorter hours of work for high achievers.

One important trait of high achievers is that they desire feedback as to how they are doing; therefore, feedback should be built into the design of their jobs. People who feel valued and are reminded of the contributions they are making to the organization are less likely to feel stress even in a job that is making many demands of them. Research dealing with high-performing salespersons reveals that salespeople feel greater organizational commitment when they feel valued and are praised for their excellent work

record. "Such positive behavior by leaders makes burnout less likely" (Amyx and Alford, 2005). These individuals need to be nourished since there are definite organizational benefits to having salespeople with elevated levels of need for achievement.

Because high achievers want feedback, their managers need to have good coaching skills. The good coaching skills of active listening, purposeful questioning, and "providing helpful and objective feedback" would be especially helpful to this group (Berriman, 2007). In fact, Paul Malone revealed that research shows that "a sense of achievement actually helps reduce our stress" (Malone, 2006). "We work much more efficiently, and are much happier, when we feel that we are reaching our full potential" (Prime, 2006).

Another trait of high achievers is their desire to improve themselves. Trillium Health of Canada offers these employees an opportunity to grow through its "distributed leadership model" which provides for training in other areas of the organization (Cakebread, 2006). Participation in the distributed leadership model forces people who may be too targeted to their jobs to take a look at other areas of the organization with the possibility of change and growth.

Also, granting special leaves (sabbatical programs) is a great way to retain your high-need achiever nearing the stage of burnout (Urbaniak, 2006). This could be the beginning of convincing employees to take charge of their own lives which could include such techniques as changing perceptions since half of the battle is to view stress as a positive rather than as a negative or keeping a journal so that the employee can monitor the events that cause stress levels to rise. In addition, employees should "tackle a big backlog the same way you would an elephant, one bite at a time (Graham, 2006). Set a reasonable goal that can be reached in a day, achieve it and repeat.

#### **4. CONCLUSIONS AND RECOMMENDATIONS**

Corporations' policies and procedures must encourage (1) coaching strategies, (2) the promotion of a culture that encourages vacations and other time off, and (3) the establishment of work patterns that allow for an employee to successfully structure time, tasks, and mental efforts. In addition, two management strategies that must be in place include (1) an early intervention program so that a stress problem doesn't become a medical problem and (2) identification of managers' training needs (Colgrave, 2006).

Some of these training needs include an understanding of the importance of resolving issues as they arise so that small issues do not grow into a source of stress. Likewise, managers should consider teambuilding since developing good working relationships can be instrumental to preventing work stress. Managers should be trained in enabling autonomy since there is considerable research that reveals that employees can manage sustained high workloads without negative effects if they have control over how it is managed (Moyle, 2006). Further, make certain your HR people in the EAP area are trained to handle stress (Urwin, 2006).

In conclusion, to prevent "Karoshi" which is a Japanese word meaning sudden death caused by overwork, companies must address the needs of the high achievers in the workplace (Ferns, 2007). However, as Cary Cooper, professor of organizational psychology and health at the Lancaster University Management School emphasizes, stress management should start when the employee is hired by making him/her aware of the potential pressure of the job (O'Reilly, 2004).

Finally, one important recommendation is to always remember that stress is highly individual. Some can tolerate a great deal of stress and others much less; however, there is a threshold at which stress affects all. Further, there are cultural differences that may determine how stress affects individuals i.e., in Sweden it may be work encroaching on private lives and in Germany it may be time pressures and deadlines. Also, gender differences may affect the way that stress is experienced i.e., men may report more physical effects and women may report more psychological effects.

To end on a more positive note, the Bureau of Labor Statistics tells us the number of stressed in the workplace has shown a 25% decline in the last decade (Selliman, 2004).



## REFERENCES

- Amyx, Douglas and Alford, Bruce L., "The Effects of Salesperson Need for Achievement and Sales Manager Leader Reward Behavior," *Journal of Personal Selling and Sales Management*, Volume XXV, (4), fall, 2005, 345-359.
- Atkinson, William, "How Favorite CEOs Manage Stress", Penn Well Publishing Company, July/August 2004, [www.elp.com](http://www.elp.com).
- Berriman, Jo, "Can Coaching Combat Stress at Work?" *Occupational Health*, Volume LIX, (1), January, 2007, 27-30.
- Cakebread, Caroline, "People Power," *Benefits Canada*, Volume XXIX, (7), July 2005, 23.
- Cakebread, Caroline, "SAS . . . not SOS", *Benefits Canada*, Volume XXIX, (7), July 2005, 18.
- Colgrave, Fiona, "Stress Busters," *Occupational Health*, Volume CVIII, (9), September, 2006, 12-14.
- Cooper, Cary L., "In my Opinion," *Management Today*, 00251925, March 2006, 8.
- Dempsey, Karen, "Failing to Tackle Stress Could Cost You Dearly," *Personnel Today*, 09595848, September 12, 2006, 10-15.
- Donato, Mary, "Workplace Stress: A Survival Guide," *Sales and Marketing Management*, 101637517, (9), November/December, 2006, 24-28.
- Ferns, Joe, "It's Stress Down Day," *People Management*, Volume XIII, (1), January 11, 2007, 7.
- Fuller, Georgina, "HR Fears for Employee Health as Work Stress Grips Nation", *Personnel Today*, September 12, 2006, Reed Business Information UK, Ltd. 09595848, 1-2.
- Gulli, Cathy, "All Work No Play No More," *Maclean's*, Volume CXIX, (25), June, 2006, 35.
- Goodwin, Bill, "Don't Close Your Eyes to Workplace Stress," *Computer Weekly*, 00104787, November, 2004, 3-6.
- Graham, Doug, "Battling Burnout," *Event DV*, Volume XVIV, (2), February, 2006, 35-36.
- Hallowell, Edward M., "Overloaded Circuits: Why Smart People Underperform", *Harvard Business Review*, Volume CXXXIII, (1), January 2005, 76-77.
- Lloyd Paul J. and Foster, Sandra L., "Creating Healthy, High-Performance Workplaces: Strategies From Health and Sports Psychology," *Consulting Psychology Journal: Practice and Research*, Volume LVIII, (1), 2006, 23-39.
- Macarthur, Kate; Halliday, Jean and others, "Average CMO Tenure Drops to 23.2 Months," *B to B*, Volume XCI, (9), July 10, 2006, 35.
- Malone, Paul, "Feeling the Pressures," *Travel Weekly: The Choice of Travel Professionals*, August 18, 2006, Volume XXXIV, (34), 79.
- Minirth, Frank and Hawkins, Don, and others (1990). , *Before Burnout*, Moody Press, Chicago, 1990.
- Moyle, Penny, "How to Reduce Stress in the Workplace", *People Management*, Volume XII, (26), August, 2006, 48-49.
- O'Reilly, Sally, "Stress—What Works and What Doesn't," *Occupational Health*, Supplement V, September, 2004.
- Prime, Louise, "Work with Strengths to Cut Stress," *Practice Nurse*, Volume XXXII, (8), November 10, 2006, 5.
- Selliman, Dan, "New Crisis—Junk Statistics," *Forbes*, Volume CLXXIV, (8), October 18, 2004
- Spiers, Carole, "Under Pressure", *Management Services*, Volume XLIX, (2), Summer, 2005, 35-39.
- Stanley, T. L. (2004). , "Stress Management for High Achievers," *Supervision*, Volume CV, (3), March, 2004, 23-24.
- Urbaniak, Anthony (2006), "Managing Stress," *Supervision*, Volume XVII, (8), August, 2006, 6-7.
- Urwin, Tony (2006), "How to . . .Manage Stress," *Occupational Health*, Volume CVIII, (8), August, 2006, 12-13.
- White, Gayle (2007), Experiences Gained through Administering the Executive in Residence Program at Southern Arkansas University over a decade.

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# COOL-HUNTING: A BASIS FOR CATALYZING ENTREPRENEURIAL THINKING

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## ABSTRACT

*The writer presents a methodology for catalyzing entrepreneurial thinking among Russian managers participating in an intensive two-year MBA program in Moscow. Utilizing coolhunting, Web surfing, cases, teamwork, and a textbook, processes for opportunity recognition, idea screening, and business plan development are described. The author concludes with examples of business plans and marketing plans which resulted from this methodology.*

**Keywords:** Creativity; Entrepreneurship; Opportunity Recognition; Business Plan; Russia; Pedagogy.

## 1. INTRODUCTION

Teaching entrepreneurship is a complicated process that involves a mix of theory, practice, examples, and case studies of successful entrepreneurs. There is no magic formula to guide a successful entrepreneur, and there is as yet no textbook that can guarantee results. For example, eighteen course syllabi submitted for a retreat sponsored by Rennselear Polytechnic Institute included 116 different subjects that overlapped on only a third of the topics. (Fiet, 2000) I don't recall when I first discovered the article or when the idea actually came to me, but after teaching entrepreneurship since 1996 in Cal State East Bay's Moscow MBA Program, I realized that "The Coolhunt" by Malcolm Gladwell could be a basis for inspiring entrepreneurial thinking and new business ideas (Gladwell.com, 1997). I made the article the introductory reading in the course and the first question on a pre-assignment.

The article describes the primary research process practiced by two coolhunters, Baysie Wightman and DeeDee Gordon, "the Lewis and Clark of cool," as they observe teens, interview cool people, and report fashion trends from the street to their Converse and Placid Planet Boutique employers in 1992. Gladwell describes his experiences coolhunting with Baysie and positions the process in the context of diffusion research. From scouring the streets and shops of Boston, Harlem and the Bronx, both coolhunters evolve into future careers in spotting and reporting youth fashion trends, DeeDee for the marketing research firm Lambesis in Southern California and Baysie for Reebok (Gladwell.com, 1997). Since Gladwell's article was published, his concept has spawned a website ([www.coolhunting.com](http://www.coolhunting.com)), described as a "a daily update on ideas and products in the intersection of art, design, culture and technology;" a wikipedia entry (<http://en.wikipedia.org/wiki/Coolhunting>); and two books (Coolhunting: Chasing Down the Next Big Thing, Gloor and Cooper, 2007, and Chasing Cool: Standing Out in Today's Cluttered Marketplace, Kerner and Pressman, 2007).

My approach includes an attempt to catalyze entrepreneurial thinking by introducing managers to the mindset inherent in the experiential process of coolhunting, "a collection of spontaneous observations and predictions that differ from one moment to the next and from one coolhunter to the next." (Gladwell.com, 1997) Precisely because the course participants are managers, they don't have time to prowl the streets of Moscow in search of cool people and the latest trends. However, by introducing a coolhunting mindset through an analysis of Gladwell's article, my expectation is that during their normal weekday and weekend activities of commuting, dining out, clubbing, shopping, Web surfing, exercising at fitness centers, and others, the participants will look at their surroundings and consider their experiential interactions differently, filtered now through the mindset of a coolhunter.

## 2. LITERATURE REVIEW

How educators instill in prospective entrepreneurs a capability to recognize potential ideas and develop them into viable business opportunities is the subject of much research. Kirzner (1979) proposes that entrepreneurs interpret events differently from other market participants because of entrepreneurial alertness, their own specific personal cognitive and perceptual skills. Gaglio and Katz (2001) discuss the differences between alert and non-alert individuals, and propose an alertness schema that links an

entrepreneur's perceptions of a market situation, "figuring out what is really going on," with schema for the socio-political environment, for an industry, and for market processes. According to Ardichvili, Cardozo, and Ray (2003), personality traits, prior knowledge and experience, and social networks are three coincident factors that act to heighten entrepreneurial alertness. Corbett (2005) contends that "experiential learning theory fits well with entrepreneurship" because it focuses on process. He states that:

"Courses that focus more on learning, improvising, and adapting in reaction to changes suggested by potential customers and other actors in the marketplace may provide additional value to students. To do this, educators can test the students' ability to learn in different manners by using scenarios, role plays, and experiences that tap each individual's ability to grasp and transform experiences in each of the four manners delineated in the experiential learning model (convergent, assimilation, divergent, accommodative)."

In a study by DeTienne and Chandler (2004), students participating in an opportunity recognition training program were asked to keep a log of everyday activities that could be potential opportunities. Their conclusions provide "evidence of a link between training and the ability to generate innovative business ideas within the entrepreneurial classroom." Binks, Starkey, and Mahon (2006) review the literature on the future of the MBA and the business school and evaluate entrepreneurship education in this context. They propose that a "design principle for entrepreneurship education" should be a "live" case study based on students' own activities, because students are more receptive to real-life situations than case studies. The coolhunting pre-assignment appears to be in the mainstream of current research on the relationship of experiential learning to entrepreneurship education and the possibility to teach idea generation and opportunity recognition through alertness to one's surroundings and daily activities.

