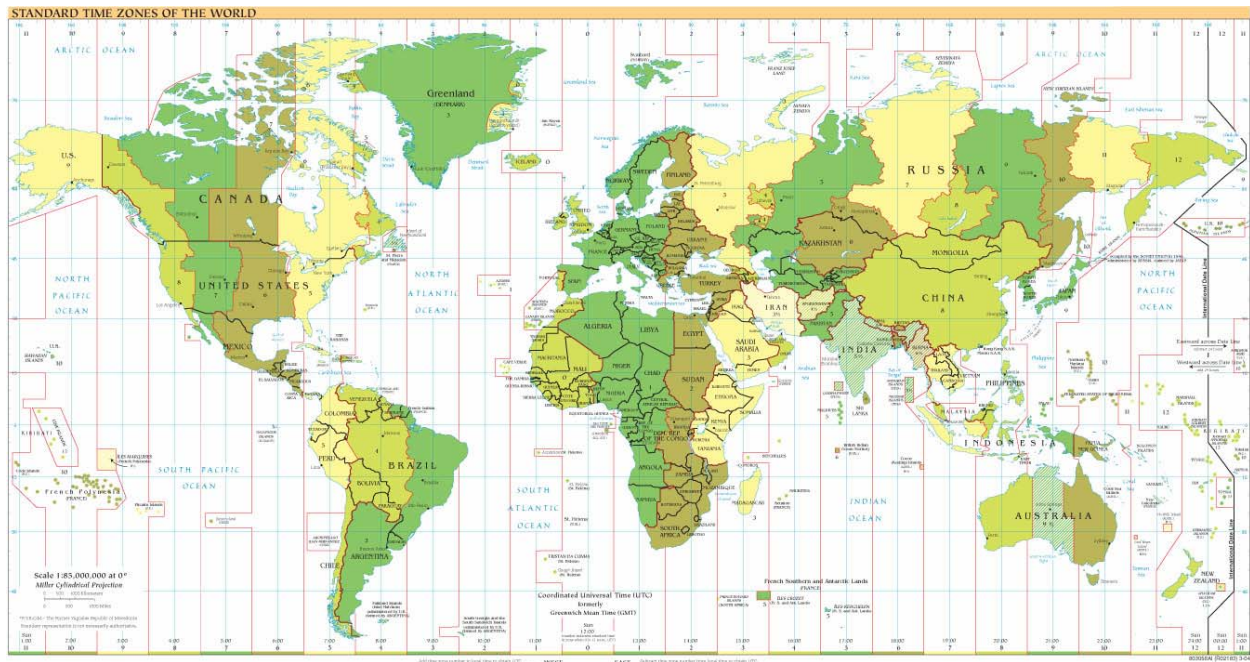


# PROCEEDINGS

of the

## IABE-2005 Annual Conference

Las Vegas, Nevada, USA



### Program Chairs:

**Bhavesh M. Patel, Ph.D.**  
Myers University, Cleveland, Ohio

**Tahi J. Gnepa, Ph.D.**  
California State University-Stanislaus



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## A Welcome Letter from Program Chairs!

You are currently viewing the proceedings of the third annual meeting of the *International Academy of Business and Economics (IABE-2005)*, Las Vegas, Nevada, USA.

In this year's proceedings, we share with you more than 20 manuscripts of research conducted by scholars and business practitioners in Australia, India, Russia, Uzbekistan, and the United States. The studies presented herein, extend from a theoretical modeling of environmental marketing, to user satisfaction assessment of a college's laptop initiative, especially for those who have always wondered about student perceptions and the learning impact of such programs. Natural disasters such as "*Hurricane Katrina*" that devastated the city of New Orleans or this week's massive earthquake that rocked Pakistan have tended to bring mostly the best, but also sometimes the worst, out of people; the bases (altruistic or otherwise) of individual and business responses to such natural disasters as the recent Tsunami in Asia are explored as well.

IABE is a young and vibrant organization. Our annual conferences have been opportunities for scholars of all continents to congregate and share their work in an intellectually stimulating environment, in the world truly fascinating tourist destination that Las Vegas represents. The experience of an IABE conference is unique and inspiring. We invite you to be part of it each year, as an author, reviewer, track chair, or discussant.

We welcome your manuscripts on research in all business, economics, healthcare administration, and public administration related disciplines. Abstracts and cases in these areas are also invited. Submit your manuscript early as a period of 8 weeks is required to complete the review process. Visit the IABE.org site frequently. Find out how you may submit your work to our future conferences.

We hope you will find these proceedings informative and useful.

We hope you will join us again next year at the **IABE-2006**, Las Vegas, Nevada, USA.

Warmest regards,

Tahi J. Gnepa, Ph.D.  
Program Chair, IABE-2005

Bhavesh Patel, Ph.D.  
Program Chair, IABE-2005

October 16, 2005  
Las Vegas, Nevada, USA

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# A SIMULATION STUDY OF THE CONTROL CHART FOR COEFFICIENT OF VARIATION

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## ABSTRACT

*The current popularity of Six Sigma has highlighted the importance of variation reduction in production and service delivery process. In fact, the capability of a company in meeting customers' quality requirements is primarily determined by the existing variation in their processes. Reducing process variation should be among the top priority for companies pursuing continuous improvement or Six Sigma. Up to now, R-chart and s-chart have been the two frequently used tools to detect departures from acceptable variations in performance measures. However, when multiple measurements are essential to the management, these charts will have difficulties to compare variations across several measurements because they may use different units. The purpose of this paper is to construct a new control chart that uses coefficient of variation. Like other control charts, this new chart could provide early warnings to the abnormality in process variations. To facilitate the development of this control chart, a simulation study will be conducted. Random samples will be generated from a hypothesized population and then processed to provide insight of the sampling distribution of the coefficient of variation. The control chart will be built based on the derived sampling distribution.*

**Keywords:** quality management; control chart; coefficient of variation; Six Sigma; process variation; sampling distribution; simulation; process improvement

## 1. INTRODUCTION

The intense market competition has compelled many companies to include quality as one essential element of their competitive strategy. Since the 1990s, most of them have taken the initiative of drastically changing the way they manage their product and service quality. Companies such as AT&T, Motorola, GE, Xerox, and Federal Express have invested enormous amount of resources in quality management but also gained very impressive results (Hunt, 1992; Welch, 2001). With its great improvement in quality management, Motorola's Six Sigma has attracted huge attention in the business community. The well-known goal of making less than 3.4 defective parts per million has even turned the management guru, Jack Welch, into an enthusiastic proponent of Six Sigma.

The popularity of Six Sigma has no doubt highlighted the importance of variation reduction in production and service delivery process. In fact, the capability of a company's process in meeting customers' quality requirements is primarily determined by the existing variation in their processes. For companies pursuing Kaizen, reducing process variation should be among the top priority. However, as many have said, "You can't improve what you do not measure." Process variations need to be measured and controlled. Up to now, R-chart and s-chart, using sample statistics of range and standard deviation, have been the two frequently used tools to detect departures from acceptable variations in performance measures. The measurement units of both charts are the same as those used in the collected samples. If the management focuses on only one type of performance measurement, these two charts are suitable. However, if more measurements are essential to the management, it is rather difficult to use these two control charts to compare the variations across multiple measurements because they employ different measurement units. For example, to ensure service quality a service company collects more than one type of performance measure. Just for the billing process alone, it can be useful to measure the percentage of the bills processed accurately, the lead-time of the bill processing, the completeness of invoice, and others. If the R-chart is constructed for each of the performance measure, the trend of the variations in each performance measure can be displayed. However, it does not help much when comparing the differences among the variation trends of several performance measures. It's like comparing apple with orange because their measurement units are different. To resolve this problem, the coefficient of variation can be used as the statistic on the control chart. This statistic uses a standardized measurement unit and therefore is dimensionless.



The purpose of this paper is to construct this new control chart that displays the sample coefficient of variation. Like other control charts, this new chart could provide early warnings to the abnormality in variations. To facilitate the development of this control chart, a simulation study will be conducted. Random samples will be generated from a set of hypothesized populations and then processed to provide insight of the sampling distribution of the coefficient of variation. The control chart will then be built based on the approximated sampling distribution.

## 2. THE CONTROL CHART FOR THE COEFFICIENT OF VARIATION

The purpose of this paper is to construct a new type of control chart that focuses on one measurement of process variation, the coefficient of variation. Constructing such a control device, however, requires the knowledge of the sampling distribution of the coefficient of variation. Unfortunately, the literature on the coefficient of variation is hardly abundant (Vangel, 1996; Iglewicz and Myers, 1970; Johnson and Welch, 1940; McKay, 1932). Among those studies, Johnson and Welch identified the non-central t-distribution as the sampling distribution of the coefficient of variation with a degree of freedom equals to  $n-1$ . They developed a set of tables to facilitate hypothesis testing and the construction of confidence intervals. In this paper, their findings have been extended to the construction of control charts that use coefficient of variation as the control variable.

To build such a control chart for the sample coefficient of variation, the following procedure is recommended:

Step 1. Take random sample of size  $n$  from the process. Use  $n-1$  as the degrees of freedom,  $f$ .

Step 2. Choose one performance measure and calculate the sample statistics including mean ( $\bar{X}$ ), the standard deviation ( $s$ ), and the coefficient of variation ( $\nu$ ).

Step 3. Determine a proper significance level,  $\alpha$ .

Step 4. Calculate the non-central t-statistic:

$$t_0 = \frac{\sqrt{n}}{\nu}$$

Step 5. Compute:

$$\left(1 + \frac{t_0^2}{2f}\right)^{1/2}$$

Step 6. Calculate:

$$\frac{t_0}{\sqrt{2f}}$$

Step 7. If  $\left|\frac{t_0}{\sqrt{2f}}\right| \geq 0.75$ , find  $y = \left(1 + \frac{t_0^2}{2f}\right)^{-1/2}$

$$\text{If } \left|\frac{t_0}{\sqrt{2f}}\right| < 0.75, \text{ find } y' = \frac{t_0}{\sqrt{2f}} \left(1 + \frac{t_0^2}{2f}\right)^{-1/2}$$

Step 8. If  $f > 9$ , calculate  $12/\sqrt{f}$ .

Step 9. If  $\alpha \leq 0.5$ , use  $12/\sqrt{f}$  and  $y'$  to find  $\lambda(f, t_0, \alpha)$  from Table IV in Johnson and Welch (1940).

$$\text{Then, compute } \delta(f, t_0, \alpha) = t_0 - \lambda \left(1 + \frac{t_0^2}{2f}\right)^{1/2}$$



Step 10. If  $\alpha \geq 0.6$ , calculate  $\delta(f, -t_0, 1 - \alpha)$  and then change sign.