### **3. COURSE FORMAT**

The courses are taught over 3 to 4 weeks, with class meetings three or four evenings per week from 6:30 – 10:00 pm. The course is based on the Timmons and Spinelli book, New Venture Management: Entrepreneurship for the 21<sup>st</sup> Century, 6<sup>th</sup> edition, 2004, and includes lectures, cases, readings, class discussion, a final exam, and team creation and presentation of a business plan. Teams are limited to 5 or 6 individuals. Students are expected to spend significant time outside of class working on the business plan. Cases and readings are discussed in class, sometimes turned in for credit, sometimes presented by teams to the rest of the class.

### **4. CLASS COMPOSITION**

All students are working managers employed by multinational corporations or by Russian banks, corporations, or government agencies. Representative multinational employers include American Express Bank, Baxter, Boeing, Chase Manhattan Bank, Caterpillar, Coca Cola, Deloitte & Touche, Ernst & Young, Gillette, Hewlett-Packard, LG Electronics, McKinsey & Company, Microsoft, Pepsi Cola, PriceWaterhouse Coopers, Proctor & Gamble, Raffey Bank Austria, in fact almost every multinational corporation that has a presence in Moscow. Russian employers include Aeroflot, Alfa Bank, MFK Renaissance, the Ministry of Taxation, Troika Dialog, and others. The age of the participants ranges from 24-45 years old, and the gender composition is about 40% women, 60% men (California State University, East Bay, 2005).

### **5. PRE-ASSIGNMENT**

The intent of the pre-assignment is to get students thinking about new business ideas, first by understanding the process of coolhunting, then by defining entrepreneurship in their own words, next to speculate on how they might coolhunt in Moscow, and with this speculation as a basis, to come up with three new and "cool" business ideas. Finally they are asked to identify obstacles to creating their businesses. The process is described here step-by-step. My pedagogical objective is to have all class members prepared with their new business ideas before the first class, so that during an intensive course the first 1-2 days are not consumed by exploratory brainstorming. Instead, having already engaged in

individual idea generation, members of teams can now leap forward to collective opportunity recognition and idea screening.

### **5.1 Cool-Hunting Article**

The course pre-assignment is designed to be worked on for seven to ten days before the evening lectures begin, with a notation that it's designed to provide students with a fast-track start on the course and with some directed web surfing in "coolhunting," the essential ingredient for the course project. The first task the students face is to read "The Coolhunt" article, and analyze in some detail who originated the term "coolhunting" and in what context. The objective is for students to identify Gladwell as the author who introduced the terminology and to describe the processes DeeDee and Baysie engaged in to spot fashion trends among the youth culture. Further, the objective is to introduce the coolhunter mindset to prepare the student to pay closer attention to new business opportunities they might spot in their everyday activities.

### **5.2 Star-Bucking**

The Trendwatching website first introduced the concept of Starbucking into business terminology. Students are specifically directed to surf the web, find the site, and explain the concept of Starbucking. Quite interestingly, the definition put forward is the knack of spotting a promising business trend and commercializing it before the founders realize what they have and do it themselves (Trendwatching, 2003). The objective is for students to find and paraphrase the definition, and add relevant commentary from their own experience.

### **5.3 Definition of Entrepreneurship**

Students are next asked to define their understanding of the concept and process of entrepreneurship in their own words, without paraphrasing a dictionary, textbook, or website. The objective is to force them to conceptualize the process after absorbing information from multiple sources and then to synthesize a definition.

### **5.4 Cool-Hunting in Moscow**

Next the pre-assignment leads the students to reflect on their own business environment. They are asked to describe how they would apply the process of coolhunting in Moscow, and what adaptations, if any, would be needed. The objective is to inspire them to provide more than generalities, to think about the Moscow youth and fashion culture, about their own clubbing, shopping, dining out, and hanging out habits, and provide very specific examples of neighborhoods, bars, clubs, events, concerts, schools, universities, whatever locations they conceive as appropriate given the examples in the Gladwell article.

### **5.5 Idea Generation**

Now hopefully inspired by their application of coolhunting to the Moscow consumer environment, students must list and then discuss in some detail three cool ideas for a new business concept that they would like to introduce in Moscow, in the Russian Federation, or in the global marketplace. They are instructed that "discuss" means to give details on which trend(s) or behavior(s) they observed, how they thought of their cool idea, and why the concept has business potential. These ideas form the basis for team deliberations on the first or second evening of the course. Above all, the primary objective is to come up with new ideas, not ideas that have been commercialized abroad and which might be replicated in Moscow or Russia.

### **5.6 Problem Identification**

Finally, the students must list and describe three problems or obstacles that would prevent them from implementing their cool ideas. Common reasons cited include lack of financing, bureaucratic red tape, inability to access resources, and crime and corruption. These problems will later become part of a SWOT analysis when teams analyze the business environment for their idea.

### **5.7 Resource Links**

The pre-assignment includes a list of 26 web links that all deal with coolhunting, trendspotting, or new business ideas. The objective is to facilitate student discovery of information sources that might aid them in catalyzing their own new business ideas. Representative sites include:

1. <http://www.bzzagent.com>
2. <http://www.trendwatching.com>
3. <http://www.springwise.com>
4. <http://www.youthintelligence.com>
5. <http://www.trendcentral.com>
6. <http://www.lstylereport.com>
7. <http://www.hipsterhandbook.com>
8. <http://www.eonline.com>
9. <http://buzz.yahoo.com>
10. <http://www.pbs.org/wgbh/pages/frontline/shows/cool/>

In some classes, students are also asked in the pre-assignment to list and evaluate any interesting coolhunting or trendspotting websites that they have discovered through their own web surfing.

## 6. TEXTBOOK

I have found that the Timmons and Spinelli book is an excellent vehicle for teaching entrepreneurship, and that the examples, anecdotes, statistics, and cases translate the many aspects of entrepreneurship into practical application. In my opinion the best tools in the text after The Business Plan Guide are the Venture Opportunity Screening Exercises (VOSE). Once a team has completed the twelve sections, they basically have all the information needed to write a business plan. While it's usually not possible to collect all this information given the limitations of working managers pursuing a three or four-week evening course, it is possible to work on selected VOSE sections. In some classes when there is ample time, I try to incorporate use of all the VSOE as a prerequisite assignment to the final business plan, while in other classes I use only selected sections including Exercise 9, which requires the team to assess their commitment to the business idea and plan, and Exercise 10, which asks for discussions of flaws and downside risks (Timmons and Spinelli, 2004).

## 7. INTRODUCTION TO COURSE

In the first class meeting, the students turn in their pre-assignments. Individuals take turns giving their responses to the questions, and as the class progresses through the questions, I ask students to give one of their business ideas, but not their best one, so as not to give a good idea away. After 7-10 pre-assignment days of web surfing and developing their individual cool ideas, there is usually a lively discussion the first night of class. Following the discussion, I give a PowerPoint presentation based on Gladwell's Coolhunt article, in which I present synonyms and substitutions for the word "cool" as the American culture's vocabulary has evolved, including "hip," "bad," "rad," "groovy," "far out," "gone," "totally," "no doubt," "out 'a sight," "radical," "excellent," and so on.

I make specific reference to Gladwell's discussion of diffusion research based on a study of the spread of hybrid seed corn in Iowa in the 1930s. Gladwell notes "Everyone else made his decision overwhelmingly because of the example and the opinions of his neighbors and peers. Isn't this just how fashion works?" (Gladwell.com, 1997) Then I refer to a slide from Kotler's 8<sup>th</sup> edition that shows the bell curve of time to adoption of innovations, which he had taken from Diffusion of Innovation, 3<sup>rd</sup> edition, by Everett M. Rogers (Kotler, 1994). This aids in legitimizing coolhunting as a valid marketing research process in the minds of the students when they can see its relationships to consumer behavior.

Gladwell's conclusion that "coolhunting represents the ascendancy, in the marketplace, of high school" doesn't have much meaning in the Russian context (Gladwell.com, 1997). Therefore I close my presentation with comments that coolhunting observes the need to belong to a group, the desire to fit in with one's peers, and yet to stand apart at the same time; that coolhunting reflects the influence of reference groups, the psychological risks of purchase behavior, the potential for post-purchase dissonance from making the wrong choice. This summary adds credence to coolhunting for the students as the process is linked again with consumer behavior concepts that they have studied.

Next I introduce the concept of trendspotting and differentiate it from coolhunting by pointing out that while coolhunting is primarily practiced in the realm of youth fashion trends, trendspotting can be applied to all areas of life. Representative web sites are introduced and include:

1. <http://aol.smartmoney.com/trendspotting/>  
(Trends in the economy, personal finance, small business and technology.)
2. <http://www.entrepreneur.com>  
(Ideas and trends for small business entrepreneurs.)
3. <http://www.newhope.com>  
(Everything new in the natural products industry.)
4. <http://asia.cnet.com>  
(Trends in the Asian electronics industry.)
5. <http://news.zdnet.com>  
(More trends in the global electronics industry.)
6. <http://www.cbsnews.com/stories/2003/10/23/60minutes/main579657.shtml>  
(An inside look at undercover marketing and buzz creation.)

The objective here is to motivate students to gather more information from these and other trendspotting websites which they might use in formulating or revising their cool business ideas.

## **8. IDEA SCREENING**

Once teams of 5 or 6 managers are formed, they each share their three new business ideas from the pre-assignment and create a team pool of 15 to 18 ideas for consideration. Class time is given for team discussion on multiple occasions, and follows a presentation on brainstorming. To unleash creative thinking at this point in idea screening, I introduce a right brain, left-brain exercise intended to catalyze an open mind and suspension of judgment. Students are asked to select one side of a paper, use the hand that they usually write with, and draw a picture of what they did on their last vacation. Once completed, they are then directed to turn the paper over, use their opposite hand, and draw a picture of where they would like their career to be in five years. The exercise creates a lot of initial apprehension and then subsequent excitement, and hopefully induces some creative thinking as the teams shift to evaluating their ideas.

After a couple of classes in which the teams have group time to discuss their ideas, and following a lecture presentation on the VOSE, the teams are required to submit a list of their top ten business ideas. This requires them to reject 5 to 8 ideas from the collective idea pool. Teams are then given more class time to come up with ten screening criteria, using the VOSE for examples. Criteria are determined by each team, and might include degree of financing needed, access to capital, barriers to entry, degree of red tape, degree of competition, market share of competitors, and so on. The five components of Porter's Five Forces analysis can often constitute a useful part of the criteria. Next the teams are required to create a screening grid, listing the criteria across the top but now only seven ideas on the left margin. Teams can use weighted or unweighted criteria to rank each business idea by each criterion.

A scale of one to ten is easiest to work with. The more positive impact that a criterion has on the success of a business idea, the higher the number it should be assigned; the more negative impact, the lower the number. For example, if competitor strength is high, that's a negative worth a ranking of 1, 2, or 3. Conversely, if access to financing is high, that's a positive worth an 8, 9, or 10. Next the team multiplies each ranking by the weight assigned the criteria and totals the score for each business idea. The idea with the highest ranking then becomes the subject of the team's business plan, for which both a paper and a presentation have to be created. Tables 1 presents an example of an unweighted ranked list. There is a fallback option in which teams can pick another idea, with instructor feedback, if they don't like their number one ranked idea.

**Table 1: Ranked List of Seven New Venture Ideas**

	Criteria	1	2	3	4	5
		Target Market Exists	Market Growth Rate	Threat of Entry	Power of Buyers	Power of Suppliers
	Idea					
1	Metro Disco	5	5	1	1	1
2	Three-Star Hotel	10	9	5	6	5
3	Public Laundromats	7	9	5	7	5
4	Business Class Metro	7	7	1	1	1
5	Vegetarian Restaurant	8	5	7	7	6
6	Regional Air Taxi Service	9	9	3	1	1
7	Driving School for Women	9	9	8	4	6

**Table 1 continued: Ranked List of Seven New Venture Ideas**

	Criteria	6	7	8	9	10	Total
		Degree of Rivalry	Financing Available	Degree of Red Tape	Intellectual Property Protection	Degree of Coolness	
	Idea						
1	Metro Disco	3	3	1	3	9	32
2	Three-Star Hotel	9	7	5	6	5	67
3	Public Laundromats	7	7	6	7	6	66
4	Business Class Metro	9	3	1	1	9	40
5	Vegetarian Restaurant	3	7	7	4	5	59
6	Regional Air Taxi Service	4	5	3	7	7	49
7	Driving School for Women	2	9	7	7	8	69

## 9. BUSINESS PLAN TOPICS

I first tested the article with the Moscow MBA-19 group in Spring 2005, found that the students liked the pre-assignment approach with coolhunting and trendspotting questions and links, and that they generated some very creative business ideas. Subsequently I used the article and the same pre-assignment format with the MBA-21 group in Spring 2006 and had similar results. A list and brief description of the business plans from the teams in each group follows. Later in Fall 2006 I also taught Marketing Strategy to the MBA-21 group. I've included their marketing plan ideas here as well.

### 9.1. MBA-19 Business Plans (Spring 2005)

Aerotaxi: short-hop air taxi service in the Moscow region and adjacent cities where regular flights are not offered or the transportation infrastructure is limited. (Six months after the team presented its business plan, an aerotaxi service was launched in Moscow; unfortunately the students were not involved.)



Babushki Online: Internet services for grandparents whose sons and daughters, and for children whose mothers and fathers, already have Internet access at home; training in the use of email and web surfing.

Game Mania: one-stop retail outlet for all variety of board games (checkers, chess, monopoly, and so on), as well as a gaming club to support the board game culture in Moscow.

Metro Business Company: a plan to attract commuters out of their cars by renting carriages from the Moscow Metro and upgrading them to business class standards. (Coffee, newspapers, air conditioning.)

President E-School: online distance learning tutorials to assist students with homework and high school and university entrance exams.

ProbOK.net: a traffic jam solution company for Moscow that transfers streaming video from cameras at highly-congested traffic points and provides it to commuters through image, video, or text format to cell phones, PDAs by SMS or MMS, and PCs by email.

Prostirni: a network of self-service Laundromats for students living in university hostels and for residents of low-budget hotels. (No self-service Laundromats exist in Moscow.)

StoGramm Bar (100 Gram Bar): a chain of ryumochnyas, a Soviet-style quick-stop snack bar based on Russian zakuski snacks but with vodka as the centerpiece, to capitalize on nostalgia for the Soviet era.

## **9.2 MBA-21 Business Plans (Spring 2006)**

Onyx Studio: a chain of manicure/pedicure salons close to business centers and office complexes to provide male and female customers with more convenient access and expanded hours than existing competitors.

Smoothie Burst: a plan for a chain of smoothie bars and kiosks in shopping malls, airports, and amusement parks, first in Moscow and the Moscow region, later in St. Petersburg.

RichFloat River Taxi Company: a business to provide fast and predictable all-weather transportation by hovercrafts on Moscow waterways, thereby assisting the commuter to avoid city traffic jams and route delays. Includes a mini-bus shuttle from Sheremetyevo Airport to a nearby canal for waterway access.

World of Holidays: a retail, wholesale, and on-line shop to provide holiday cards and gifts, interior design accessories, and unique handicrafts from around the world to Russian and expatriate consumers in Moscow.

## **9.3 MBA-21 Marketing Plans (Fall 2006)**

BMW Remington Shavers: a plan for Remington to expand its Russian product lines from hair care and grooming products to men's shavers with its new BMW line.

Grill & Chill Restaurant Chain: a "grill-it-yourself" restaurant chain to be founded in Moscow and expanded to the Moscow region and then St. Petersburg.

Life Insurance Supermarket (LIS): term and whole life insurance, annuities, and accidental risk coverage for the Russian middle class.

MBA Loan Consulting Agency (MLCA): a marketing division within the Institute of Business & Economics, Cal State East Bay's MBA partner in Moscow, to match student financial needs with Moscow lending institutions to enable needy students to attend the MBA program.

Sake introduction by Group OST: a plan to expand the product line of ZAO "Group Ost," founded in 1998 in the Moscow region, to include sake, and to capitalize on the growing trend among Russian consumers for Japanese foods and beverages.

## 10. CONCLUSION

I was particularly gratified by the creativity shown by most teams in the MBA-19 group in the choice of business plan ideas. Each team's idea seemed to "catch the wave" of things that were happening in Moscow in the Spring of 2005: concern over increasing traffic congestion, more and more access to the Internet, nostalgia for the Soviet era. The business plans and marketing plans for MBA-21 seemed to me less timely and less creative in comparison. It would be ideal if the individual students could actually roam around Moscow in true coolhunting fashion as DeeDee and Baysie do, but given their work commitments, that's not realistic. However, in their social activities and with their circles of friends, I assume they do gain enough exposure to the new and to the cool. Overall, I am very satisfied with the process, find it very useful for catalyzing opportunity recognition, idea generation, and new business ideas, and plan to continue using it in the Moscow program.

## REFERENCES

- Ardichvili, A., Cardozo, R., and Ray, S., "A theory of entrepreneurial opportunity identification and development," *Journal of Business Venturing*, Vol. 18, 2003, 105-123.
- Binks, M., Starkey, K., and Mahon, C., "Entrepreneurship Education and the Business School," *Technology Analysis and Strategic Management*, Vol. 18, (1), February 2006, 1-18.
- California State University, East Bay, An Assessment of Program Management Practices in the context of Principles of Good Practice in Overseas International Education Programs for non-U.S. Nationals, February 2005, [http://www.csueastbay.edu/wasc/pdfs/GoodPractices\\_Final.pdf](http://www.csueastbay.edu/wasc/pdfs/GoodPractices_Final.pdf), retrieved May 30, 2007.
- Corbett, A., "Experiential Learning Within the Process of Opportunity Identification and Exploitation," *Entrepreneurship Theory and Practice*, July 2005, 473-491.
- DeTienne, D. and Chandler, G., "Opportunity Identification and Its Role in the Entrepreneurial Classroom: A Pedagogical Approach and Empirical Test," *Academy of Management Learning and Education*, Vol. 3, (3), 2004, 242-257.
- Fiet, J., "The Theoretical Side of Teaching Entrepreneurship," *Journal of Business Venturing*, Vol. 16, 2000, 1-24.
- Gaglio, C., and Katz, J., "The Psychological Basis of Opportunity Identification: Entrepreneurial Alertness," *Small Business Economics*, Vol. 16, 2001, 95-111.
- Gladwell, M., The Coolhunt, March 1997, [http://www.gladwell.com/1997/1997\\_03\\_17\\_a\\_cool.htm](http://www.gladwell.com/1997/1997_03_17_a_cool.htm), retrieved May 30, 2007.
- Gloor, P., and Cooper, S., *Coolhunting: Chasing Down the Next Big Thing*, American Management Association, New York, 2007.
- Kerner, N., and Pressman, G., *Chasing Cool: Standing Out in Today's Cluttered Marketplace*, Simon & Schuster, New York, 2007.
- Kirzner, I., *Perception, Opportunity, and Profit*, University of Chicago Press, Chicago, 1979.
- Kotler, P., *Marketing Management: Analysis, Planning, Implementation, and Control*, Prentice-Hall, Upper Saddle River, 1994.
- Timmons, J., and Spinelli, S., *New Venture Creation: Entrepreneurship for the 21<sup>st</sup> Century*, Irwin, Boston, 2004.
- Trendwatching.com, Starbucks, March 2003, <http://www.trendwatching.com/trends/2003/03/STARBUCKING.html>, retrieved May 30, 2007.

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# TRADE WITH AUTOCRATIC CHINA: DOES IT JUSTIFY OR RUIN "DEMOCRATIC TRADE"?

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## ABSTRACT

*For decades, scholars have been discussing the explanations of democratic peace from different perspectives. They examined shared ideology, institutional constraints, and other possible reasons. One of the economic considerations, namely international trade, stands out as an indirect cause of democratic peace. It proposes that democratic states are more likely to cooperate with each other in international trade. Since trade and peace promote each other (Kim, 1998), democratic peace follows. Scholars explain "democratic trade" in various methods. An empirical study of Bliss and Russett (1998) used a gravity model and proved democracy to be significant in deciding inter-state trade. The data employed in this study dated from 1962 to 1983. Trading records of the Soviet Union, People's Republic of China, and Republic of Korea were incomplete and the authors coded them as no trade. In this paper, I am interested in studying the trade between major world exporters from 1985 to 2005, especially the extraordinary trade size and its dramatic increase between U.S. and PRC. The Bliss and Russett model has difficulties to interpret the data in focus. I propose to add a variable measuring the difference between normative and actual currency value. This factor influences inter-state trade in the similar reasoning as relative price theory. I wish to see that for data from 1985 to 2005, the democracy variable remains significant in the new model, and the explanatory power of the new model is higher than the original one.*

**Keywords:** Democracy, International Trade, Sino-US Trade, Normative and Actual Currency Value, Trade Growth

## 1. INTRODUCTION

In 2006, U.S. was the largest trading partner of China, and China was the second largest trading partner of U.S. The sum of imports and exports between U.S. and China increased more than 43 times from 1985 to 2005. Meanwhile, U.S. is the largest democratic country and China is the largest autocratic country in the world. The trade between the two countries seems unexplainable by the hypothesis that democratic countries tend to trade with each other more than with autocratic countries. This "democratic trade" hypothesis is also one of the explanations to the more widely known "democratic peace" hypothesis. This paper is interested in solving this problem by using an extended Bliss and Russett (1998) model to explain the extraordinary trade between U.S. and China.

## 2. LITERATURE REVIEW

"Democratic peace" is an observed fact and also a hypothesis that the academia eagerly tries to explain. Scholars have examined many possible causes, including differentiated political processes in democratic and autocratic states (Rummel, 1997), institutional constraints and cultural (or normative) restraints on bargaining between democratic states (Russett, 1993), as well as officers' strategic behavior caused by domestic political incentives-- desire to remain in office (Brueno de Mesquita and Lalman, 1992). One theory proposes that democratic countries are more prone to trade with each other, and high level of inter-state trade in turn reduce the possibility of conflict between them. Therefore, trade and peace propose each other (Kim, 1998), and democracy serves as indirect cause of peace. Literatures examining the "democratic trade" explain it in different perspectives. Powel (1991) pointed out that compared to autocratic trading partners, a state worries less that its democratic trade partners may use trade gains against it, so relative gains matter less in democracy- democracy trade. Dixon and Moon (1993) summarized existing trade theories including Hecksher-Ohlin factor proportions theory, Linder's (1961) theory of sharing tastes of the demand side, Balassa's (1961) preferential trading arrangements (shifting trade patterns in line with the processes of trade creation and trade diversion), and "psychic" distance theory (Beckerman, 1956; Linnemann, 1966). They then proposed that "foreign commerce is difficult to sustain in the presence of deteriorating or openly hostile foreign policy relations (Dixon and Moon, 1993, p.11)", whereas trade relationships are most likely to prosper when diplomatic conflict is unlikely. They

employed the economic gravity model and showed that the democracy is an important stimulus to inter-state trade after testing U.S. exports to 76 importing nations over an 18-year period.

### 3. MODEL PROTOTYPE

Bliss and Russett (1998) also examined the relationship between trade and democracy. They explained the more trade between democratic countries both from the perspective of the state (the state feels less threatened by democratic trading partner so it concerns less about relative gains from the trade) and the private sector (entrepreneurs feel more confident in the stability of the business in democratic countries). In an economic gravity model, besides gross domestic product, Bliss and Russett included "political" components, namely democracy, language, dispute, alliance, openness, distance, to explain the size of inter-state trade. They used Direction of Trade Statistics (DOTS) records of exports and imports of 14 major trading states during Cold War era (1962- 1989) as Trade, the dependent variable. They measured the democracy level of both the trading partners by Polity III dataset but only included the lower democracy score in the model: supposedly, the dyad member of lower democracy score should influence the trade the most according to "weak link" assumption (Oneal and Russett, 1997). Language was a dichotomous variable coded as 1 for dyads sharing a common official language, and 0 for otherwise. Bliss and Russett also controlled Dispute by using militarized interstate disputes (MIDS) data coded as 1 for dyads if members involved in a MID with each other. Alliance was coded as 1 for allied dyads and 0 for otherwise. Openness was the ratio of total world trade to GDP of a dyad member (Summers and Heston, 1991; updated as Penn World Table version 5.6a). Only lower openness score of the trading partner was included due to same reasoning to democracy score. Distance between the trading partners and GDP were also included. Both are key components of the economic gravity model. Bliss and Russett then took logarithm to the both side of the equation and got a linear regression model. Taking logarithm enables the model to reduce the influence of skewness of the data which is typical for GDP statistics. Therefore, they constructed the model as following:

$$\begin{aligned} \log TRADE_{ij} = & \log a + b_1 \log DEM_L + b_2 \log LANGUAGE + b_3 \log \\ & DISPUTE + b_4 \log ALLIANCE + b_5 \log OPEN_L + b_6 \log DISTANCE_{ij} + \\ & b_7 (\log GDP_i + \log GDP_j) + \log e \end{aligned}$$

According to regression from two datasets including 882 and 1042 dyads respectively, Bliss and Russett concluded that except for Alliance and Dispute variables, the coefficients of all other independent variables were all statistically significant. They showed that in the Cold War era, common language, geographic proximity, openness, and economic size were highly pertinent with the size of inter-state trade. More importantly, they proved the existence of a significant relationship between democracy level and trade.