Step 11. Set the upper control limit to:

$$UCL = \frac{\sqrt{n}}{\delta\left(f, \sqrt{n}/v, \alpha\right)}$$

### 3. THE SIMULATION STUDY

Although the above procedure was developed based on the theoretical sampling distribution of the coefficient of variation, it is certainly not a simple approach to apply in the real world environment. In this paper, a simulation study is proposed to further explore the possibility of building the control charts for coefficient of variation with a simplified but still effective approach.

In this proposed simulation study, random samples of fixed size are generated from several known populations. Sample statistics including mean, standard deviation, and coefficient of variation are then calculated. For each population studied, the above procedure will be repeated, say, 1000 times to generate a set of 1000 sample coefficient of variations. These 1000 sample statistics will then form the required sampling distribution. Based on the approximated sampling distribution, the mean and standard error can be estimated. Finally, the control chart can be constructed using the obtained mean and standard error of the sampling distribution of the coefficient of variation.

To increase the applicability of the results of this study, both continuous and discrete distributions will be used as representative populations. The following distributions are considered: normal, exponential, Weibull, binomial, Poisson, and hypergeometric. Moreover, sample size is treated as another control factor in this simulation study. The range of the sample size included in this study will be from 10 to 100. To verify the generated sampling distributions, goodness of fit tests such as Anderson-Darling (Romeu, 2005) will be employed.

The final stage of this simulation study will include a comparison of the control limits estimated from the simulated sampling distributions versus those derived from the procedure stated in section 2. This comparison hopefully will shed some lights on how to develop an easy procedure for the construction of the control charts for the coefficient of variation.

### 4. THE SUMMARY

Global competition has urged American companies to take on quality revolution since the 1990s. While pursuing this quest for quality, more companies have realized that the process variation holds the key for success. How to control and then reduce the process variation is certainly an issue that needs to resolve. In this paper, a new type of control chart has been recommended to monitor the coefficient of variation. This new control chart allows a comparison of several leading performance indicators at the same time. It will become a useful management tool for process improvement.

In this paper, a theoretical procedure, based on the theoretical sampling distribution of the coefficient of variation, was first presented. Due to the complexity involved, a simulation study was further proposed to explore other alternative approach. It is the objective of this research to develop an easy to apply but still effective approach to construct the control charts of the coefficient of variation.

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## **“AGENCY PROBLEM”: COULD IT BE A CONFLICT BETWEEN AN IDEAL AND REALITY?**

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### **ABSTRACT**

*“Principal-Agent” relationship has been analyzed by economists primarily as an “Agency problem” - a potential conflict of interest and related negative outcomes of modern enterprise governance. While acknowledging frequent instances of less than optimal management performance, we suggest that the picture is not as bleak as many critical papers suggest. Indeed, we believe that the professional management is a solution to a problem, rather than being just a problem itself. Certainly, the system of professional management is not perfect, but it also can't be expected to be perfection: no other human-created system is 100% efficient. Hence, both academics and practitioners should be interested in both highlighting deficiencies in the system, but also identifying and preserving broad positive impact from the professional management on industry.*

**Keywords:** Agency problem, Principal-Agent relationship

### **1. INTRODUCTION**

In economic theory, “Agency problem” is defined as a “potential conflict of interest between the agents (managers) and the outsider owners (i.e. owners not involved in running the business). Hundreds of academic economic articles have been devoted to finding and analyzing these conflicts in various contexts: executive compensation (Bebchuk, 2003), company's capital structure (Fama, 1980 and Kochhar, 1996) and many others. Indeed, the value of managerial talent and the contribution of professional managers to industry and society in general remains extremely important question in both academic and practical aspects.

### **2. LITERATURE REVIEW**

Overall, the two main directions of agency theory studies are aligned with either positivists (Berle and Means, 1932) or principal-agent (Jensen, 1983). While positivists are mostly focused on corporate governance structure within large, public companies, principal-agent researchers are looking at a much broader set of situations, including employer-employee, lawyer-client, buyer-supplier, etc (Eisenhardt, 1989).

The assumption that agent's behavior is driven by solely his own self interest has been criticized as being a too simple conception of human behavior (Williamson, 1985). It is argued that in addition to self-interested motives, other features (altruism, curiosity, irrationality, generosity, pride, genuine concern for others) also characterize multi-faceted human behavior. Indeed, Sen agrees and actually states that “to argue that anything other than maximizing self-interest must be irrational seems altogether extraordinary” (Sen, 1987). With majority of conclusion being critical to the management, perhaps not surprisingly, that economics textbooks give students an impression of professional management as a potential suspect that must be watched after to control its inferior motives (Buckley, 1998).

This view has reasons to exist, but it is decidedly one-sided, as it focuses on side-effects while largely ignoring other primary benefits. These benefits will become clear in a more comprehensive review of “Principal-Agent” relationship, undertaken further in this paper.

### 3. DISCUSSION

A principal, a current or a potential owner of a new business, hires a manager, thereby outsourcing some business functions. For one of the following reasons (or some combination of those) the principal does not have appropriate amount of time, skills, interest, patience to complete a project (or a given on-going business role) himself with appropriate quality, within time and budget: hence the outsourcing to other who are able and willing to do so. Even in cases when the owners does have all the required ingredients for managing a project (or a company), they might decide to spend this time on other, more interesting and profitable projects, or just spend that time on leisure.

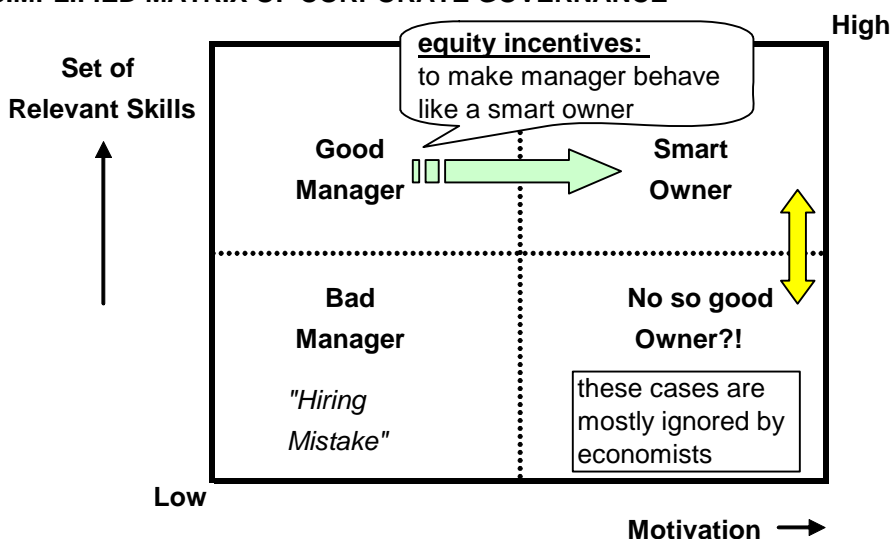
This solution allows the owner to pursue other interests, in return he provides the manager with remuneration and required business resources. Moreover, the owner most certainly accepts a possible somewhat lower efficiency of a manager (due to lower ownership motivation), however, these negative side-effects could be compensated by higher specific business skill proficiency of a manager, and presence of appropriate control mechanisms (in form of periodic performance reports and independent auditing of results).

#### 3.1 Motivation and skills: two vitally important dimensions in corporate governance

While motivation is assumed to be proportional to equity ownership value (residual value of a company), an owner is assumed to be more motivated than salaried manager – that's simple and clear. Much less obvious is an accurate measurement of skills level and, more importantly, ultimate performance on a job. The problem is that there is no Standard Aptitude Test for managers and owners. Actual company performance is influenced by the manager output, and thus could be used as a proxy for his performance. However, a company performance could also be strongly influenced by external factors (economic growth, currency and inflation fluctuations, just to name a few).

As with any real-life solution, outsourcing is not perfect (and should not be expected to be) there might be some side-effects (real, but hopefully smaller and solvable problems). In reality, any medicine has some side-effects: as long as their impact and risks are tolerable and outweighed by the intended positive effect, the drug is allowed for use. If later a more potent drug with less side-effects is found, it displaces its less effective predecessor. The same way the management theory and practice are evolving, offering improved ways of managing business relationships, including Principal-Agent relationship. Economists should recognize and accept that no process (including outsourcing) could be completely efficient: hence for the overall judgment on this relationship, both positive primary results and potentially negative side effects must be considered.

#### SIMPLIFIED MATRIX OF CORPORATE GOVERNANCE



### 3.2 The Allure of “shining, crystal-clear, round number-perfect” 100% efficiency

*“The bottom line, however, is that the agency problem can never be 100% solved in a world where virtually everyone has a healthy regard for their own self-interest and the relevant information for evaluating performance is imperfect, costly to obtain and unequally distributed between the agent and his principals”* (Johnson, 2004). The reason for using a lengthy quote is that it captures perfectly the idealistic drive of some economists to the 100% perfection. While this perfect 100% dedication and efficiency is clearly admirable, in reality people often have to settle for something which less than perfect, let's look at just one ubiquitous example: vehicles.

Why our increasingly advanced and ecologically sensitive society has been tolerating the gasoline engines for a century, despite their pitifully low efficiency of converting chemical energy of fuel into a kinetic energy for vehicle motion? Indeed, after a century of improvements, the efficiency of engines is still only 25% for cars, 50% in marine engines and about 66% in aircraft engines. This is still a far cry from “the ideal of 100%”!

Well, perhaps using far less than perfect engines was a much better solution than abolishing cars, trucks and boats, returning to yet even less efficient but more charming horse riding. Welcome to planet Earth, where both humans and machines are less than perfect and have to live with it!

Review of economic academic literature shows a pronounced bias towards criticism and analysis of side-effect problems, outside of context of the mainstream benefits of professional management. We are not suggesting that the side-effects should be ignored: not at all! Yet one-sided focus on “agency problem” overlooks large, measurable and sustainable benefits of professional management to a given company and a society at large.

Several more homogeneous industries could provide a fruitful area for such intra-industry analysis. For example, banking industry is driven by interest rates and inflation, which are the same for all banks within a certain country. There, it is interesting that a recent study (Micco et al. 2004) found that in developed countries the bank's ownership did not correlate with bank's financial performance - a surprising absence of presumably beneficial impact from a presence of owner-operator. Meanwhile, in emerging economies, foreign professional managers achieved higher profitability and lower costs than local private banks, which in turn, had better results than state-owned banks. These results suggest that at least within the developing countries system, professional managers happen to deliver superior results to owner-operators. This finding, if confirmed for other industries, could be an interesting counter-argument to the basic assumptions of the principal-agent theory, which generally assumes a manager as inferior performer to the owner-operator.