### 4. NEW MODEL DESIGN

The constraints of Bliss and Russett's model that I want to talk about are concerned in the time period and countries it considers. In dataset 1, Bliss and Russett deleted the Soviet Union (USSR) and the People's Republic of China (PRC) because data were incomplete and that they were not "major worldwide traders in the 1960s and 1970s". Republic of Korea (ROK) was also excluded from dataset 1 from 1962 to 1972 in spite that it was a major trading state. In dataset 2, USSR, PRC, and ROK were added after 1972. However, trade data of the dyads of PRC and ROK before 1983, as well as those of the dyads of U.S. and PRC before 1972 were missing, so the authors coded them as no trade. As a result, a very important portion of autocratic trade was not included in the test, which makes me wonder whether the results would be different if data from USSR, PRC, and ROK were complete.

On the other hand, I am more interested in the explanation of "democratic trade" in the past two decades (1985 to 2005). One special feature of inter-state trade during this period of time is the extraordinary trade increase between U.S. and PRC: exports and imports between U.S. and PRC increased more than 43 times from 1985 to 2005. During the same time period, the sum of trade between U.S. and U.K. increased

less than 3 times and that between U.S. and Japan increased less than 1.5 times. (I choose U.K. and Japan as examples to compare with PRC because they are typical democratic trading partners of U.S.) If the model is going to sustain in this period of time, it must be able to explain the Sino-U.S. trade in addition to other inter-state trade. However, all political and demographic variables-- democracy score, common language score, dispute, alliance, and distance-- of all three dyads have not changed in the period. When taken back to the model, they cannot explain why the trade size between U.S. and PRC has increased much more than that between U.S. and U.K. or U.S. and Japan. Meanwhile, it is true that normative GDP of China increased more than 19 times when calculated in RMB terms (and more than 6 times when calculated in U.S. dollar terms), and economic openness increased about 2.4 times. Yet, increase of normative GDP and economic openness of U.S.- PRC dyad can only partially explain the increase of Sino-U.S. trade size. These two variables have not increased as largely as the trade, and the coefficients of these two variables were both around 1 in the Bliss and Russett model, so they are not sufficient to explain the dramatic increase in the trade: the 19-time (or 6-time if calculated in USD terms) increase in GDP and 3-time increase in economic openness cannot add up to the 43-time increase in the trade. Therefore, I wonder that if one is interested in the inter-state trade during the past two decades, the extraordinary trade size between democratic U.S. and autocratic PRC will cast doubt on the model.

To expend the Bliss and Russett model to the 1985 to 2005 period, I need to make sure it is valid for the special case of Sino-U.S. trade, the extraordinary trade size between the largest democratic country and the largest autocratic country in the world. I will try to improve the model in following method. I propose to add a new variable-- Currency Underestimate Rate to the model. I will subtract the Implied Purchasing Power Parity (PPP) Conversion Rate (PPPEX) from the normative exchange rate (national currency to one USD), and then divide the above result by the PPPEX. The PPPEX is from the IMF World Economic Outlook (WEO) program, which measures how much national currency equals to one USD. When the value of the new variable is positive, it indicates the times that the national currency is underestimated compared to its actual value to USD. When its value is negative, it is the time national currency is overestimated. For example, in 2005, one USD equals to 8.19 RMB normatively, whereas the PPPEX is 1.79, so the normative RMB is 3.58 times underestimated compared to its actual value.

Adding the measurement of underestimated national currency in the model uses similar reasoning as relative price theory. Still using the above example, one USD has the same purchasing power in American market as 1.79 RMB has in Chinese market, but one USD can buy 8.19 RMB in the exchange market. As a result, one USD can purchase 2.58 times more commodity in China than it can in America. From 1984 to 2005, the underestimate rate of RMB increased from 200% to 358%, which means the value of USD in Chinese market increased 78.8%. U.S. grabs this "bargain" and the Sino-U.S. trade increased dramatically. I propose to use PPPEX instead of PPP because PPP focus on the commodity market, whereas PPPEX is converted exchange rate, which also influences financial investments. Underestimated national currency appeals to entrepreneurs by lowering costs. It attracts foreign direct investments, which in turn leads to increased inter-state trade on the second fold. Although it is called Currency "Underestimate" Rate, in some cases, the currency of a country can also be overestimated (the value of the variable will be negative). Under such situations, the country's trading partner diverts the money to buy more commodities in other markets. FDI will also leave the country because of increasing costs. According to the logic, I propose the Currency Underestimate Rate has a positive relationship with inter-state trade size.

## 5. RESEARCH DESIGN

In my study, I am interested in explaining the inter-state trade between major trading states from 1985 to 2005, especially the extraordinary increase in trade size between U.S. and PRC. I will build my model on the basis of Bliss and Russett's study.

For the dependent variable-- Trade, I will follow Bliss and Russett's application to use the logged value of the sum of exports and imports for each of the major trading states. The data will be from DOTS in current dollars.

For the independent variables, I will add Currency Underestimate Rate variable. The data will be from IMF WEO program, which describe the difference between normative and actual currency value. I will drop Alliance and Dispute variable from the Bliss and Russett model, because they are proved statistically insignificant. All other independent variables-- Democracy, Language, Distance, Openness, and GDP will remain in my model. I will use Polity IV dataset for Democracy variable; I will interpret and code all five variables in the same way as Bliss and Russett did. I will estimate the regression parameters in the following equation:

$$\log TRADE_{ij} = \log a + b_1 \log DEM_L + b_2 \log LANGUAGE + b_3 \log OPEN_L + b_4 \log DISTANCE_{ij} + b_5 \log UNDERESTIMATE_{ij} + b_7 (\log GDP_i + \log GDP_j) + \log e$$

In addition, I will also estimate the regression parameters in the original Bliss and Russett model using the data from 1985-2005. According to the regression results, I will test the validity of following hypotheses:

1. In the new model, the regression coefficient of Democracy is positive and statistically significant, so democracy encourages inter-state trade as the "democratic trade" hypothesis proposes. The hypothesis sustains in the period of 1985 to 2005 and it is able to support the extraordinary trade size between the largest democratic country and the largest autocratic country in the world.
2. In the new model, the regression coefficient of Currency Underestimate Rate is positive and statistically significant, which means the difference between normative and actual national currency value indeed influences the inter-state trade. Moreover, the influence is directional: underestimated currency encourages inter-state trade while overestimated currency reduces trade.
3. The R-squared of the new model is higher than the original Bliss and Russett model for data in 1985 to 2005. The revision of the model increases its explanatory power. The addition of Currency Underestimate Rate makes the model have a better fit to the data in the tested time period. It also explains the special case of Sino-U.S. trade better than the original model.

## REFERENCES

- Balassa, Bela, The Theory of Economic Integration, Allen and Unwin, London, 1961.
- Beckerman, W., "Distance and the Pattern of Inter-European Trade", Review of Economics and Statistics 38, 1956, 31-40.
- Bliss, Harry and Russett, Bruce, "Democratic Trading Partners: The Liberal Connection, 1962-1989", the journal of politics, 60 (4), 1998, 1126-1147.
- Bueno de Mesquita, Bruce and Lalman, D., War and Reason, Yale University Press, New Haven, 1992.
- Dixon, William J. and Moon, Bruce E., "Political Similarity and American Foreign Trade Patterns", Political Research Quarterly, Vol. 46 (1), 1993, 5-25.
- Kim, Soo Yeon, "Ties That Bind: The Role of Trade in International Conflict Processes, 1950-1992", Ph.D. diss., Yale University, 1998.
- Linder, Staffan, An Essay of Trade and Transformation, John Wiley & Sons, New York, 1961.
- Linnemann, Hans J., An Econometric Study of World Trade Flows, North Holland Publishing Co., Amsterdam, 1966.
- Oneal, John R., and Russett, Bruce, "The Classic Liberals Were Right: Democracy, Interdependence, and Conflict, 1950-1985", International Studies Quarterly, 41 (2), 1997, 267-294.
- Powell, Robert, "Absolute and Relative Gains in International Relations Theory", American Political Science Review, 85 (4), 1991, 1305-1322.
- Rummel, Joseph, Power Kills: Democracy as a Method of Nonviolence, Transaction Publishers, New Brunswick, 1997.
- Russett, Bruce, Grasping the Democratic Peace, Princeton University Press, Princeton, 1993.
- Summers, Robert, and Heston, Alan, "The Penn World Trade Model (Mark 5): An Expanded Set of

International Comparisons, 1950-1988", *Quarterly Journal of Economics*, 106 (2), 1991, 327-369.  
Revised and updated through 1992 as Penn World Table (Mark 5.6a), National Bureau of  
Economic Research, Cambridge.

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# EFFECTS OF UNDERWRITERS, VENTURE CAPITAL AND INDUSTRY ON LONG-TERM IPO PERFORMANCE<sup>1</sup>

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## ABSTRACT

*We examine the effects of choice of underwriters, venture-capital support and industrial classification, and the interactions of these effects on the long term performance of IPO's. We find significant underwriter and venture capital effect and that underwriter effect subsumes industry effect. Short term price momentum and long term price reversal pattern is most pronounced for IPO's that are underwritten by leading investment banks and backed by venture capital. The beginning of price reversal coincides with the expiration of IPO lockup period. Although by the end of the first year, IPO's on average underperform the market, investors can earn above market returns by investing in IPO's that are underwritten by leading investment banks and backed by venture capitalists and divest before the expiration of the lockup period.*

**Keywords:** IPO, Underwriters' Reputation, Long Term Performance

## 1. EXECUTIVE SUMMARY

It has been well documented in the literature on IPOs that stocks of IPO firms experience an initial short-run underpricing (positive return) [Beatty and Ritter (1986), Miller and Reilly (1987)] and a subsequent long-run overpricing (negative returns) [Aggarwal and Rivoli (1990) and Ritter (1991)]. However, these effects can be mitigated by engaging a highly reputable investment bank to underwrite the IPO. Studies by Beatty and Ritter (1986) and Titman and Trueman (1986) show that the degree of initial underpricing of IPOs is inversely related to the underwriter reputation, while Carter et al. (1998) and Michaeli and Shaw (1994) document that the long-run underperformance of IPO firms is less severe if the IPOs are handled by more reputable underwriters.

On the other hand, Logue et al. (2002) provide evidence to show that after accounting for the services provided by the underwriters, underwriter reputation has no significant impact on stock returns. In other words, the results documented in early studies are more consistent with the argument that the post-IPO stock return dynamics is more related to the services provided by the underwriters rather than the reputation of the underwriters per se. Premarket underwriter activities such as road show and offer price adjustment are significant determinant of issue-date returns. In addition, aftermarket underwriter activities are also significant in explaining the first month returns. Similar findings on long run effect of aftermarket activities are reported by Aggarwal (2000). Aggarwal (2000) finds that it is not uncommon for an underwriter to establish a short position on issue date by allocating more than 100% of the shares. Subsequently, to cover their short position, the underwriter can either buy back shares in the open market or exercise their overallotment option. Short covering is more commonly used for weak offerings while overallotment option is exercised mostly for strong offerings. The effect of short covering on long run stock return is negative and significant while exercising overallotment option has a significant positive impact on the long run performance. However, Aggarwal (2000) observes that most price support activities by underwriters end within the first 15 trading days. Although Logue et al. (2002) and Aggarwal (2000) provide evidence to show that aftermarket price support activities by underwriters have a pronounced effect on the performance of stock prices during the first month of an IPO, whether the effects of these aftermarket activities persist in the long run is less clear.

Theories based on human behavior offer an alternate explanation to the observed price behavior of IPO firms. The theory developed by Daniel et al. (1998) (hereafter refer to as DHS) is based on evidence that

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<sup>1</sup> Note: Full paper is available upon request



people tend to overestimate their own abilities. Furthermore, if future revelation of events affirms the private belief of such investors, their confidence level will grow, and such behavior is termed by DHS as biased self-attribution. Such biased self-attribution behavior of investors will drive stock prices farther away from their fundamental value. However, as more public information become available, prices as predicted by DHS will “move closer to the full-information value”. Based on the DHS theory, the initial underpricing of IPOs boosts the confidence of investors which result in a short-run price momentum. Subsequently, as time passes and more information arrives, a price reversal is observed. The empirical evidence uncovered by Jaggia and Thosar (2004) in their study of stock performance of high-tech firms in the six months after their IPOs supports the theory posited by DHS.

In this study, we extend the work of Jaggia and Thosar (2004) to include both high-tech and non high-tech firms and also to expand the observation period from six months to a year. By extending the observation period, it will allow us to observe the evolution of stock prices over the medium-term and to investigate if the price performance of IPO firms conforms to the theory proposed by DHS.

Starting in mid-1990s, a growing number of small companies have gone public through direct public offering (DPO). With the recent rise in popularity of online trading, DPOs through Internet, while not yet a commonplace phenomena, have become a viable alternative for smaller firms that are previously excluded from the IPO market. In our sample, for period from January 1996 through December 2000, there are 50 companies going public through DPOs, and they have successfully raised over \$8.54 billion. However, for the same sample period, we also notice that the share of the IPO market for the top 10 most active underwriters has increased from 71% in 1996 to 92% in 2000. The observation of this seemingly contradicting trend has led us to investigate further whether the hiring of a market leader as an underwriter will reinforce investors’ preconceived notion that this is a quality company to invest, and thus accentuate the self-attribution bias.

In this paper, by examining the performance of firms in the first year after their IPOs, we test if investors behave in accordance with the theory proposed by DHS (1998). Without considering the choice of underwriters, our results are consistent with DHS theory in that IPOs exhibit a short term price momentum then follow by a price reversal. However, once the choice of underwriter is factored out, our empirical results suggest that short-run price momentum and long-run price reversal is only observed for the IPOs underwritten by the leading investment banks. On the other hand, direct public offerings and IPOs underwritten by less active underwriters tend to underperform the market in almost every month for the first year after IPOs.

IPO by itself does not transmit any information regarding the quality of the firm to investors. Therefore, it is not unexpected that we do not observe the behavior pattern as predicted by DHS (1998) for direct public offerings and IPOs underwritten by less active underwriters since such IPOs will not reaffirm investors’ confidence. On the other hand, for IPOs underwritten by leading investment bank, the participation by top underwriters is a signal of quality which can reinforce the investors’ belief and hence may lead to investors’ overconfidence due to biased self-attribution. The results are also consistent with the theory suggested by Chowdhry and Nanda (1996) that leading investment banks are more likely to step in to stabilize the stock prices in favor of their IPO clients as such investors are more confident about such IPOs.

We also observed a venture capital effect and industry effect. The results present in this paper are similar to those reported by Brav and Gompers (1997) in that ventured capital-backed IPOs perform better than those that not backed by venture capital. In addition, our results support the contention put forth by Jaggia and Thosar (2004) that IPOs for firms in the high tech industry tend to exhibit the performance pattern as predicted by DHS theory.

When we test underwriter effect against venture capital effect and industry effect, our results indicate that both underwriter and venture capital effects are distinct effects. However, our results show that underwriter effect subsumes industry effect. That is, once the underwriter effect is removed, there is no significant difference in aftermarket performance between firms in high-tech and non-tech industry. The industry effect, which we observe previously and also reported by Jaggia and Thosar (2004), is implicitly

an underwriter effect. The hypothesis that the aftermarket patterns as predicted by DHS is more pronounced for high-tech IPOs underwritten by leading investment banks is not supported. In fact, the performance of IPOs underwritten by leading investment banks dominates the others regardless of whether the offering firms are from high-tech or non-tech industry.

Since venture capital backing and reputation of underwriter are both signals for quality, we would expect IPOs backed by venture capitalists and underwritten by leading underwriters to exhibit a more pronounced DHS performance pattern. Indeed, this conjecture is supported by our empirical results which also demonstrate that this subset of IPOs has the best performance.

In addition, we find that VC backed IPOs significantly underperform the market in Month 7 which concurs with results presented by Field and Hanka (2001) that the sale of shares by venture capitalists following the expiration of the lockup period is more intense as compared to those by insiders. The sale of shares by venture capitalist immediately after the expiration of the lockup period is more pronounced for IPOs underwritten by leading investment bankers.

Although, by the end of the first year, IPOs, on average, underperform the market regardless of the choice of underwriters, investor can still benefit from investing in IPOs underwritten by highly reputable investment bank if they divest before the expiration of the lockup period. The returns will be even higher if these IPOs are financed by venture capitalists.

## REFERENCES

- Aggarwal, R. (2000), 'Stabilization activities by underwriters after initial public offerings', *Journal of Finance* Vol. 55, pp. 1075-1103.
- Aggarwal, R. and P. Rivoli (1990), 'Fads in IPO market?' *Financial Management* Vol. 19, pp. 45-57.
- Beatty, R. and J. R. Ritter (1986), 'Investment banking, reputation, and the underpricing of initial public offerings', *Journal of Financial Economics* Vol. 15, pp. 213-232.
- Brav, A. and P. A. Gompers (1997) 'Myth or reality? The long-run underperformance of initial public offerings: Evidence from venture and nonventure capital-backed companies', *Journal of Finance* Vol. 52, pp. 1791-1821.
- Carter, R. B., F. H. Dark, and A. K. Singh (1998) 'Underwriter reputation, initial returns, and the long-run performance of IPO stocks', *Journal of Finance* Vol. 53, pp. 285-311.
- Daniel, K. D., D. Hirshleifer, and A. Subrahmanyam (1998) 'Investor psychology and security market under- and overreactions', *Journal of Finance* Vol. 53, pp. 1839-1885.
- Field, L. C., and G. Hanka (2001) 'The expiration of IPO share lockups', *Journal of Finance* Vol. 56, pp. 471-500.
- Jaggia, S. and S. Thosar (2004) 'The medium-term aftermarket in high-tech IPOs: Patterns and implications', *Journal of Banking and Finance* Vol. 28, pp. 931-950.
- Logue, D. E., R. J. Rogalski, J. K. Seward, and L. Foster-Johnson (2002) 'What is special about the roles of underwriter reputation and market activities in initial public offerings?', *Journal of Business* Vol. 75, pp. 213-243.
- Michaely, R. and W. H. Shaw (1994) 'The pricing of initial public offerings: Tests of adverse selection and signaling theories', *Review of Financial Studies* Vol. 7, pp. 279-319.
- Miller, R. E. and F. Reilly (1987) 'An examination of mispricing, returns, and uncertainty for initial public offerings', *Financial Management* Vol. 16, pp. 33-38.
- Ritter, J. R. (1991) 'The long-run performance of initial public offerings', *Journal of Finance* Vol. 46, pp. 3-27.
- Titman, S. and B. Trueman (1986) 'Information quality and the valuation of new issues', *Journal of Accounting and Economics* Vol. 8, pp. 159- 172.

# THE EFFECTS OF EMOTIONAL STRESS ON INFORMATION PROCESSING

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## ABSTRACT

*This paper discusses two-factor theory and examines the effects of the presence and absence of emotional stress on message evaluation. Without emotional stress, subjects are supposed to increase liking for a message. On the other hand, when subjects are under emotional stress, they start to dislike the message as the number of exposures increases. Stress may reduce the appropriate processing of information by decreasing the mental resources allocated to evaluate the message. Emotional stress forces subjects to allocate available resources to irrelevant thoughts instead.*

**Keywords:** Marketing, Advertising, Consumer Behavior, Two-Factor Theory, Information Processing, Emotional Stress.

## 1. INTRODUCTION

There have been many studies done to measure the effects of repeated exposure to advertising messages (Anand and Sternthal, 1990; Cacioppo and Petty, 1979). The leading explanations in this area are based on Berlyne's (1970) two-factor theory. Studies that proceed from this theory attempted to explain the effects of repeated exposure to advertising messages on attitude change, depending on the type of stimulus. Based on this analysis, moderate exposure leads to liking and excessive exposure leads to disliking. When the number of exposures increases from low to moderate, people are expected to like the message more. When exposure levels are increased beyond a moderate level, however, disliking will occur (Berlyne, 1970; Cacioppo and Petty, 1979).

Although many studies have been conducted to examine the relationship between advertising message evaluation, consumer behavior, and information processing, not enough research has been done to examine the effects of emotional stress on information processing. The purpose of this paper is to come up with a new conclusion based on two-factor theory and offer some new propositions.

## 2. CONCEPTUAL BACKGROUND

The following is an explanation of Berlyne's two-factor theory from which the proposals in this paper are derived.

Anand and Sternthal (1990) explain positive habituation and tedium, the two factors discussed in the theory. The first repetitions are seen as positive habituation, which is associated with learning and reduction of uncertainty. According to the theory, this leads to liking the message. After several repetitions, the second factor in the theory, tedium or boredom, is exhibited. This leads to disliking the message (Anand and Sternthal, 1990). Overall, the theory states that the more a subject is exposed to a message, the more disliking will be associated with the message due to the decreased amount of learning that is associated with the subsequent repetitions of the same stimulus.

Many studies have been conducted to test this theory and extend it. Researchers have looked at many other cues that influence liking for a message, as well as different variables that will accelerate or decelerate the path to tedium. Based on their study, Singh and Cole (1993) recognized that the message's length and number of repetitions influence the subject's learning of a message.

Several studies have been conducted to determine whether or not personal relevance has an effect on the processing of a given message. It was concluded that when the personal relevance of the information is high, people will process the message more carefully. This means that if subjects see an advertising message that is of personal relevance, they tend to process the information carefully to learn about it faster (Claypool, Mackie, Garcia-Marques, McIntosh and Ashton, 2004).

If this is true, then the factors in Berlyne's theory may not only be influenced by the number of repetitions but also by the personal relevance of the message. If a subject pays more attention to a message that is of personal relevance, then he/she will learn about it faster than an irrelevant message. This considered, the subject will reach the second factor of boredom rapidly and will start to dislike the message. Moreover, a message with a high level of personal relevance seems to require fewer repetitions before tedium sets in because the information is processed faster.

The amount of repetitions leading to the point of tedium also depends on whether the advertising message is an incidental exposure or the primary focus of the subject (Nordhielm, 2002). An example of an incidental exposure is a banner advertisement on a website. This usually does not attract much of the reader's attention while he/she browses the site and will require more exposures to reach the point of tedium compared to a message at the center of a person's attention (Nordhielm, 2002).

Competitive advertising also affects the amount of learning needed for a single advertisement (Law, 2002). Studies on a particular brand or product show that when surrounded by competing advertising messages, a product's message can be confused and learning about it is hindered (Law, 2002). This demonstrates that the learning of a message is not solely linked to the number of repetitions. Learning is also affected by the number of advertising messages that compete with the main advertising message. This is important because our world is cluttered with countless ads. It is highly unlikely that consumers only come in contact with a single advertising message at a time (Malaviya, Meyers-Levy and Sternthal, 1999).

A study by Campbell and Keller (2003) probed the relationship between the effects of repetition and familiarity with the brand. It was proposed that advertising messages of brands that were familiar to consumers would reach the point of tedium faster than those of unfamiliar brands. The findings of Campbell and Keller (2003) support this. Subjects continued to process unfamiliar brands after more repetitions unlike familiar brands.

Another study done three years later found that the effect of a message is impacted by brand familiarity (Homer, 2006). It proved that as a message is repeated, brand familiarity is another factor that influences the consumer's liking for the message.

The two-factor theory was also analyzed in a study of brand logo repetition (Janiszewski and Meyvis, 2001). This study concluded that the fluency of a message is not solely determined by the number of repetitions. In accordance with two-factor theory, subjects will become bored with the repeated messages after they attain a full understanding of the message. According to this study, achieving this level of understanding is not only a function of repetition but also of any other factors that influence the subject's processing fluency. One such factor is emotional stress, which can therefore impact the effect of the message.

The effects emotional stress can have on information processing are key in understanding how the repetition of messages can influence an individual's reaction toward the given message. Processing information will occur at a faster rate in the absence of emotional stress. If an individual is under stress, part of her mental capacity will be used to deal with the stress. Thus, not all of her mental resources are used for the task at hand (Sachs, Martin and Moyer, 1977). Moreover, when two subjects—one who is under emotional stress and another who is not—are exposed to the same message, the subject without stress will become bored with it sooner. This subject is able to comprehend the message faster than the other whose capacity is lessened due to emotional stress.

The military is a prime location for observing subjects under emotional stress and its effects on their information processing. In one study, subjects were asked to perform tasks involving information processing after a week of training which had left them emotionally and physically stressed (Harris, Hancock and Harris, 2005). It was found that when the subjects were stressed, they had a much harder time concentrating than when they were not stressed (Harris, Hancock and Harris, 2005).

Based on the above discussion, we propose that when subjects under stress evaluate simple messages, their evaluation of supporting arguments (counterarguments) continues to be favorable (unfavorable) as the number of exposures to the message is increased.

### 3. DISCUSSION

Several researches have been done to support Berlyne's two-factor theory but over the years many exceptions and extensions have been discovered. In 1979, Cacioppo and Petty were among the many who did additional studies that supported Berlyne's two-factor theory and repetition effects. Recently, it was found that the rate at which tedium is reached can be influenced by other factors, such as brand familiarity, attention to the message, personal relevance, fluency, and the amount of emotional stress associated with the message or the stress the subject is under (Janiszewski and Meyvis, 2001; Nordhielm, 2002; Campbell and Keller, 2003; Claypool et al., 2004). Thus, all ads do not reach the point of tedium at the same rate. Many factors influence this and repetition is only the simplest of influences (Scott and Solomon, 1998).

As stated previously, the subjects' message evaluation of counterarguments continues to be unfavorable as the number of exposures increase from two to four. When under emotional stress, subjects devote more resources to irrelevant thoughts. During the first two exposures, they have enough mental resources to evaluate the message. After four exposures, however, they think more about thoughts that trigger the stress and do not have enough mental resources left to evaluate the message. Even though the message is simple, the subjects' available mental resources and the necessary resources to evaluate the message do not match during high levels of exposure. This can also bring about tedium. When subjects suffer from emotional stress, they think about the reasons for the stress and this leads to tedium. They are preoccupied with too many thoughts and repeated exposure forces them not to evaluate the message. They cannot completely think about the message.