If the current professional management structure is not perfect, and produces well-publicized bad side-effects, why its existence should be tolerated, and not abolished? Well, perhaps, because this is a better compromise than the alternative: return to predominantly owner-operator corporate structure. For example, given that no single person or a family is likely to buy the entire Procter & Gamble Company, why not split the consumer-products giant into 500 smaller units, which could be acquired by entrepreneurs? We suspect that this idea is unlikely to find support among all involved stakeholders: shareholders (owners) creditors, employees and customers. Procter & Gamble will likely suffer huge losses its operating scale efficiency in R&D, development, production and distribution of consumer products. Whether or not 500 individual units could run better than a single giant company is yet to be proven (despite instant elimination of the “agency problem”). In fact, the successful history of many large companies is a real-life proof of their successful business model (although, of course, the large scale alone is no guarantee for survival and prosperity).

#### 4. CONCLUSIONS AND PROSPECTIVE ISSUES

Our approach suggests taking a broader view to the Principal-Agent relationship, to include both primary benefits of professional managers along with side-effects (so-called agency problem). **In our view, Principal-Agent relationship is a solution to a problem** (problem being defined as shortage of owner's time): this relationship exists due to recognition of higher ultimate efficiency in outsourcing work vs. doing it yourself. The history of human civilization is driven by greater sophistication and specialization of skills, and the mankind is benefiting due to greater efficiency.

There are several possible directions of future research in this area. First, it would be interesting to examine the financial results of US industrial and service sectors for various forms of management: owner-operator vs. professional manager. Secondly, a comparison of privately owned vs. state-owned companies could shed light on a more efficient form of corporate governance.

Finally, a great deal of attention should be focused on analysis and design of effective ownership and compensation structures to minimize the undesirable side-effects of the Principal-Agent relationship, while retaining the positive primary impact of experienced professional managers. While such approach will never reach the ideal "100% efficiency", hopefully, it could exceed the efficiency of a jet airplane (not to mention that of a car).

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## A REVIEW OF THE CRITICAL SUCCESS FACTORS FOR E-LOYALTY PROGRAMS

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### ABSTRACT

*According to a recent study by Shop.org and Forrester Research (2005), online sales are expected to grow from \$141.4 billion in 2004 to \$172 billion in 2005. Despite this spectacular annual growth of 18%, many web based businesses failed in recent years leading to the "dotcom bubble burst". With these failures, the business community saw a renewed interest in focusing on online customer satisfaction and retention through the creation of e-loyalty as a means for gaining a sustainable competitive advantage. Online businesses realized that by retaining customers, they can reduce cost because it is much cheaper to retain customers than to attract new customers.*

*In this paper, we review the extant literature on e-loyalty. Based on the literature review, and our vast experience in e-business, we first outline the critical differences between traditional loyalty and e-loyalty, and then suggest a set of critical success factors to attain e-loyalty.*

**Keywords:** e-Loyalty, eCRM, Electronic Commerce, e-Commerce, Brand Loyalty, Internet Loyalty.

### 1. INTRODUCTION

According a study by Shop.org and Forrester Research (2005), online sales rose to \$141.4 billion for 2004 and are expected to reach \$172 billion in 2005. In spite of increasing spending on e-commerce, many websites failed when the dot.com bubble burst (McDonald, 2000). With these failures, the business community saw a renewed interest in focusing on online customer satisfaction and retention through the creation of e-loyalty as a means for gaining a sustainable competitive advantage. According to Reichheld (2000), "Raising customer retention rates by 5% could increase the value of an average customer by 25-100%." By retaining customers, costs will shrink because it is much cheaper to retain customers than to attract new ones. As costs decline, revenues will increase and therefore profits will also increase.

Articles published on Internet companies' success stories show that two of the main keys to success are a customer-oriented focus and the delivery of high quality value-added products and services. Success stories were cited for companies such as Sun Microsystems, JCPenny.com, and Amazon.com (E-Commerce Times, 2001).

This emphasis on customer satisfaction and loyalty has prompted research on the various methods and ways to improve and enhance the experience of Internet customers in an effort to attract new customers and retain current customers. In this paper, we review the extant literature on e-loyalty. Based on the literature review and our vast experience on e-business, we suggest a set of critical success factors to attain e-loyalty. Our paper is organized as follows: first, we distinguish between traditional loyalty and e-loyalty. Next, we outline a set of critical factors that must be satisfied to achieve e-loyalty. We cite several examples of companies that have been successful in gaining loyalty from their online customers. Finally, we discuss how measurement models of traditional loyalty can be modified to measure e-loyalty.

### 2. CUSTOMER LOYALTY PERSPECTIVES

The concepts of customer satisfaction and consumer loyalty are by no means new concepts. There is a rich literature on customer satisfaction and consumer loyalty. See, for example, Day (1969), Dutka (1993), Dick and Basu (1994), and Johnson (1998) for more details on brand loyalty. Traditional "brick and mortar" businesses have been embracing the theories of customer satisfaction and loyalty for years. They have also recognized that customer satisfaction is a necessary step in the loyalty formation process. As Dutka (1993) and Johnson (1998) point out, customer satisfaction results from meeting customer



expectations; and exceeding customer expectations repeatedly may lead to customer loyalty. And customer loyalty, in turn, drives profitability and growth (Reicheld, Markey and Hopton 2000).

### 3. E-LOYALTY VS. TRADITIONAL LOYALTY

E-loyalty is the behavior of an online customer to remain loyal to a particular website as a result of feeling satisfied with prior online experiences with that website. The issues of e-satisfaction and e-loyalty are more complicated than the traditional concepts of customer satisfaction and loyalty respectively. Table 1 provides a summary of these differences.

**TABLE 1: COMPARISON OF TRADITIONAL LOYALTY AND E-LOYALTY**

| <b>Traditional Loyalty</b>                              | <b>e-Loyalty</b>                                       |
|---|--|
| Higher loyalty levels                                   | Lower loyalty levels                                   |
| Higher switching costs                                  | Lower switching costs                                  |
| Higher power of producer                                | Higher power of consumers                              |
| Higher level of contact between merchants and consumers | Lower level of contact between merchants and consumers |
| Higher level of security                                | Lower level of security                                |
| Lower level of customer personalization                 | Higher level of customer personalization               |

For example, it is more difficult to achieve a higher level of e-loyalty more than that of traditional loyalty because of the unique attributes of the Internet. One major attribute of the Internet is that it eliminates geographic boundaries. With the click of a mouse, consumers now have access to any product or service anywhere in the world. Also consumers are provided with a wider choice of products and services to choose from 24 hours a day, 7 days a week. Hence consumers have the ability to compare prices from the convenience of their home, forcing suppliers down to the lowest margins (Smith, 2000).

In addition, online consumers have low switching costs since the competitor is just a click away. If your website is too slow, customers will simply click on another website to purchase the item. There has also been a shift of power from producers to consumers which results in high consumer buying power.

Traditional stores have higher levels of contact with the customer than do websites. When a customer walks into a store, they are greeted by a "live" person rather than a standardized webpage. In addition, online customers are more concerned with security issues because of the fact that they are not dealing with an actual person. Customers may be concerned about providing credit card numbers over the Internet to pay for their items.

And finally, websites can offer more customer personalization than a traditional store. Websites should encourage customers to log into their site which allows the online retailer to offer customized pages and also allows the website to track customer usage.

### 4. CRITICAL SUCCESS FACTORS FOR BUILDING E-LOYALTY

As mentioned previously, it is important to have a customer-oriented focus and to deliver high quality value-added products/services. It is necessary to succeed in those two steps before a website can begin to build e-loyalty. While there are many factors that determine the success or failure of an online business, we believe that the following factors are absolutely critical for success for an online business:

**(i) Determine what value-added service your website is offering:** It will be important to determine what type of high quality value-added product/service that your website is presenting. It will be critical that this item be differentiated in some way from the type of product that customers can purchase in brick and mortar stores. As Rust and Kannan (2003) points out, the organization that survived the bursting of the dot.com environment have "embraced" the "e-service paradigm."

**(ii) Design an easy to navigate website and provide a thorough search engine:** Once you have determined what differentiated product/service you are providing, it will be critical to develop an easy to navigate website that has a thorough search engine. Customers need to feel comfortable using the website and be able to easily locate the item they are looking for. In addition, the website should be different from your competitors' websites. Your website should reflect company logos and colors to aid in brand recollection by your customers.

**(iii) Use eCRM to build a customer-oriented focus:** Websites need to implement an online customer relationship management program (eCRM) to provide customized service to each person who visits the website. In addition, the website will need to offer unique ways to retain customers and to encourage customers to refer their friends and family. Therefore a unique e-loyalty program will need to be implemented that offers rewards to customers. For example, a website may offer a customer a \$5 discount for each person they refer to the website who makes a purchase. In addition, websites should offer profitable customers (as determined by eCRM) future discounts on items related to what they usually purchase.

### ***Building e-Loyalty Through eCRM***

In an attempt to achieve and maintain satisfied and loyal customers, businesses developed and integrated customer relationship management within their organization. Customer relationship management (CRM) is defined by Strauss and Frost (2001) as integrated sales, marketing, and service strategies which depend on coordinated enterprise-wide actions. This is a process of identifying and differentiating customers based on needs and value to the firm, and then customizing the marketing mix to meet the individual customer's need.

The basics of CRM apply to eCRM as well. But it is even more important for online business to have eCRM as an integral part of the business process to help create e-loyalty. According to Seybold and Marshak (1998), the steps to successfully building e-loyalty through eCRM include:

#### ***1. Targeting the right customers:***

It involves identifying profitable customers, deciding which customers are worth retaining, finding out which customers generate referrals, streamlining business processes to meet customer needs, and enhancing the profitability of existing customers.

#### ***2. Customer retention:***

The goal here is to retain the profitable customers for life. This involves, among other things, delivering personalized service, giving customers control over their online shopping experiences, integrating customer service and billing, integrating CRM applications, and building a community for customers.

### **(iv) Design and implement an e-Loyalty program**

There are various types of e-loyalty programs currently being implemented by e-business. Smith (2000) cites the including e-loyalty programs:

- **Service programs.** Companies implementing this e-loyalty program include Hertz and eBay.
- **Information and advice programs.** Companies that implement this type of program include IBM owner privileges and Garden.com.
- **Discount programs.** This includes sending out emails for free or discounted items to members in the categories for which the members indicated an interest. An example of this type of program is the Club FreeShop e-loyalty program created by FreeShop.com.

- **Other e-loyalty programs.** Examples include access, entertainment, community, points (air miles), and the unanticipated rewards program.

It is very important for a business to identify the most suitable e-loyalty program and implement it wholeheartedly.

**(v) Constantly monitor and update these success factors:** After an e-loyalty program has been designed and implemented, it is critical to monitor customer satisfaction through the adaptation of traditional customer satisfaction models, listening to customer feedback, and continually updating the e-loyalty model. To be specific, it is important to monitor customer relations, security issues, website design, ease of navigation and speed of loading, product features such as price and quality, and finally the speed of the feedback system. Understanding what creates a satisfying experience for customers has become crucial as more e-tailors have been promising satisfying online experiences.