As stated earlier, however, the subjects' evaluation of supporting arguments continues to be favorable as the number of exposures is increased. The more they see the message, the more they like it. Subjects without stress have enough resources to evaluate the message. They do not think about irrelevant thoughts and use their available mental resources for the task at hand. As they see the message more, they will concentrate on it, process the information well, and ultimately like it more. This result corresponds with the findings of two-factor theory.

It would be beneficial for additional research to be conducted to determine the threshold between the number of exposures that leads to liking a message and overexposure that causes disliking. Managers should also consider the effect of stress and find out the number of exposures it will take for viewers to reach boredom and begin disliking the brand. Companies that spend money on excessive advertising may not realize that they are overexposing consumers to their brands. This could cause them to dislike the brand. Determining where to draw the line on too much advertising exposures could save companies a lot of money.

### REFERENCES

- Campbell, Margaret C., and Kevin Lane Keller, "Brand Familiarity and Advertising Repetition Effects." Journal of Consumer Research, Vol. 30, Sept. 2003, 292-303.
- Claypool, Heather M., Diane M. Mackie, Teresa Garcia-Marques, Ashley McIntosh, and Ashton Udall, "The Effects of Personal Relevance and Repetition on Persuasive Processing." Social Cognition 22.3 (June 2004): 310-336.
- Harris, Wayne C., P.A. Hancock and Scot C. Harris. "Information Processing Changes Following Extended Stress," Military Psychology 17.2 (2005): 115-128.
- Homer, Pamela Miles, "Relationships Among Ad-induced Affect, Beliefs and Attitudes: Another Look." Journal of Advertising 35.1 (Spring 2006): 35-52.
- Janiszewski, Chris and Tom Meyvis, "Effects of Brand Logo Complexity, Repetition and Spacing Processing Fluency and Judgment." Journal of Consumer Research 28 (June 2001): 18-32.

- Law, Sharmistha, "Can Repeating a Brand Claim Lead to Memory Confusion? The Effects of Claim Similarity and Concurrent Repetition." Journal of Marketing Research 39.3 (Aug. 2002): 366-379.
- Malaviya, Prashant, Joan Meyers-Levy and Brian Sternthal, "Ad Repetition in a Cluttered Environment: The Influence of Type of Processing." Psychology & Marketing 16.2 (Mar 1999): 99-118.
- Nordhielm, Christie L., "The Influence of Level of Processing on Advertising Repetition Effects." Journal of Consumer Research 29.3 (Dec. 2002): 371-383.
- Sachs, David A., David W. Martin, and Petrina Nelson Moyer, "Limited Capacity Information Processing Interpretation of Conditioned Emotional Responding." Journal of General Psychology 97 (1977): 211-218.
- Scott, Douglas R., and Debbie Solomon, "What is Wearout Anyway? " Journal of Advertising Research 38.5 (Sept/Oct 1998): 19-29.
- Singh, Surendra N, and Catherine A. Cole. "The Effects of Length, Content, and Repetition on Television Commercial Effectiveness." Journal of Marketing Research. 30.1 (Feb 1993): 91-105.

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## **PUBLIC ADMINISTRATION AND DEVELOPMENT IN INDIA: PREMISE, FORM AND PERFORMANCE**

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### **ABSTRACT**

*This paper is essentially an attempt to make a presentation on the changing character of the Public Administration systems in the changing socio-political context of India. The examination of the changing character of the administration in other words is an attempt to understand the nature of the 'Governance' and 'Government' for whom the technocratic and generalized forms of Administrative practices are invariably subordinated. The examination of changing character of the administrative system inevitably poses certain questions to its very premise, form and performance. Therefore, a brief note on these, three dimensions of Administrative system – before and during the globalization context - would provide a substantial space for the needed interaction, debate, evaluation and the contemporality of Administrative practices which have come to a critical transition. This is specifically true with the emerging paradigms in the discipline. The initial origin of the administrative knowledge had been an out product of western industrial and military organizational experiences from where it was crystallized and made applicable to the executive practices of the European and American Governance. Classical, Behavioural and Post-Behavioural schools of administrative thought were largely reflections of this linkage of the Industrial experience which is largely responsible for the evolving of organizational theories and techniques of management. Managerialism as an expanded version of the changing dimensions of organizations had certainly met the required needs of the system from where it has been originated. The increased industrialization and capital intensive economics had necessarily demanded a modified sophistication to the various management techniques be it O & M or even the latest one of cybernetics or systems analysis. Respective social relations had provided greater acceptability to the emergence and as well as the guarded continuation of this managerialist practice in the larger civic life.*

### **1. INTRODUCTION**

The predominance of the managerialism as an area of knowledge had greater influence over the Public Administration discipline for the last four decades. The uncritical adaptation of the management techniques to the cross cultural and differential social contexts of the under developed countries were proved to be fatal to the very legitimacy of the "structures of ruling" in the developing countries. While it proved to be fatal to the 'structures of ruling' in these societies and equally it was made irrelevant to the very process of people centered development. As a result of this, the administrative process and net work which was built on the very premises of dominant class interests leading to the devoid of the appropriate legitimacy. The loss of legitimacy polity rooted in the premise of the public administration had also been equally seen as a bye-product of the incorporation of westernized managerialist orientation and an adherence to the local dominant class interests which are cohesively networked in the national context. The collaboration of the interests between the native elite and the interests of the western managerialist orientation is a result of logical sequence of the process of power transformation. Specially in the context of India having its colonial past the basic premise of Public Administration in India is a bye-product of colonial influences. The logical reflections in its form and performance are tend to be consistent. The Riggsian thought based on ecological perspective clearly explained this contrast and inbuilt contradictions of the system. But still there is a need for further development of post Riggsian administrative thought on post colonial societies like India.

### **2. PREMISE, FORM AND PERFORMANCE; PRE-GLOBALIZATION PERIOD**

The uncritical acceptance of the managerialist content and practice to the ever growing public economics in the developing countries had posed a number of serious constraints in its governance process. The constraints are too many. The nature of the constraints is again essentially structural. The structural heterogeneity of the societies prevents the effectiveness of the administration and tends to mock at the sophisticated character of the Western managerial practice and their application. The most required part

of the intellectual introspection at the contradicting administrative practice of the developing countries had been again began from the development theorists by themselves. This is initiated by Riggs in his writings. His ecological theories, characterization of prismatic societies, contradictions within these Administrative system and Economy and the proposition for the attainment of the optimal differentiation and integration formula had been looked as worthy and novel solution to the problems of governance. By and large the Riggsian- solution suggests the capitalist American model of administration is a superior system to be adopted and followed by developing countries.

The serious portion of Riggsian thought was that it had exploded the myth of the coherence of the premise and performance being frequently acclaimed by the administrative structures of the under developed countries. However the need for post Riggsian thought was being tried by the policy analysts like Dror and Marxist theorists on organization and administration. Both of this post Riggsian intellectual trends in the discipline tend to represent and act as the utmost philosophical and macro basis for the Administrative science. But a detailed look at the empirical levels of administrative practice is yet to be under taken. The coincidence of both theoretical and as well as the empirical examination of representing forms and corresponding practices is to be analyzed in the specific Indian context. This dimension is to be dealt with the appropriate suitability of the administrative structures evolved to meet the process of structural demands of development of the Indian society. This needs the basic look at the premise of Indian Administrative structures. The premise latently tends to look as constitutional with its value frame work, legality and performing structures based on equality principle. But in the critical understanding the reality remain differential to the proclaimed value structure; coloniality; collusion with dominant class interests and partiality in performance constitute the core of the premise of inaction of Administrative system in India. The Riggsian analysis has not taken this historical legacy whereas a few Indian studies (B.B. Misra's Bureaucracy in India) provide substantial evidence to this historical legacy that was extended and being formed as the premise for the continuation of the administrative system in the later stages of independence. The extended continuation of administrative practice thus resulted in a loss of the legitimacy to its very existence. As the basic premise of the Indian Administrative system embodies these latent qualities, the form of it do logically suffer from the loss of scientific character whatsoever is drawn from the managerialist practice in the western context. The principles of efficiency, economy and effectiveness make a reverse presence in these systems and specially in Indian Administration. The immediate application of these principles to the various instances, phases of the organization did not yield expected results. The adoption of the techniques had resulted in organizational deviance and perversion of organizational planning. Perversion of organizational planning had again led to a kind of disfunctionality with average skills of maintenance. This ultimately resulted in organizational decay.

The administrative system with the given premise and from remain marginal in its performance the basic structures of operation of the activities remain by and large unaltered. The promotion of universal values do continue at a snails pace.

Administrative action do not correspond with the structures of operation on par with the set of goals which tend to be immediately unattainable. The development machinery responsible gearing up of the operations remain at minimal levels of efficiency. The development functions aimed at the systematic change suffer from the duplicity of the performance of administrative system. Land reforms, abolition of bonded labour, protection of natural rights of the depressed sections and tribals largely become farcical due to this dismal performance.

To understand the inappropriate character and dismal performance of Administrative system either the Administrator's or the Administrationists did not make serious attempt to analyze and understand the following critical aspects in the administrative system. They are:

- i) modes of impairing structures in the administrative practice of Indian Administration.
- ii) the character of the 'Governing Class' and the roots of pervasive trends of performance inherently seen with in it.



- iii) the context and process of organized sabotage of the administrative rationality being carried at differential levels. The enquiry into the identification of the spheres of sabotage of administrative rationality did not be placed on highest research priority.
- iv) establishing the linkage of the systemic heterogeneity and the consequential impact on the administration as an agent of development and change.

These are the few areas of enquiry which explain the basic premise, form and performance of the Public Administration as an agent of development process. The Indian Public Administration as a panacea for development is to be therefore understood in this perspective and the logical conclusion is that it is yet to serve its universal image as an instrument of the "General interests" in the strict Weberian terms during the pre-globalization era.

### 3. GLOBALIZATION CONTEXT AND INDIAN ADMINISTRATION

There is a debate not only in India but all over the globe about the pros and cons of "globalization". Every important global meeting which witness vigorous protest marches or picketing by the opponents against the globalization process. Equally, there are those who regard it as panacea for all the world's problems and key to unmixted prosperity and well being for all the countries and all the people. If you take a poll in any assembly, you will find some are strongly for and some are strongly against globalization. The only rational view is to accept it as an emerging and powerful global reality which has a momentum of its own. As an independent nation / state is to ensure that, maximize the advantages and minimize the risks. It has both pluses and minuses like any other major global economic change - say, the industrial revolution of the 18th century. Some countries gained, some lost - partly because of the then prevailing political circumstances. India, for example, lost because of colonialism and fragmented nature of its polity. U.K., Europe, U.S. - and later Japan prospered. Same is the case with globalization.

In discussing the issue of globalization in the Indian context, it is proposed to confine largely to the factual and descriptive sense in which the word is used, i.e. the technological changes, and associated policy changes, that have brought the world economies closer and made them more integrated with each other, by way of free flow of capital, labour and goods and services across the global markets.

Before assessing the opportunities and challenges from globalization it is necessary to know, where exactly India in terms of globalization. If we look at the reality, it would seem as if we are already well on the way to globalization, which was shaking up our economy. A most common measure of globalization is openness to trade and a country's participation in trade. By this measure, the extent of India's globalization is insignificant - it is one of the lowest in the world. India's share in world trade is a meagre 0.7 per cent or so. If a map of the world were to be drawn on the scale of a country's participation in trade, India with a population of more than 1,000 million will occupy a smaller area than Singapore with a population of only 3 million. You would need a magnifying glass to locate India on that map.

A second commonly used measure of globalization is a country's participation in international capital flows, particularly Foreign Direct Investment (FDI). As you know, annual flow of FDI across the globe is more than \$ 1 trillion, i.e., \$ 1,000 billion. Annual FDI inflows *into* India is \$ f 3 - 4 billion only or 0.3 - 0.4 per cent of the total- that is all. Same is true of Foreign Institutional Investment (FII).

As part of globalization process, the major change is "Services Revolution". The focus of attention in conventional economics, was on production of goods – manufactured products and agricultural commodities. It was recognized that the services sector (which includes transport, communication, trade, banking, construction, entertainment and public administration, etc.) was an important source of income and employment in most economies. However, the growth of services was perceived at best as a by-product of developments in the primary and secondary sectors, and at worst as a drag on the prospects for long-term economic growth. In the last few years, there has been a phenomenal change in the conventional view of services and their role in the economy. This change has been facilitated by unprecedented and unforeseen advances in computer and communication technology. As a result, the development of certain services is now regarded as one of the preconditions of economic growth, and not as one of its consequences. The boundary between goods and services is also disappearing. Many

industrial products are not only manufactured, but they are also researched, designed, marketed, advertised, distributed, leased and serviced.