Also, websites need to provide their customers with information and advice programs. For example if a customer purchases a rose bush, the website should offer advice on how to grow the bush. By including more information on your website, customers will be more likely to return to your website for information and may decide to purchase more products because of the information they obtain. At the very least, it will increase your brand name since the customer may recall that your website provided information and return to your website instead of using a search engine to find out information about other related products. A cost effective way to provide information could be the use of online communities and forums.

### ***Monitoring the e-Loyalty Model***

As we have demonstrated with the traditional models, it is important to cultivate, monitor, and maintain loyal and satisfied customers and e-customers. Smith (2000) emphasizes the importance of constantly improving e-loyalty by (1) listening to customers, and (2) measuring e-loyalty.

### **Listening to Customers**

By encouraging a 2-way flow of information customers can be encouraged to take an active and interactive role in the products/services offered by an organization. This increased interaction by the customers offers a tremendous opportunity for e-business to learn more about their customers including what the customers want and how they feel about the products, brands, website, and the organization. We suggest the following strategies to maximize feedback from the customers:

- Stimulate customer feedback to obtain information through the customer's own words.
- Analyze email unsubscribe logs to discover why people are not interested in the service.
- Measure participation in your customer programs.
- Utilize web applications.
- Develop interactive sites and chat rooms.
- Analyze customer service logs and reports.
- Conduct routine e-loyalty research.

### **Measuring e-Loyalty**

Businesses can learn how to measure the feedback, how to analyze it, and most importantly how to implement necessary changes. From our analysis of both traditional and e-loyalty models, we found that there were distinct differences in the fundamental basic assumption of these models both in the design and structure of surveys. Therefore, we recommend the following strategy based on the e-business model for designing and implementing a measurement model:

1. **Click and mortar e-business model.** Traditional brick and mortar companies which are in transition to a click and mortar company should adopt the traditional measurement models such

as Johnson's performance model. See Johnson, Anderson and Fornell (1995) for a detailed discussion on the performance model.

Johnson's performance model is based on the premise that perceived performance is the primary driver of satisfaction. The model evaluates customer's overall purchase and consumption. This follows directly from the notion of a value-percept disparity, which says that the greater a product/service's capability to provide what the customer needs, wants, or desires relative to the price or costs incurred, the more satisfied a customer should be with the purchase or consumption experience (Churchill and Suprenant, 1982). Hence it will be critical to include eCRM in the e-business model to ensure that the website meets the preceding criteria. In addition, performance of the website will also be a critical factor. For example, the website should load quickly, have a good search engine, and provide a seamless transaction with an e-loyalty program.

2. **Click and order e-business model.** Businesses that operate only on the Internet should adopt and adapt the SERVQUAL model. See Parasuraman, Zeithaml and Berry (1998) for more details on the SERVQUAL model. Generally speaking, the SERVQUAL model can be applied to almost all e-market maker models, including exchange, virtual distributor, lead generator, catalog aggregator, auctions, reverse auctions, and e-pure play models.

According to Rust and Oliver (1994), "New ideas in service quality currently center on better understanding how the customer is affected by service quality, how a firm implements and measures service quality improvement, and how key trends are likely to affect service quality management in the coming years." The SERVQUAL model attempts to measure the quality of services utilizing a set of 10 general criteria or dimensions. These dimensions include: tangibles, reliability, responsiveness, competence, courtesy, security, access, communication, and an understanding of customers (Parasuraman, Zeithaml and Berry 1998).

Click and order e-businesses generally offer a physical, tangible product to the customers. This type of business also needs to be reliable in delivering the high quality product that was ordered. The company needs to ensure timely delivery and be responsive to customer needs and offer a variety of ways to contact the company should a problem arise (i.e. telephone, live chat, and email). Communication needs to be exceptional: the customer should receive information about when the item was shipped and should be able to track the package online. The business needs to be credible and provide security with customer information, especially credit card information. The website should portray a high level of knowledge and competence and any communication with personnel should portray the same. The website should portray the importance of each customer's needs and understand what the customer is looking for. The website needs to be available 24/7 for the convenience of customers to access the website anywhere at anytime. The SERVQUAL model will need to be adapted to encompass the special attributes of the e-commerce business.

## 5. CONCLUSION

From this analysis, we can see that the trend for customer retention has become more complicated with the introduction of e-commerce. Interactive contact with customers is also more important. Moreover, the emphasis on customer involvement in the business process and customers' feedback becomes essential as business organizations are continuously improving their customer services from a 360-degree perspective. The interrelation and cooperation among all departments in the companies is more important than ever before. Customer information sharing, supply-chain integration with eCRM, and the selling chain is becoming an integrated part of the e-loyalty strategy. Without integration, business will face difficulties in offering excellent customer service, broadening selling channels, and enhancing customer loyalty levels.

We also elaborated on the steps in building the e-loyalty measurement models. We suggest selectively adopting the performance and disconfirmation models in the traditional brick and mortar companies which are transitioning to click and mortar companies. The performance and disconfirmation models must be adapted in order to integrate with the new e-loyalty models. However, the SERVQUAL model can be applied directly to the Internet companies who are focused on providing services and intangible assets. Continuous monitoring, measuring, and improvement of customer satisfaction are the ways to transition from brick and mortar businesses to click and mortar. Using a successful e-loyalty strategy, e-commerce companies will achieve sustainability, profitability, and a competitive advantage in today's highly competitive and aggressive business environment in the future.

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# JUST-IN-TIME IN OUR TIME: A LOOK TODAY'S BUSINESS ENVIRONMENT AND THE VIABILITY OF JIT SYSTEMS

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## ABSTRACT

*Over the last few decades Just-In-Time (JIT) was first presented as the miracle cure for production woes and later portrayed as an ideologically driven failed promise. The reality seems to be between the extremes, JIT methods and philosophies have great value in some situations, and more limited applicability in others. In this paper we examine the ideas driving JIT, and identify some contemporary business conditions that can enable or impede the effectiveness of this potentially powerful concept. Specifically we look at current trends regarding extended supply chains, increased globalization, unstable prices and mass customization, and explore their implications for JIT systems.*

*Keywords: Just-in-time, Kanban, Supply Chain Management*

## 1. INTRODUCTION

Just-In-Time (JIT) is a variant of the lean manufacturing methods that emerged as a response to the failure of 'Fordism' in the 1970's and 1980's (Jaffee, 2001). Fordism is the manufacturing model associated with American automobile industry of the past, with its rigid hierarchy, highly specialized division of labor and sequential repetitive tasks (Aglietta, 1979). The Fordist production line and its emphasis on economies of scale and technical control (Edwards, 1982) was effective for decades, but eventually factors such as the increasing market influence of newly industrialized and less developed countries and new capacities for product customization (Appelbaum & Batt, 1994) lead to a decline in the effectiveness of the system. Many looked to Japan, whose automobile industry was taking the world by storm, for alternative approaches.

JIT was one such approach. Associated with the Japanese automobile industry and 'Toyotaism' (Dohse, Jurgens, & Malsch, 1985), JIT was a model of flexibility and efficiency. It is characterized by minimization of inventories, scrap and rework, maximum utilization of productive capabilities and constant improvements in quality and technology. It also often involves such practices as increased teamwork, cross-training, and job-switching. Initially lean manufacturing in general and JIT in particular were heralded as the practices of the future that would soon become the dominant paradigm. However, in practice, although it had an impact in many industries, JIT fell short of expectations (Milkman, 1991; Graham, 1995; Stewart, 1996).

In this paper we will explore the applicability of JIT today and in the near future. The paper starts with an explanation of the ideas behind JIT, both the potential benefits and the pitfalls encountered in practice. We then identify some contemporary business conditions identified in the literature that can enable or impede the effectiveness of this potentially powerful concept. Specifically we look at four current trends - extended supply chains, increased globalization, unstable prices and mass customization. For each we explore their implications for JIT systems. The paper concludes with implications for practitioners and recommendations for further research.

## 2. JUST-IN-TIME

JIT was developed at Toyota by manager Taiichi Ohno following WWII. It is also referred to as the Toyota production system and is commonly associated with 'kanban' and lean manufacturing systems. The main objective was to increase productivity not by exploitation of labor (Kenney & Florida, 1988), but by reducing inventory management activities and costs by examining such things as carrying costs, work stoppages, overproduction, machine downtime, poor quality, setup and breakdown, and movement of inventory (Leclair, 2005).



In JIT increased productivity comes from the decreased material costs per unit of output though an emphasis on increasing quality and minimizing inventory. Higher quality reduces rework and scrap costs and minimal inventory eliminates carrying costs (Kenney & Florida, 1988). Included in the JIT system is a philosophy of continuous improvement also known as 'kaizen'. The competing demands of reduced costs and increased quality are consistent with the Eastern philosophical notion of a "Harmony of competing values" (Eisenhardt & Westcott, 1988).

JIT is usually associated with repetitive production systems (Nicolaou, 2002; White & Prybutok, 2001) but can be used in non-repetitive or mixed systems (Kaynak, 2005). JIT, supply chain management (SCM), and Total Quality Management (TQM) are related current topics. Their linkages are important at both strategic and operational levels (Kannan & Tan, 2005). There is little research on JIT in different production systems, such as the difference between made-to-order (MTO) as opposed to made-to-stock (MTS) systems. Individual components of lean manufacturing however have been prescribed in specific situations, for example, the use of 'kanban' is suitable for mid-sized companies with linear demand (Leclair, 2005). Besides manufacturing and production environments, JIT can also be used in a number of specific application areas (Gilbert, 1990; Im & Lee, 1989). For example JIT in purchasing is used for managing inventory flows throughout the supply chain (Kaynak, 2005) or JIT combined with electronic data interchange (EDI) systems improve cash management systems (Nicolaou, 2002).

What research has shown is that most companies are not in a situation where JIT is appropriate, and very few have the wherewithal to implement a true JIT system. JIT works fine when there is the capacity for short supply lines in a static economy with modest competition, however this is not today's world (Allen, 2004). What is more common when companies say they have JIT is just on-time delivery (Leclair, 2005). Other companies attempt to adapt JIT into 'flexible mass production' systems. Unfortunately such systems often maintain many dysfunctional elements of traditional manufacturing systems such as the hierarchical structures and power relationships that impede the lean production philosophies to the point that they cannot build high-quality competitive operations (Applebaum & Batt, 1994). Some experts predict that 'low-wage lean production' systems will emerge, where some aspects of lean production will be implemented in low wage, unregulated regions or countries (Dassbach, 1994). Although such operations may achieve low production cost, they will fail to achieve this through true JIT techniques that involve an emphasis on quality, teamwork and highly trained workers.