The death of distance, the services revolution, and the mobility of capital – which characterize globalization – present unprecedented opportunities for India. The primary source of comparative advantages today are: skills and ability to adapt and change. And, India has the advantage – of skills, of entrepreneurship and of managerial competence in taking advantage of these changes. Globalization is becoming a critical factor not only in trade and commerce, in financial services, in entertainment electronics, in cultural exchanges but also in more crucial areas of public administration. No country can remain insulated from the outside world. If we can't fight them, we have to join them. The presence of globalization is being felt in India as never before. With the passage of time it will only increase. An equally important point is that whether the so-called globalization is considered to be good or bad for a country depends crucially on the sense in which the word is used. The word may be used in a purely descriptive sense to describe a "shrinkage" of distance among nation states due to technological changes in transport and communication and closer integration of product and financial markets across the world. As a parliamentary democracy India has some of the finest organizational structures of governance. It has two houses of parliament, legislatures in different states and over 2,00,000 local self-governing institutions. These bodies direct and oversee the functioning of the executive at different levels and geographies. There is an independent judiciary and a free press that provides the checks and balances necessary to ensure accountability.

Yet the problems of poor governance are all too plain to see. The numerous public bodies that are mandated to carry out various programmes and spend public funds perform poorly. Laws that are among the finest in the world are often not enforced. Public audits carried out by bodies such as the office of the Comptroller and Auditor General (CAG) routinely point out glaring examples of wastage of public funds and corruption. Yet no action follows. Commissions of inquiry are set up to investigate everything from riots to financial scandals only for the reports to gather dust.

In the matter of interface with the citizen there is an enhanced accent on transparency and right to information. It is in this context that one has to analyze India's governance in the present tense and in the near future of the governance. However, it is not possible to 'predict' the future because unanticipated developments do take place both in technology and human relations and affairs. It is difficult to state with total assurance as to what would be the picture like in far future but one can certainly envision the likely scenario at least in near future. India shall continue to be a union of States as envisaged in the Constitution. However, as the present trends suggest, the present quasi-federal structure is likely to become more and more federal in character implying that the States and the constituent units of the Union may acquire greater muscles. The number of states and districts of the Indian Union may likely to increase irrespective of lack of economic viability since the political aspirations of the people and the social pressures would lead to formation of new states and districts.

The public sector will undergo a radical change in the near future. Not only most of the commercial undertakings of the government at the national and state level known as Public Sector Undertakings would have been disinvested but even the functions presently discharged by some public authorities could be passed on to the private sector. In the process it also may lead to public – private partnership to manage the institutions and services. The process of disinvestment is already on. The economic, political and social compulsions would lead to a leaner and more manageable public sector which should not require much budgetary support. Many of the services presently rendered by the public service agencies would get transferred to private initiatives. There are already serious moves to privatize power and water supply. Transport and health services are also in for a major change. Education increasingly should pass on to private hands. Only the core functions related to planning of Education and Health sectors should remain with the Government and the Public Sector.

In the context of decentralization and devolution of powers, emergence of the civil society and people's empowerment, one need not depend on central government. At the same time, a national government which mainly depends on coalition partners based on democratic alliance should try to protect and enhance the country's image and provide affective governance.

As part of the process of de-bureaucratization and de-concentration of authority, the process of entrusting decision making responsibility of Government to Regulatory Commissions is in evidence. It is quite likely that such Commissions shall be set up in many more areas of governance. For the recruitment of civil servants there are Public Service Commissions. In addition, these are Insurance Regulatory Authority, the Telecom Regulatory Authority and the Power Regulatory Authorities at the Centre and in the States. It is quite likely in near future the process of decision making and enforcement of such decisions in many more sectors will be in the hands of Regulatory Commissions over which the government will have little control. Whether this would be for the better or it will have adverse implications for governance will depend on how these Commissions are allowed to function and behave. Thus, the impact of globalization is all around on economy, polity and socio-cultural aspects which bound to be resulted in emergence of a new set of human relations and affairs in the society.

#### **4. GOVERNANCE REFORMS AND CIVIL SOCIETY INITIATIVES**

No single term has come to dominate development discourse in the new millennium as much as 'governance'. From good governance to corporate governance and more recently e-governance, the term has gained in popular usage. Yet to date there is no well-accepted definition of what governance means. The concept first emerged in the mid-1980s as 'governability' with the emphasis on adherence to the rule of law. Following the collapse of the Soviet Union and the end of the Cold War, the term 'governance' came to be used to define the reinventing of public administration, particularly in developing countries, to make it more receptive to the needs of globalization. Thus 'good governance' came to be associated with policies and practices of deregulation, liberalization and opening up the economy to foreign competition. The international financial institutions, most notably the World Bank and the IMF, were in the forefront of pushing forward the concept of good governance as part of their aid packages. "By governance we mean the manner in which power is exercised...in the management of a country's social and economic reforms," that is how the World Bank defined the concept governance in the mid-1990s, which includes the interplay of state, civil society and market in resolving the problems of polity, society and economy.

One of the more comprehensive definitions of governance is from the United Nations Development Programme (UNDP). According to UNDP, governance is "the exercise of political, economic and administrative authority to manage a society's affairs. It is a broad concept that encompasses the organizational structures and activities of central, regional and local government, the parliament and the judiciary and the institutions, organizations and individuals that comprise civil society and the private sector in so far as they actively participate and influence the shaping of public policy that affect people's lives".

Generally, Politicians are faced with more pressing demands, and bureaucrats resist the change that would weaken their power, prerogative, and privilege. At the end, the valuable support of the bureaucracy is won over by the political executive through many compromises. The linkage between administrative reform and the programmes and manifesto of political parties, indeed, deserves in-depth analysis. This vital aspect goes unexamined in most studies on administrative reforms. In developing countries, the continuation in power, coalition-building, and frustrating or fending-off the opposition usually head the list of priorities. Administrative reform activities in most donor-dependent countries center around those changes which are suggested by the World Bank, IMF and other major donor agencies. Generally, demands from the opposition political parties for administrative reform are ignored and it is only undertaken at the initiative of the government to serve its own interest. It is always possible to detect efforts to score political points through such moves. In most developing countries, administrative reforms are announced with great fanfare indicating the intention of the government to introduce substantial changes. Invariably, the changes promise to eliminate corruption, increase efficiency, reduce expenses, bring the citizens close to the administration, and improve the quality of life. Even if the reforms fail to achieve the stated objectives, governments can still claim credit for having tried to bring about the promised improvements. However, a number of above mentioned other factors have effected the introduction and implementation of administrative reforms in India, the most important being the lack of political commitment to do so. One must emphasize the positive aspects of development in unionization.

In fact, the preconditions laid down by the authors on administrative reforms are desirable, but they will be extremely difficult to achieve and measure.

Good governance is to mean being pro-poor and gender conscious. It involves improving bureaucratic and political accountability, fighting corruption, promoting people's participation and making effective and efficient use of the nation's resources. In recent years a number of civil society initiatives in India have used a variety of tools to try and improve the quality of governance. Some of these initiatives include: Voter Awareness Campaigns: Peoples movement for right to information, human rights and environment protection, Capacity Building for Advocacy, Public Interest Litigation, Movement for labor wages and rights, Campaign for Effective Citizens Charters, Initiatives for Public-Private Partnerships, Budget Analysis and Advocacy, Community-media partnerships, and so on.

In spite of gradual attempts to alter the nature of public administration, make it subservient to political authority and responsive to the needs of the citizens, the basic framework remains the same. The various studies help to confirm the fact that despite numerous attempts at reform through a number of agencies, committees and commissions, public administration in India is still in need of comprehensive changes in terms of premise, form and performance in order to bring it in tune with the needs of the time, i.e. in the context of globalization.

## REFERENCES

- Ahmed Shafiqul Huque, Public Administration in India : Evolution, Change and Reform (Review Article), Asian Journal of Public Administration, Vol. 16, No. 2 (Dec, 1994).
- Binu S Thomas, Governance – Background and Perspective, Infochange News & Features, September, 2003.
- D.C. Potter, India's Political Administrators 1919-1983, Clarendon Press, Oxford, 1986.
- Hartmut Elsenhans, Public Administration in developing countries; Specifies "Public" and Administration in Market regulated Developing and capitalistic societies, IJPA, Jan. March. 1989.
- Henry Jacoby, The Bureaucratization of the Third World – The State Class, Law and State, Vol. 31, 1985 Tubengin, West Germany.
- M.C. Gupta : Governance in India, Vision 2020, IIPA, New Delhi.
- R.L. Hardgrave, Jr. and S.A. Kochanek, India, Government and Politics in a Developing Nation, fifth edition (New York: Harcourt Brace Jovanovich, 1993).
- Roff Hanisch and Rainar Tetzlaff, the State in developing countries an object of social science Research, Law and State, Vol. 27, 1983. Tubingen, West Germany.

**IABE-2007 Las Vegas Annual Conference**

# **PROCEEDINGS**

**ABSTRACTS**

## LONG-TERM UNEMPLOYMENT IN CENTRAL EUROPE: HOW BAD IS IT?

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### ABSTRACT

*In Mondschean and Oppenheimer, (Journal of International Business and Economics, 2006, 152-170), we analyzed the economic performance of labor markets since 1995 in four Central European countries: Hungary, Poland and the Czech and Slovak Republics (the CE4). We found, among other things, that inflation rates had more or less converged to the EU15 average, economic growth rates have been higher and per capita GDP levels were converging (but still had a long way to go to reach Western European levels), and that productivity growth in the CE4 has been running at triple the rate of the EU15 since 2000. With respect to unemployment, the performance of the Czech Republic and Hungary tracked the EU15 average fairly closely after 1995, but Poland and the Slovak Republic had significantly higher unemployment rates.*

*As a result of this work, we were able to identify long-term unemployment as an issue that warrants further research. Long-term unemployment, defined as those unemployed for at least a year, is becoming an increasingly serious problem in Central Europe. For example, from 1999 to 2006, long-term unemployment as a percent of total unemployment rose from 46.9% to 73.1% in Slovakia, 34.8% to 49.4% in Poland, and from 37.1% to 54.% in the Czech Republic. Only in Hungary did this ratio decline (from 49.5% to 41.1% over the same period). As a benchmark, the long-term unemployment rate was 43.8 % in the EU15 in 2005, which most analysts consider high. Moreover, the extremely high rates of overall unemployment in Poland and the Slovak Republic (13-14 percent), means that, in 2006, between six and ten percent of the entire labor force in these two countries were unemployed for over a year. Given the generally high levels of unemployment in many European countries relative to the US and the economic and social costs of long-term unemployment on both individuals and countries, a better understanding of long-term unemployment in Central Europe is needed.*

*This paper examines historical and current data for long-term unemployment in Central Europe, concentrating on Poland, Hungary and the Czech and Slovak Republics (CE4). We document the size of this problem and the long-term trend in each of these countries. In addition, we benchmark these findings with data from the EU in order to compare the history and current magnitude of long-term unemployment across these countries.*

*There are several different data sources that we use. The official statistical offices of each of the CE4 countries publish detailed data on unemployment including long-term unemployment. The OECD annual labor reports compile unemployment data for many countries, including a composite summary for the EU15 countries. These data allow us to compare the history of the CE4 to other countries in Europe and the EU15 as a whole, to determine if the patterns of long-term unemployment in the CE4 transition countries are different from or have converged towards patterns elsewhere in Europe.*

# BUSINESS PROCESS MANAGEMENT IN ACADEMIA: HOW TO LEVERAGE RESOURCES

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## ABSTRACT

*Business Process Management (BPM) is being used to streamline and increase the effectiveness of business processes in the face of scarce resources and increasing global competition. That same increase in effectiveness is being sought, but is not currently being achieved in most areas of academia. The proposed outcome of this research initiative is to answer the question, how can academia utilize BPM techniques and tools to effectively manage and expand the effectiveness of educational processes without unduly increasing resource utilization, and in many instances, decrease resource utilization.*

**Keywords:** Process Management, resource utilization, effective academia, learning

## 1. INTRODUCTION

Business Process Management (BPM) is the latest set of tools and techniques developed and being developed to manage all business processes. A process is a series of related work steps that alters or incorporates inputs from other processes into a product. This product will in turn be incorporated into other processes to help produce another product. Michael Porter developed the firm value chain schematic comprised of support and primary processes. The primary processes of logistics and production have long been analyzed and controlled from a process perspective and enjoy a degree of effectiveness relative to resource usage and the correct output. Due to the functional and firm spanning characteristics of support processes such as new product development, knowledge management, and strategic development these processes have not been subject to the same analysis nor have they enjoyed the same degree of effectiveness. People in a functional area may have responsibility for executing process steps from many different support and primary processes. All of these steps together may or may not overburden that person, but, because there is little understanding of the interconnectivity of the steps of a single process neither across boundaries nor of the multiple process responsibilities of a single person, the person may not be able to effectively execute all steps they are responsible for in a timely manner.

Business Process Management is the latest attempt in the world of business to expose and manage the connectivity of processes across boundaries and the interactions of processes with one another to enable effective process execution and resource utilization. The below quotes demonstrate the increasing prominence of BPM in business.

“Business process improvement is the top priority for most CIOs in 2006, according to a recent Gartner report. Companies increasingly recognize core processes as their levers for transforming how they do business. Today, core processes are often siloed by organization, product line and transactional system. It is difficult to understand end-to-end process performance – even for the most critical processes like procurement, order management and claims management. The promise of Business Process Management (BPM) – as both a discipline and technology – is that it can remove the traditional barriers to process improvement and give companies a basis for differentiation by focusing on the performance of a process. Not just the execution.” (Favaron, 2006)

“Business Process Management (BPM) is rapidly growing and becoming the technology for modeling, optimizing and automating business processes. A number of research reports and customer case studies have shown that BPM yields impressive bottom-line and top-line benefits to organizations trying to compete in a global economy. These reports and case studies provide significant justification to support the continued and rapid adoption of BPM. Analyst firms predict the BPM market growth rate at 15 percent to 20 percent, which far outpaces the 3 percent to 4 percent growth rate predicted for ERP and CRM markets. BPM will continue to accelerate this momentum by expanding its ability to model, manage and optimize the business process flow in correlation with systems, employees, customers and partners within and beyond corporate boundaries.” (Moulas, 2006)

Currently in academia, most students do not have the opportunity to work with all steps of enterprise-wide processes or with the full spectrum of process management. Enterprise-wide processes are complex, cross-disciplined and cross-firmed. An example of such a process is product development. Steps of this process are performed by people from many different disciplines and each step may reside in different company divisions. For instance, to properly execute the first step of product selection, a team should at least include members from marketing, finance, engineering, the target market, and manufacturing. This project will explore how the use of BPM software and tools can effectuate a truly cross class and college system without unduly increasing faculty and staff resources.

## REFERENCES

- Favaron, Rob, A Business-Oriented Architecture, August 31, 2006; *bpm.com*,  
<http://www.bpm.com/FeaturePrint.asp?FeatureId=217>. Captured 04/23/2007
- Moulas, Alex, Business Process Discovery, July 7, 2006; *bpm.com*,  
<http://www.bpm.com/FeaturePrint.asp?FeatureId=213>. Captured 04/23/2007.

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## **AIRPLANES, LLC: A CASE IN COMPLEX TAX PLANNING AIMED AT AVOIDING U.S. TAX BY SHIFTING INCOME TO A FOREIGN PARTNER**

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### **ABSTRACT**

*This case study is designed to integrate important concepts of U.S. partnership taxation with complex principles that apply to tax shelters, using a fact pattern that is purportedly a partnership between a U.S. leasing company and a foreign bank. The U.S. company is seeking to shift to the foreign bank for U.S. income tax purposes significant taxable income from airplane leasing. The foreign bank would not be subject to U.S. taxation on that income. This case study is based on the recently decided appeals court case commonly known as Castle Harbour. It has been substantially simplified to facilitate classroom use and it has been disguised to discourage students from reading the original case for insights into the tax issues involved. The Castle Harbour case was extremely complex, as evidenced by the \$9 million fee that the taxpayer paid to an investment bank for assistance in creating and executing the plan (a fee that itself seems to generate plenty of student interest).*

*By focusing on selected factors while avoiding many of the excruciatingly complex details of the court case, this case study focuses students on selected partnership taxation issues and on some of the broader issues that the IRS and the courts have raised, while providing a manageable set of facts that students can address within a reasonable time frame. It is organized to guide students through some important partnership tax concepts, as well as selected financial reporting and business issues, by asking leading questions about how the transaction was intended to work. This is followed by questions designed to force students to think through the broader tax ramifications of the transaction and whether the structure is really what it purports to be.*

*Tax shelter cases are notoriously difficult to teach because of their fact-specific nature and their complexity. Some of that complexity is often contrived to obscure the real substance of the transaction, while other complexity results from real life business, legal, and economic considerations, and from resulting tax and financial accounting issues. This case study is designed to take a complex international tax shelter transaction, simplify it, and make it into a useful learning tool.*

*Summary of Case Study: The case puts the student in the shoes of Tom Burton, a young MBA, CPA, employed by a leasing company named TCL, who was called upon to evaluate this proposed transaction. TCL had a fully depreciated portfolio of airplanes that were currently under lease. They were older planes that could not readily be sold. The leasing company sought proposals from various investment banks regarding a transaction that could meet a detailed set of goals (described in the full case study). An investment bank came up with quite an elaborate proposal and was ultimately paid a fee of \$9 million for its work.*

*The proposal involved: (1) the formation of a Nevada limited liability company, Airplanes, LLC (to be taxed as a partnership, although that is left for the reader to determine in the case study); (2) the transfer of the plane portfolio and cash to the LLC; (3) the sale of an ownership interest in the LLC to a Dutch bank that would not be subject to U.S. income tax on its share of partnership income; and (4) a contribution of cash by the Dutch bank to the LLC.*

*TCL would be responsible for the management of the LLC. The Dutch bank would have no management role, not even a minority vote. Operating income and loss would generally be allocated 98% to the Dutch bank and 2% to TCL. The net operating income would reflect large financial accounting depreciation deductions. The taxable income allocated to the Dutch bank would be much larger since the planes are fully depreciated for tax purposes.*

*The amounts allocated to the Dutch bank were to be used by the LLC over a scheduled period of eight years to buy out the interest of the bank in the LLC at a price that would yield about a 9% annual return*

on invested assets for the Bank. Based on further details of the arrangement, the Dutch bank was fully protected from risk of loss, and its ability to participate in any additional gain was severely limited. For both financial accounting and Dutch taxation, the Dutch bank would treat its interest as debt.

The LLC was restricted in its use of its available cash and in the amount of liquid assets that it had to keep on hand. The LLC, through a subsidiary, actually invested most of the cash in commercial paper of TCL.

The effect of the elaborate structure was to cause almost all of the income that would be generated by the LLC to be allocated for federal income tax purposes to the Dutch bank. At the end of the eight-year period, the LLC was to be completely owned by TCL.

The overall result of the elaborate structure (as more fully described in the full case study) was that the Dutch Bank would have made about \$117 million dollars immediately available to TCL, \$50 million in sales proceeds on the sale of an interest in the LLC and 67.5 million of additional investment in the LLC that was indirectly made available to TCL because the LLC's subsidiary purchased TCL commercial paper. The Dutch Bank would have received about a 9% annual return on those funds over eight years. They could, however, have accomplished this with a simple loan arrangement.

The question is why the investment bank would propose something this complex when they could have proposed a simple borrowing. The answer is that this arrangement (1) was intended to provide a very substantial additional tax benefit over and above the simple borrowing structure; and (2) it is likely that the financial accounting rules applicable to this transaction would make the company's debt/equity ratio substantially more attractive than the comparable ratio under a straight debt arrangement. As a result, this structure, if respected for tax purposes and financial reporting purposes, would be much more attractive than a traditional borrowing arrangement.

Among the points raised for student consideration are the following:

- What is the tax treatment of LLC's (this LLC would be treated as a partnership)?
- What is the tax treatment of guaranteed payments to partners?
- What is the result of allocating almost all depreciation to the Dutch bank? (The planes were fully depreciated for tax purposes; this was merely a financial accounting allocation.)
- Will an allocation of 98% of the income to the Dutch bank for federal income tax purposes—far out of proportion to its investment in the LLC—be respected for U.S. income tax purposes? This raises the issue of substantial economic effect. Recall that the Dutch bank would not pay any tax to the U.S. on this income.
- How would this structure be better or worse than a simple borrowing transaction?
- For financial accounting purposes, should the LLC be treated as a variable interest entity? If so, could Airplanes, LLC be consolidated with TCL and how would that consolidation affect the presentation of the commercial paper on TCL's balance sheet?
- What are the broader tax risks associated with this structure? This leads to issues of sham transaction (both business purpose and economic effect), whether this arrangement was really a partnership at all, and whether the interest of the bank was really a bona fide equity interest. This also raises the implications of the recent partnership anti-abuse regulations.

This case study is designed to raise complex tax planning questions in an international context, and incorporates practical business decisions and financial reporting, using a simplified set of facts that is manageable for classroom use.

## **DEFINED BENEFIT PENSION PLANS: APPLICATION OF FAS 158 TO FINANCIAL ACCOUNTING AND REPORTING BY EMPLOYERS**

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### **ABSTRACT**

*The Financial Accounting Standards Board (FASB) in 2006 issued Statement of Financial Accounting Standards No.158 (FAS 158), Employers' Accounting for Defined Benefit Pension and Other Postretirement Plans, to improve financial reporting by companies and organizations sponsoring defined benefit plans. Specifically, the FASB sought to improve the usefulness of financial statements for decision making primarily by requiring companies to report the over or underfunded status of their pension obligations in the balance sheet. In addition, companies now are required to include the entire change in the over or underfunded status in comprehensive income, through net income and other comprehensive income (OCI). This paper contains an outline and discussion of the main provisions of FAS 158; explains how the new standard builds on and strengthens previous standards; and provides a detailed illustration demonstrating application of the new standard. Attention is focused on financial accounting and reporting for defined benefit pensions.*

## FROM MADE IN CHINA TO GLOBAL CHINESE BRAND

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### ABSTRACT

*Based on literature review, this paper attempts to identify the recent developments in China's effort to become involved in the global market and develop credible and successful brand name products. The paper surveys recent Chinese government policies to effect growth of successful brand names to compete with global brands both in China's market and in the global market. The paper also presents trends in Chinese companies' marketing strategies that attempt to achieve progress in penetrating the global market. It appears that though Chinese companies and government are making progress to that end, they need to change course to achieve a status comparable to that held by competing global brands.*

*The Chinese economy has changed significantly in the last few decades as a result of changes in political, cultural and economic environments, opening the opportunity to Chinese enterprises to develop and provide for the country's needs in products and services. It has also opened the doors for foreign investments and trade. At the same time, success in marketing to the local population was an essential step to help companies develop their own brands. The ability to satisfy the local market is the first stage for building brand reputation. Recently, China has been blessed with urban consumers of higher sophistication that demanded products with a higher level of perceived quality.*

*Globally, China is known for its inexpensive manufacturing of products distributed world wide as brands of well-known non-Chinese global companies and well-known successful foreign retailers. Still, China is not known for its high quality, originality or innovativeness. One of the major limitations of the current state of affairs is that the Chinese are functioning as "order takers" from global companies that are in close relation with end users. To gain know how, Chinese companies are seeking partnerships with and buying companies with well-known brand names and reputations. But this is not enough. In contrast to Chinese companies, these foreign global companies have full understanding of the end user's values and preferences. In order to progress toward achieving leadership in the world market, Chinese companies need to move to the front line in the value chain, to develop a relationship and build a partnership with the end user, and to answer directly to the end user's needs and aspirations: starting from marketing research, moving to original, innovative, competitive strategy development, and finally being responsible for distribution and the service components of their offering.*

*The literature related to the country-of-origin image shows how the perception of the country of origin affects the perception of the country brands. Though the need to build a positive image of China as a brand, promoting both the national culture and the most prominent products and services, is very important, the question will still be to what extent China has brands that represent a major achievement in the world market. It is clear that the existence of such brands is the most important factor in promoting the nation as a brand. Therefore, it is critical that each and every Chinese corporation that intends to be among the leading brands that are recognized globally follow the most successful global brands and gradually reach the same level of leadership position in the global market.*

*In conclusion, though China has a proven record as a provider of inexpensive products which are distributed either under private labels of international retailers or as branded products of globally known companies, it seems that many Chinese brands are struggling in the local domestic markets facing international brands, as the Chinese products are, to some extent, perceived as low quality by Chinese consumers, who prefer imported products. Also, there are several cases in which Chinese companies either are acquiring international companies with know-how and reputation or creating joint ventures with global companies with the intention to separate and progress independently. Still, there is a need to stress the role of the individual Chinese company in the development of its own global brand if it so aspires.*

*Therefore, Chinese companies need to leave behind that image of “low quality” products and less innovativeness and lead in innovativeness and perceived quality by global standards. They also need to create presence in the global markets to assure direct access to the end user for information gathering, access to local proficient man-power, manufacturing and services.*

**KEYWORDS:** *Chinese Global Brands, Marketing Strategy, Country of origin effect, Long term strategy for global leadership.*

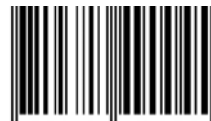
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