### **3. CURRENT BUSINESS CONCERNS**

In 2002 analysts predicted that Dell Computer was in for a rough time. Dell used a JIT manufacturing model and there were impending West Coast dock problems. The analysts realized that companies that used JIT systems were highly dependent on their suppliers and receiving raw materials and parts on schedule. In this case there was a 10 day labor lockout keeping 10,000 union workers out of work and closing 29 ports. Dell was not hit as hard as predicted because it knew of the potential problem 6 months ahead of time, formed strategic contingency plans with its overseas partners and eventually chartered 18 747's to keep their supply chain moving. Things worked out for Dell, however very few companies have the ability to take such drastic measure to deal with such a situation. This situation highlights two key business concerns that have an impact on JIT systems – supply chains and globalization. Two other current concerns are prices and customization, and although they do not play a part in the Dell response to the dock problems, as with many other JIT users they do have an effect on the company (Breen, 2004)

#### **3.1 Supply Chains**

There are supply chain implications for JIT such as reducing SCM by reducing inventory and lead time through synchronizing activities with buyers and suppliers (de Treville, Shapiro & Hameri, 2004; Kaynak, 2005). Two problems arise with modern supply chains both causing increased uncertainty in transportation links, which in turn have caused a return to supply chain slack (Tierney, 2005). The first problem is extended supply lines caused by globalization. There is a domino effect due to extended supply lines causing JIT to not work for shippers. Shippers are adding safety inventory to correct for going too lean (Sowinski, 2005). The second problem related to supply lines deals with infrastructure.



The infrastructure has not kept up with globalization and causes delays. Capital investment in railroad, trucking and shipping has not kept up with demand since the late 1980's (Allen, 2004).

### **3.2 Globalization**

As noted in the previous section, globalization has extended supply lines (Sowinski, 2005). Extended supply lines are less reliable and less suitable for JIT than shorter supply lines, but that is rarely the case today (Allen, 2004). Extended supply lines are not the only concerns brought by globalization. Globalization has brought effects such as the fast pace of growth in China. Increased growth has created shortages in such things as oil, coal and steel (Tierney, 2005). The likelihood of shortages make increased inventory a wise choice and compromises a JIT system.

### **3.3 Prices**

Between 1985 and 2000 commodity prices kept falling and multiple suppliers made them readily available (Allen, 2004; Cooke, 2004). JIT made sense when you knew the price would be less. Now materials prices and supply are unpredictable (Allen, 2004). The general unpredictability of prices is exacerbated by the shortages caused by a growing global economy. Global supply in many areas is being outpaced by global demand, causing rising prices and limited availability. These conditions provide an incentive for increasing inventory, and make the reduced inventories associated with JIT an unacceptable risk. In addition, recently raw material prices have been increasing at a rate many times that of finished goods. In such a situation increasing inventories is prescribed to avoid price increases (Cooke, 2004).

### **3.4 Customization**

Mass customization has been the next big thing since the 1980's; however attempts during its first decade of existence were few and far between. A new wave of mass customization attempts by such companies as Land's End, Nike and M&M/Mars seems to be more successful. This success is due to the internet and flexible electronic JIT systems (Schlosser, 2004). The problem for JIT systems with customization is that it is difficult to predict demand. JIT works best when the production schedule is steady. In customization environments the inconsistent demand creates an erratic production schedule. The materials and parts needed are difficult to predict, therefore the greater the effort to minimize inventory the greater the possibility of a stock out that will delay production.

## **4. IMPLICATIONS AND CONCLUSION**

James Cooke recently asked "Is JIT dead?" citing commentary that JIT has "outlived its usefulness" (Cooke, 2004). He specifically was referring to the currently rapidly rising commodity prices and questioned the wisdom of minimizing inventory instead of stockpiling. Whereas rising prices is a concern that influences the dynamics of JIT, it hardly is a cause for abandoning it. Indeed all of the concerns listed above – supply chain issues, globalization, increasing prices and the trend towards customization – are challenges to JIT that can be dealt with. The answer to "Is JIT dead?" is "no, JIT is not dead, but it needs to evolve and be adjusted to fit the times".

Manufacturing and production operations need to follow the lead of the warehouse industry in adjusting to JIT and the new realities of the world. The entire orientation of the warehouse industry has changed as the industry was transformed from storage facilities to a high turnover distribution centers (Malloy, 2004). Modern plants using JIT systems need to change their orientation. They need to concentrate on measurement of throughput, profitability and flexibility, not just raw utilization and inventory minimization. One current trend that appears to be effective is to implement systems as a phased roll out and to utilize software that can help internally, but also coordinate with customers through EDI and electronic kanban (E-kanban) systems to allow a customer pull (Michel, 2004). E-Kanban systems are between companies and triggered by customer demand (Drickhammer, 2005). Another trend is to use automatic and semi-automatic systems with radio frequency data communications technology. Such radio systems have been used to effectively manage JIT materials handling (Feare, 2004).

Lean production in general and JIT in particular are still valid approaches, but it is important to realize their limitations and to be aware of the current business environment. Once the critical limitations of JIT

and the relevant environmental factors are identified, then it is possible to adapt lean production techniques through the use of new information technology to coordinate with buyers and suppliers, selectively increasing inventories to prevent workflow interruptions and hedge against price increases, and so on.

In this paper we identified and briefly explored four current areas of concern that could affect JIT operations - supply chain issues, globalization, increasing prices and the trend towards customization. Future research should investigate the key elements and dynamics of these four areas and attempt to identify other areas of concern. Researchers should also identify and analyze specific practices that are effective in dealing with the identified problematic dynamics. Some attempts have already been made at benchmarking JIT practices (Yasin, Wafa & Small, 2004) but much more needs to be done in this area. JIT and lean manufacturing are still valid concepts, they just need to change with the times, and it is important to take note of successful adaptations that deal with current environmental concerns.

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## PEDAGOGICAL DIFFICULTIES IN THE PRICING OF FIXED INCOME AND DISCOUNT SECURITIES

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### ABSTRACT

*There appears to be a gap between theoretical pricing of fixed income securities as it is usually taught in introductory finance courses and true market pricing that is presented in higher level courses. Astute students are often confused when the application of basic knowledge attained earlier appears to be inappropriate in other situations. It is suggested that a few changes in the traditional approach can make the pricing fixed income securities accessible to all students; particularly those that are continuing in higher-level finance or accounting.*

**Keywords:** Pedagogical Finance, Discount Security Pricing, Fixed-Income Security Pricing

### 1. INTRODUCTION

With little variation, introductory finance texts introduce the concepts of time value of money in the following sequence:

1. Future value of a lump sum with annual compounding of interest.
2. Future value of a lump sum with other-than-annual compounding of interest.
3. Present value of lump sum with annual discounting of interest.
4. Present value of a lump sum with other-than-annual discounting of interest.
5. Future value of annuities; first annual annuities, then other-than-annual annuities.
6. Present value of annuities; first annual annuities, then other-than-annual annuities.
7. The effect of interest compounding periods: Effective Annual Rate.
8. Bond valuation with annual coupon payments.
9. Bond valuation with other-than-annual coupon payments.
10. Yield to maturity.

The implicit assumptions used when introducing time value of money concepts include:

1. The interest rate applied and the compound frequency are constant during the period in question.
2. Interest earned (cash flow) is reinvested and earns the constant periodic rate of interest.
3. The initial investment of funds occurs *exactly* one period before interest is received.
4. There is no accrual of interest. Interest is only received if the initial principle and reinvested interest are left undisturbed until the next payment of interest.
5. When discounting annuities, it is assumed cash flows received are reinvested at the same periodic rate as the discount rate.

Introductory finance students are drilled on the importance of compound interest and eventually understand that increasing the frequency of compounding is preferred when attempting to earn the highest effective return possible. They may also attain an appreciation for the concept when it is applied to discounting future values to the present.

As students begin to grasp the concepts of time value of money (and particularly, discounting), instructors tend to move on to the pricing of fixed-income securities. With the advent of financial calculators, pricing these securities has become much less time consuming. Finding the fair value of a corporate bond can now be done in seconds by even the most mediocre student. The ease with which the student can determine the “current” market price, the yield to maturity, or the number of coupon payments remaining tends to downplay the key assumptions that must be made in order for the solution to be found.

Students that continue in finance or accounting eventually run into the challenge of pricing fixed income securities when one or more of the underlying assumptions are no longer valid. Therefore, the simple pricing techniques learned in the introductory course must be adapted if a reasonable solution is to be

found. It seems that one of the principle assumptions that students refuse to abandon is the effect of compound interest.

This paper discusses two methods of accounting for accrual of interest on a coupon bond when attempting to find the market price between coupon payment dates. Many upper-level texts provide “solutions” to this dilemma that are at odds with student understanding of compound interest. The texts explain the method used by the markets to determine the actual price that an investor must pay. The method includes accrued interest, but not compound accrued interest. When an *introductory* student attempts methods similar to those presented in upper level texts, instructors admonished them because time value of money principles have been ignored. Yet, the same instructors ignore the same principles when the situation arrives in upper-level finance courses.

## 2. INTRODUCTORY PRICING OF A FIXED INCOME SECURITY

As most finance instructors explain the pricing of a fixed income security, the current or fair market price can only be found if the next interest payment (coupon) is exactly one period away. In essence, the students learn how to find the “clean” price of a security; the price of the security moments after the *current* coupon payment has been paid. Instructors usually bring the students to this point after repeated drilling of the concepts of compound interest and finding a present value by discounting. In the introductory course, instructors then tend to move to other topics, without exploring the consequences of altering some of the underlying assumptions that are necessary to price the security. In reality, the students have learned to theoretically price an extremely small fraction of the fixed income securities actually trading in the market on any given day: those that make a coupon payment today.

The following explores the assumption that the next coupon payment on a fixed income security is exactly one period from the present. The challenge is to present the exercise of explaining accrued interest and its effect on the market price of a fixed income security to introductory finance student. Any rational investor selling the security expects to receive the interest that has accrued since the time of the last coupon payment. By not selling at the time of the last coupon payment, the owner chose to reinvest the entire value of the security for an indefinite period of time. Selling the security later, the investor demands compensation for his or her reinvestment.

### 2.1 Example of Typical Introductory Pricing Pedagogy

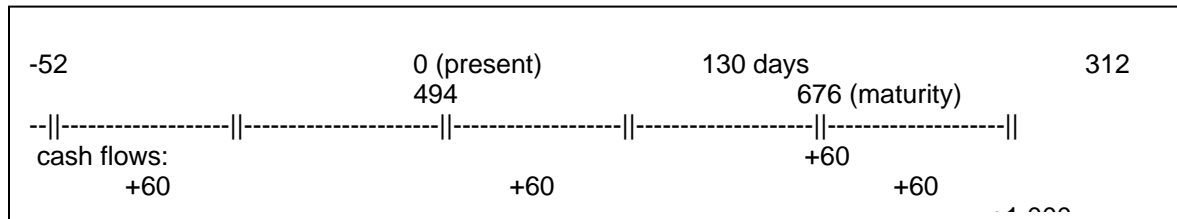
Assume a corporate bond with a face value of \$1,000, a coupon rate of 12%, and four semi-annual payments remaining. Further assume a 364-day year for computational ease. If the bond is priced to yield a constant 12%, the market value of the bond will be \$1,000 at the beginning of the trading day after each semi-annual coupon payment of \$60. The conventional fixed-income pricing formula applies:

$$(1) \quad V_0 = C * \frac{\left[ 1 - \frac{1}{\left( 1 + \frac{r}{h} \right)^{(n*h)}} \right]}{\frac{r}{h}} + \frac{V}{\left( 1 + \frac{r}{h} \right)^{(n*h)}}$$

Where

|       |   |  |
|-------|---|--|
| $V_0$ | = | current market value of fixed-income security. |
| $r$   | = | annual required rate of return.                |
| $h$   | = | number of coupon payments received each year.  |
| $n$   | = | number of years to maturity.                   |
| $C$   | = | dollar amount of each coupon payment.          |
| $V$   | = | dollar amount to be received upon maturity.    |

Assume that the owner of the bond wishes to sell today, and the last coupon payment was 52 days ago. The seller expects to be compensated for 52 days of accrued interest. Since the fair price of the bond will be \$1,000 immediately after each coupon payment, the total interest in question for the 182-day period is the semi-annual \$60 to be paid in 130 days. Note that there can be no capital gain or loss in the value of the bond. The cash flow timeline appears as:



## 2.2 Conventional Accrual Method

Most upper-level finance texts that address interim-coupon pricing of a security ignore the compounding of interest concepts that instructors emphasize to introductory students. This is done because it is the method used by the U.S. fixed income markets to determine the price that a buyer must pay to the seller. The method is usually presented as a variation of the following:

$$(2) \quad V_0 = V_{(0-j)} + \left( \sum_{t=0}^j \left( \frac{C_{(m-j)}}{m} \right)_t \right)$$

Where:

|             |   |   |
|-------------|---|---|
| $V_0$       | = | current market value of fixed-income security.                              |
| $j$         | = | number of periods since the last coupon payment.                            |
| $V_{(0-j)}$ | = | the market value of the security immediately after the last coupon payment. |
| $m$         | = | number of periods between promised coupon payments.                         |
| $m-j$       | = | number of periods until the next coupon payment.                            |
| $C_{(m-j)}$ | = | coupon payment that will be paid $(m-j)$ periods from the present.          |

According to the example:

$$V_0 = 1,000_{(0-52)} + \left( \sum_{t=0}^{52} \left( \frac{60_{(182-52)}}{182} \right)_t \right)$$

The solution equally divides the next \$60 coupon payment over 182 days and results in the accrual of \$0.32967 in interest per day. The accrual of 52 days of interest (\$17.142857) is then added to the \$1,000 market value that existed just after the last coupon payment. The current market price that an investor should be willing to pay for this bond is \$1,017.14 according to this method.

This approach tends to confuse well-prepared finance students, as it is not consistent with their previous experience. The introductory method is typically based on semi-annual compounding (discounting) of interest with ordinary annuity payments occurring in concert with the compounding (discounting) period. In order to complete the pricing of a security that is between coupon payments, a discrete linear function is suddenly introduced. After emphasizing the importance of reinvesting interest payments, instructors using the discrete approach ignore previous student training and simply add a constant amount of interest each day. In the example, the market price of the security will follow a straight line from a value of \$1,000 to a value of \$1,060 over the 182-day period. In the extreme, (*ceteris paribus*) the price of the security should increase by \$0.164835 half way through each trading day, and a consistent known amount each hour. The underlying hybrid pricing equation is a combination of equations (1) and (2):



$$(3) \quad V_0 = \left\{ C_{(m-j)} * \frac{\left[ 1 - \frac{1}{\left( 1 + \frac{r}{h} \right)^{(n+h)}} \right]}{\frac{r}{h}} + \left[ \frac{V}{\left( 1 + \frac{r}{h} \right)^{(n+h)}} \right] \right\}_{(0-j)} + \left( \sum_{t=0}^j \left( \frac{C_{(m-j)}}{m} \right)_t \right)$$

The hybrid valuation method consists of a continuous element that values the security just after the prior coupon payment, and a discrete element that increases the prior value by a constant periodic amount. It is interesting to note that the discrete component does not consider the return required by the investor.

### 3. SUGGESTED ALTERNATIVE

In order to remain consistent with the compounding of interest, it appears reasonable to use the investor's required rate of return in the adjustment of the security price for accrued interest. In doing so, it is necessary to make an interim determination of the periodic compound interest rate that applies during the time between payments of interest. For example, if the accrual period is daily, the first day's interest will earn interest every day until the next coupon payment. Of course, this is the compounding of interest concept that instructors insist finance students understand in the introductory course. The result of the accrual and compounding will eventually equal the effective return for the investor.

In the example, the instrument has a value free of any accrued interest immediately following the payment of the coupon. As time passes and interest is accrued and compounded, the security's value will increase in a non-linear fashion until immediately before the payment of the next coupon. The ratio of the ending value to the beginning value represents the periodic effective rate of return on the security. This return must be equal to an investor's periodic required rate of return for the instrument in order for it to be priced fairly. Therefore, it is necessary to determine the compound periodic rate that allows the increase in value.

$$(4) \quad RROR_p = ERR_p = \frac{FV}{PV} - 1$$

Where:

$$\begin{aligned} RROR_p &= \text{periodic required rate of return of the investor for the period, } p \\ ERR_p &= \text{periodic effective rate of return for the period, } p \\ FV &= \text{end-of period security value} \\ PV &= \text{beginning of period security value} \end{aligned}$$

Accounting for periodic compounding, equation (4) can be written as

$$(5) \quad RROR_p = ERR_p = \left( 1 + \left( \frac{i}{d} \right) \right)^d - 1 = \frac{FV}{PV} - 1$$

Where

$$\begin{aligned} (i/d) &= \text{the periodic rate of return adjusted for frequency of compounding} \\ i &= \text{base periodic rate of return prior to compounding} \\ d &= \text{number of periods between coupon payments} \end{aligned}$$

Solving equation (5) for the base periodic rate of return,  $i$ :



$$(6) \quad i = d \left( \left( \sqrt[d]{\frac{FV}{PV}} \right) - 1 \right)$$

Or, alternatively:

$$(7) \quad i = d \left( \left( \frac{FV}{PV} \right)^{\left( \frac{1}{d} \right)} - 1 \right)$$

Although equation (7) may look daunting to students, the advent of financial calculators allows an easy computation to solve for the base rate,  $i$ . The rate is simply the annualized rate of return that grows a sum of money from  $PV$  to  $FV$  over the given number of periods,  $d$ .

Assuming daily compounding of interest so as to be consistent with daily discrete accrual of interest of the linear method, the bond in the example is valued at \$1,000 immediately after the last coupon payment and \$1,060 immediately prior to the next coupon payment. The semi-annual periodic rate with daily compounding that allows the increase in value over 182 days is 5.8278%:

| Calculator Key→ | PV  | FV    | PMT | N   | I            |
|-----------------|---|-------|-----|-----|--------------|
| Input→          | (1,000)   | 1,060 | 0   | 182 | Solve        |
| Solution→       |   |       |     |     | 0.0320210092 |
| Notes→          | Solution is a periodic daily interest rate.<br>Over the 182-day horizon, it is equivalent to a semi-annual rate of return of 5.827823677% |       |     |     |              |

At this point all values needed to price the security between coupon payments are known. When daily compounding of interest is considered, the market price of the example security is \$1,016.79:

| Calculator Key→ | PV   | FV    | PMT | N  | I            |
|-----------------|--|-------|-----|----|--------------|
| Input→          | (1,000)  | Solve | 0   | 52 | 0.0320210092 |
| Solution→       |  |       |     |    | 1,016.7876   |
| Notes→          | The “current” price of the security if interest is accruing and compounding at the daily periodic rate of 0.0320210092%. |       |     |    |              |

#### 4. COMPARISON OF METHODS

Using the conventional discrete method, the example security would be priced in the market at \$1,017.14, higher than the price of \$1,016.79 found when compounding of accrued interest is incorporated. This may seem to be a minor difference, however, it is a \$1,000 bond and only represents one day (the 52<sup>nd</sup>) between coupon payments. In upper level finance courses it is often impressed upon the students the size of the markets that trade these securities. On any given day, when billions dollars are moving through the U.S. financial system, a \$0.35 pricing difference amounts to millions of “real” dollars.

Table 1 provides an example of the pricing differential between the discrete and compound methods when pricing between coupon payments using bonds with a total par value of \$10,000,000.

**TABLE 1**  
**COMPARISON OF PRICING OF FIXED INCOME SECURITY**  
**DISCRETE DAILY INTEREST VERSUS COMPOUNDING OF INTEREST**

| Number of days since last coupon payment | Conventional Method Discrete | Compounded Method | Pricing Differential |
|--|------------------------------|-------------------|----------------------|
| 15                                       | \$10,046,153.85              | \$10,044,922.84   | \$1,231.01           |
| 30                                       | 10,095,604.40                | 10,093,278.42     | 2,325.96             |
| 45                                       | 10,145,054.95                | 10,141,866.78     | 3,188.17             |
| 60                                       | 10,194,505.49                | 10,190,689.04     | 3,816.45             |
| 75                                       | 10,243,956.04                | 10,239,746.33     | 4,209.71             |
| 90                                       | 10,293,406.59                | 10,289,039.78     | 4,366.82             |
| 105                                      | 10,342,857.14                | 10,338,570.52     | 4,286.62             |
| 120                                      | 10,392,307.69                | 10,388,339.70     | 3,967.99             |
| 135                                      | 10,441,758.24                | 10,438,348.47     | 3,409.78             |
| 150                                      | 10,491,208.79                | 10,488,597.97     | 2,610.82             |
| 165                                      | 10,540,659.34                | 10,539,089.37     | 1,569.97             |

That the pricing differential is highest at the midpoint between coupon payments is not a surprise. The assumption of daily compounding of interest means that the “early” payments of interest are left on “deposit” and “earn” a little more interest each day. This is an introductory concept that is used extensively to show the power of compounding. The process results in relatively high interest-on-interest “payments” in the latter days leading up to the next coupon.

## 5. APPLICATION TO DISCOUNT SECURITIES

The money markets are home to several forms of discount securities. These instruments are typically introduced to students in a separate course with the introductory finance course required as a prerequisite. Two variations from fundamental principles at this juncture include (1) money market securities have a maturity of less than one year and (2) discount securities have no interim cash flow. Yet, neither do zero-coupon bonds, which many instructors use to show the Present Value/Future Value connection. In later courses, the students may learn of US Treasury STRIPS and other long-term securities that also have no interim cash flow.

The bedrock principle of pricing a discount security is precisely the same as discounting a lump sum future cash flow. Knowledge of the discount rate and the compounding period of that rate are necessary:

$$(8) \quad PV = \frac{FV}{\left(1 + \left(\frac{r}{m}\right)\right)^m}$$

Money market securities are often quoted on a bank discount basis. This necessitates some adjustment to determine a comparable bond equivalent yield. Upper level texts use a variety of notations and derivations to make what is essentially the same adjustment. Fabozzi and Modigliani (2003, pg. 401) use the following form:

$$(9) \quad Y_D = \frac{D}{F} \times \frac{360}{t}$$

Where:

$Y_D$  = yield on a bank discount basis (expressed as a decimal)  
 $D$  = dollar discount, which is equal to the difference between the face value and the fair market price  
 $F$  = face value of the discount security

$t$  = number of days remaining to maturity

If the bank discount yield is known, it is possible to determine a fair market price ( $P_0$ ):

$$(10) \quad P_0 = F \left[ 1 - Y_D \left( \frac{t}{360} \right) \right]$$

Which is equivalent to:

$$(11) \quad P_0 = F - \left[ t * \left( \frac{F * Y_D}{360} \right) \right]$$

Notice that the term  $\left( \frac{F * Y_D}{360} \right)$  in equation (11) represents the dollar amount of interest *per day* that accrues on the discount security. The daily accrual is constant and is multiplied by the number of days until maturity,  $t$ . Similar to the coupon-paying security, the “fair” market price of the discount security is the result of a discrete linear function. Neither form accounts for the compounding of interest that is familiar to most students.

A further adjustment must be used to compute the bond equivalent yield or coupon equivalent yield on a discount security once the fair market price is determined using the linear form. This procedure allows comparison of investor yield to other fixed income investments that have interim payments of interest prior to maturity. Variations exist in differing texts, but generally follow the form:

$$(12) \quad CEY_0 = \left( \frac{MV - P_0}{P_0} \right) * \frac{365}{t}$$

Where

|         |   |   |
|---------|---|---|
| $CEY_0$ | = | coupon equivalent yield at the current fair market price, $P_0$ |
| $MV$    | = | maturity value  |
| $P_0$   | = | current fair market price of the discount security.             |
| $t$     | = | number of days remaining to maturity                            |

This form also ignores compounding of interest that is the basis of time value of money principles. In order to find the “true” yield to maturity, or to compare to other investments’ yield to maturity, it is appropriate to use the approach suggested by equation (7).

### 5.1 Example of Typical Introductory Pricing Pedagogy for a Discount Security

Assume that a \$10,000,000 T-Bill with 68 days to maturity is quoted on a bank discount basis at 4.23%. Using the conventional method, the T-Bill will sell at a dollar discount equivalent to \$79,900 or at a price of \$9,920,100. This method assumes that interest of exactly \$1,175 will accrue each day until maturity.

$$P_0 = 10,000,000 - \left[ 68 * \left( \frac{10,000,000 * 0.0423}{360} \right) \right] = 10,000,000 - [68 * (1,175)] = 9,920,100$$

The coupon equivalent yield of 4.23293% is then determined using the conventional method:

$$CEY_0 = \left( \frac{79,900}{9,920,100} \right) * \frac{365}{68} = 4.32329311 \%$$

If daily compounding of interest is taken into consideration, determining the coupon equivalent yield is a relatively simple procedure using a financial calculator:

| Calculator Key→ | PV   | FV         | PMT | N  | I                  |
|-----------------|--|------------|-----|----|--------------------|
| Input→          | (9,920,100)  | 10,000,000 | 0   | 68 | <b>Solve</b>       |
| Solution→       |  |            |     |    | <b>0.017978887</b> |
| Notes→          | Solution is a periodic daily interest rate.<br>The equivalent annual rate of return over 365 days is determined to be 4.30622937331% |            |     |    |                    |

The difference between the discrete and compound method is a mere 1.7064 basis points on an annual basis. However, according to Saunders and Cornett (2004, pg. 123), total domestic money market instruments outstanding at the end of 2001 amounted to \$4,613.2 billion. The pricing differential between linearly priced discount securities and the price determined using daily compounding of interest amounts to over \$787 million annually in this market.

## 6. CONCLUSION

Many finance students find the transition between theory and practice confusing. The confusion may be eased by extending the students' theoretical knowledge prior to discussing actual market practices. Making a connection between the periodic compounding of interest to which students are initially exposed, and the discrete pricing models later encountered, is an appropriate example. The advent of financial calculators allows the transition to take place more easily and provides the instructor an opportunity to introduce similarities and differences in the pricing of fixed income and discount securities. Ideally, these topics may be introduced in the first finance course as a part of determining fair market values of fixed income or discount securities in conjunction with compounding of interest. If discussed in upper level courses, it may be advantageous to extend students' knowledge of compound interest before making the transition to the methods actually used by the markets.

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## AIRLINE TICKET PURCHASES ONLINE: PERCEIVED RISKS AMONG ETHNIC GROUPS

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### ABSTRACT

*Targeting of specific ethnic groups will improve by bridging the gap between perceived risk of current online consumers and the concerns of the would-be purchasers. This will identify why current users choose to make purchases online, how comfortable they are in doing so, as well as how to capitalize on these factors. This study seeks to aid in the understanding of different ethnic groups' airline ticket purchasing behavior within the online environment.*

**Keywords:** *Perceived Risk, Purchasing Behavior, Online Airline Ticketing, Ethnic Groups, Minorities, Caucasian Americans, African American, Hispanic, Airline Industry, Internet.*

### 1. INTRODUCTION

Careful analysis of primary and secondary data is key to the success of any business. This is particularly true within highly competitive industries. Competitiveness depends upon a constant evolution of strategy and technology. Today's airline industry is currently undergoing an industry wide shake out. One strategy suggested by this study is to remain competitive through the targeting of specific ethnic groups. It will be necessary to identify why current users choose to make purchases online, how comfortable they are in doing so, as well as how to improve these factors. According to the State of Retailing Online 6.0, "of the total number of people who visit a website, only about 3.1 or 3.2 percent actually make a purchase". Studies reveal the purchasing behavior of ethnic groups may play a role in this lack of online shopping. One method to increase "purchasing traffic" is to tap into the growing market of ethnic groups who are buying online. Nielsen Media Research shows 24 percent of African Americans are currently on the internet. That penetration almost matches the U.S. Internet market as a whole, which according to Jupiter Communications, New York, was at 28.4 percent in 1998 (Mand, 1999). Similarly, Hispanics rose 650 percent over the past four years to 4.5 million users. "We're moving more toward a minority majority," says Lawrence Tuckett, director of ethnic marketing for TPI, a division of New York agency Interactive8. With this in mind, this study seeks to aid in the understanding of different ethnic groups' airline ticket purchasing behavior within the online environment.

### 2. PERCEIVED RISK

"Business-to-Consumer (B2C) electronic commerce involves the use of the internet and World Wide Web to market and sell products and services to individual consumers" (Doolin, Dillon, Thompson, Corner, 2005). Most internet users have embraced the evolution of e-commerce but some are still hesitant to use the internet as a medium for shopping. Previous studies have shown that the frequency of internet use can be affected by a user's *perceived risk*. This "perceived risk" associated with use of the internet and World Wide Web can be derived from many factors including product risk, security risk, and privacy risk.

Product risk is defined by authors within the Journal of Global Information, as "the risk of making a poor or inappropriate purchasing decision." Product risk can be further broken down into three elements consisting of: the inability to compare prices, the inability to return a product, and the risk of not receiving the purchased product. "Another aspect of product performance associated with risk is that a product will not function as expected" (Bhatnagar et al., 2000; Jarvenpaa & Todd, 1997; Tan, 1999; Vijayasathary & Jones, 2000). The preceding risks can influence would be purchasers to be more risk-averse when deciding whether or not to use the internet to shop.

Consumers may also feel hesitant due to the preconceived notion of a security risk when using the internet. This risk is most commonly believed to be derived from the use of transmitted credit card

information on the Web. This security risk, along with privacy risk, also influences whether or not consumers make monetary transactions on the internet.

Privacy risk, coupled with trust issues, can also dissuade frequent use of the internet. Some consumers feel exposed while connected to the World Wide Web. This hesitancy can influence consumers to not make an online payment to e-commerce related businesses.

Consumers simply do not trust most web providers enough to engage in relationship exchanges involving money and personal information. Research reveals that this lack of trust arises from cyber consumers feeling they lack control over the access that web merchants have to personal information during the online navigation process. These concerns over privacy span the dimensions of environmental control and secondary use of information control.

Key consumer perceptions of privacy are revealed through analysis of consumer responses to two biannual surveys. The Nielsen Media Research, 1997 and www User Survey, 1997 provide insight regarding privacy concerns related to traditional and online purchases. Online consumers have more intense needs for control and protection. 87% of web users think they should have complete control over the demographic information websites capture. Over 71% feel there should be new laws to protect their privacy online.

The primary barriers to consumers providing demographic data to websites are related to trust and the nature of the exchange relationship. The surveys also revealed nearly 63% of consumers who decline to provide personal information to websites report it is because they do not trust those who are collecting the data. Consumers do, however, realize that personal data is important to web marketers and report being interested in providing such information. Up to 92% of web users would give demographic data to the web marketers. The majority of consumers (over 62%) also understand the importance of providing information so that e-marketers are able to tailor ads to consumers. Marketers can also use the convenience provided by the internet to customize ads to target segments.

### **3. INTERNET CONVENIENCE**

Shopping on the internet is viewed by many as fast, efficient, and most importantly, convenient. The convenience of shopping on line often persuades consumers to use the internet as a shopping tool. Others are not so easily persuaded by the convenience of online vendors and are hesitant due to "the loss of sensory shopping and the loss of social benefits associated with shopping" (Vijayasathya & Jones, 2000). These consumers shop for several reasons including: recreation, personal enjoyment, and social interaction.

As a result of consumers' perceived risks and other online shopping obstacles the following hypotheses can be surmised:

- Consumers who place importance on the perceived risk of Internet shopping are less likely to purchase online.
- Consumers who place importance on the perceived benefits of Internet shopping are more likely to purchase online.
- Consumers who place importance on the loss of social interaction in Internet shopping are less likely to purchase online.

(Source: Doolin, Dillon, Thompson, Corner, 2005)

Further analysis is needed in order to breakdown consumers into specific ethnic categories. This breakdown is necessary due to the differences within demographic and cultural factors among the general market, Caucasian, African Americans and Hispanic Americans.

#### 4. ETHNIC MAKEUP OF INTERNET USERS:

Internet usage, when broken down ethnically, has historically been unequal. "There is a so called digital divide between white and ethnic consumers that stems from long-existing discrepancies in income and education levels along racial lines." (Ebenkamp, 2001).

According to "Divide and Culture" it is important to explore the demographic profiles, access usage patterns and attitudes of African - American and Hispanic - American usage compared with those of the general market (Caucasian).

In previous years these discrepancies were attributed to ethnic consumers' lack of access to technology. Currently these consumers have an increased access to technologies; more specifically the internet. Culture plays a vital role in defining internet usage among ethnic Americans while income and education levels fill secondary roles.

**Table 1: Cultural online habits/traits**

**\*(Source: 2001 Cultural Access Group Demographic Studies)**

|                            |   |
|----------------------------|---|
| <b>Caucasian Americans</b> | <ul style="list-style-type: none"><li>• 97% of Caucasians have been online longer and have internet access at home.</li><li>• 69% of Caucasian web users have completed an online purchase.</li><li>• 62% of Caucasians interviewed were home owners with higher income levels.</li></ul> |
| <b>African American</b>    | <ul style="list-style-type: none"><li>• 76% feel comfortable making credit card purchases over the internet.</li><li>• 31% of African Americans have made a purchase over the internet.</li><li>• Internet users have been shown to be predominantly female.</li></ul>                    |
| <b>Hispanic Americans</b>  | <ul style="list-style-type: none"><li>• Less than one third of Hispanic consumers have completed an online purchase</li><li>• 47% would feel comfortable making credit card purchases over the internet</li></ul>   |

The studies at the Cultural Access Group reveal, "There's an automatic trust among the general market but the level of trust has to be earned amongst Blacks and Hispanics. Among African Americans there's some skepticism regarding mainstream institutions because of the history of discrimination. For Hispanics, it's something else; there may be language and cultural differences."

It is apparent that the general market, or Caucasian market, has a higher comfort level when using the internet. African Americans are more likely to use the medium for job hunting and networking. Hispanics, on the other hand, are more apt to read online newspapers. Both groups take online classes, use chat rooms and dating services more than the general market. Hispanic American and African Americans view the internet with more optimism and also as a source which can lead to the diminishment of racial barriers (Merrick, 2001). The Director of Marketing within the Cultural Access Group, Thomas Tseng, states "There's a sense of skepticism in terms of giving out credit card numbers and other personal information, yet at the same time, they are more exuberant and optimistic about what the Internet can do and what it represents." This optimism can be utilized to increase the purchasing of airline tickets online.

#### 5. PURCHASING AIRLINE TICKETS ONLINE

All of the preceding factors must be addressed when taking into consideration consumer habits pertaining to the purchase of airline tickets in an online environment. Airlines are aggressively pushing their customers to book their tickets online, whether they use the internet or not. The purpose of encouraging online ticket purchases directly from the airline is to decrease overhead costs incurred by personnel, paper handling, and online travel agents. The carrier is able to save 10 to 15 dollars per transaction when selling tickets online, so they have enforced corresponding fees to customers who choose to



purchase by phone or in person (Schechner, 2005). Airlines such as American, Northwest, United and Southwest Airlines, as well as US Airways, are currently working on attracting consumers to online purchasing rather than openly discouraging them from purchasing in person.

Although many of the sites leave much to be desired, most carriers are experiencing increasing returns from online ticket purchases. A breakdown of five major US airline carriers' online purchasing processes revealed elements that may affect a consumer's opinions and comfort levels. American Airlines' website allows travelers to choose their seat online but would not allow changes after booking. Northwest Airlines' website offered easy navigation but did not allow customers to cancel reservations online. Southwest Airlines displayed every available flight but made it difficult to determine which flights were nonstop. United Airlines' website claims you can cancel reservations for free within 24 hours but did not follow through with this promise. Finally, US Airways offers a calendar function which shows you how the fares will change each day (Schechner, 2005). The preceding breakdown reveals aspects of the online purchasing process that airlines are currently trying to improve. This creates a need for further analysis to generate new product innovations.

## **6. METHODOLOGY**

This study integrates qualitative and quantitative research in order to analyze usage patterns of different ethnic groups. Secondary research was examined in order to form a foundation of understanding regarding the subject area. This was accomplished through different medium such as, the internet, magazines, and journal articles. Primary data was obtained with one-on-one, in depth interviews. This system of data collection helped to form a more comprehensive analysis. Interview participants were asked to answer a combination of open and closed-ended questions. "This method is most effective when the subject matter can be interpreted as sensitive, embarrassing, confidential, or emotionally charged" (Hoyer, MacInnis, 2004).

## **7. SAMPLE**

A total of 53 undergraduate students were used as a sample for this study. The breakdown of interviewees are as follows; 19 Caucasian Americans, 17 Hispanic Americans, and 17 African Americans. The participants were between ages 18 and 28 and consisted of nearly an equal of number of males and females. All subjects were approached at random on a California State University campus.

## **8. CAUCASIAN AMERICANS**

Caucasian Americans were used as a benchmark for this study. The sample size consisted of 10 male and 9 female subjects. The following categories were evaluated:

- Frequency of ticket purchases online
- Purchasing comfort levels
- Purchasing channels
- Perceived risk
- Frequency of purchasing aspects
- Company loyalty

### **8.1 Frequency of Ticket Purchases Online/ Purchasing Comfort Levels**

The frequency of ticket purchases online for Caucasian Americans averaged between 1 and 4 times per year. A scale of 1 to 10 was used to measure comfort levels with 1 being least comfortable and 10 being the most. 9.1 was the average comfort level for Caucasian Americans.

### **8.2 Purchasing Channels**

There are 2 purchasing channels available for online consumers to use. Tickets can be purchased directly through the airline website or through an intermediary such as online ticket brokers.

| <b>Table 2:</b>          |                |                     |              |              |
|--------------------------|----------------|---------------------|--------------|--------------|
| <b>Purchase channels</b> | <b>Airline</b> | <b>Intermediary</b> | <b>Combo</b> | <b>Total</b> |
| <b>Sample breakdown</b>  | 8              | 7                   | 4            | 19           |
| <b>(Percent)</b>         | 42.1%          | 36.8%               | 21.1%        | 100%         |

The preceding table depicts 42.1% of Caucasian Americans Interviewees (CAI's) preferring to purchase tickets directly through the airline website. Only 5.3% fewer CAI's prefer to purchase through an intermediary. This menial difference represents the general market's similar attitudes toward the different channels. Adversely, 21.1% of Caucasian Americans chose to utilize both channels.

### 8.3 Perceived Risks

| <b>Table 3: Main Concerns: Perceived Risks</b> |                  |                      |
|--|------------------|----------------------|
| <i>Sample size: 19</i>                         |                  |                      |
| <i>4 votes per participant</i>                 |                  |                      |
|  | <b>Concerned</b> | <b>Not Concerned</b> |
| <b>Identity theft</b>                          | 9                | 10                   |
| <b>Credit card theft/fraud</b>                 | 8                | 11                   |
| <b>Cookies</b>                                 | 11               | 8                    |
| <b>Misleading fine print</b>                   | 8                | 11                   |
| <b>Overall view of perceived risks</b>         | <b>40</b>        | <b>36</b>            |

Table 3 reveals a fairly even distribution amongst CAI's with regard to their areas of concern. Although the preceding risks play a major role in the decision making process, this group still exhibited a tendency to feel more secure in light of the risks.

CAI's were found to be most worried about **credit card theft/fraud** as well as **misleading fine print** giving both categories identical scores. *"The website says my credit card number is accepted, but I am not sure if the airport will have my ticket ready. I just don't feel confident about it"* (Male, 25). This consumer is unaware of the effectiveness of backstage security aspects made available by the service provider. *"That's why I only go to "big" websites to make sure there won't be any problems"* (Male, 21).

**Identity theft** and **security cookies** received scores of 10 and 8, respectively, exhibiting a high level of concern. Recording and tracking of **cookies** are of the least concern for most CAI's. One interviewee revealed, *"I never knew about cookies, but now that you told me about them I'm worried"* (Male, 24).

### 8.4 Ranking Aspects

| <b>Table 4: Ranking of Purchasing Aspects</b> |             |
|---|-------------|
| <b>Purchasing aspects</b>                     | <b>Rank</b> |
| <b>Price</b>                                  | 1           |
| <b>Human interaction</b>                      | 6           |
| <b>Convenience</b>                            | 3           |
| <b>Speed of the transaction</b>               | 5           |
| <b>Ease of website</b>                        | 4           |
| <b>Security</b>                               | 2           |

Table 4 reveals **price** to be the primary motivating factor when considering the use of online ticket purchasing channel. **Security** followed price regarding the perceived risks of purchasing airline tickets online. Interviewees declared the security of the transaction should be the responsibility of the service provider.

Caucasian American Interviewee's view of online purchasing as a benefit is revealed with the ranking of **convenience**, **speed of transaction** and **ease of use** involving the

**website.** The CAI's regard convenience as being important, as well as all other factors involved with convenience (including speed of transaction and ease of use of the website). **Human interaction** is considered to be of the least importance when making airline ticket purchases.

## 8.5 Company Loyalty

The majority of CAI's were found to lack loyalty to any particular airline. ***"I buy the cheapest ticket regardless of the airline"*** (Male, 24). Five CAI's exhibited loyalty to one airline for certain case specific reasons such as; ***"...they fly to where I need to go"*** (Male, 24) and, ***"I fly them because my family and friends always fly with them"*** (Female, 22).

## 9. HISPANIC AMERICANS

### 9.1 Frequency of Ticket Purchases Online/Purchasing Comfort Levels

The frequency of ticket purchases online for Hispanic Americans averaged between one and three times per year. 7.1 was the average comfort level for Hispanic Americans.

### 9.2 Purchasing Channels

| <i>Table 1</i><br>Purchase channels | Airline | Intermediary | Combo | Total |
|-------------------------------------|---------|--------------|-------|-------|
| <b>Sample breakdown</b>             | 8       | 6            | 3     | 17    |
| <b>(Percent)</b>                    | 47.1%   | 35.3%        | 17.7% | 100%  |

The table above shows 47.1% of Hispanics American Interviewee's (HAI's) prefer to purchase tickets directly from the airline's website. Conversely, 35.3% of Hispanics favored using intermediary websites, with the remaining 17.7% showing no bias to either method.

### 9.3 Perceived Risks

| <b>Table 2: Main Concerns: Perceived Risks</b> |           |               |
|--|-----------|---------------|
| <i>Sample size: 17</i>                         |           |               |
| <i>4 votes per participant</i>                 |           |               |
|  | Concerned | Not Concerned |
| <b>Identity theft</b>                          | 8         | 9             |
| <b>Credit card theft/fraud</b>                 | 11        | 6             |
| <b>Cookies</b>                                 | 5         | 12            |
| <b>Misleading fine print</b>                   | 6         | 11            |
| <b>Overall view of perceived risks</b>         | <b>30</b> | <b>38</b>     |

This table illustrates HAI's being typically less concerned with the majority of the perceived risks outlined during the interviews. **Credit card theft/fraud** was however found to be the main concern of the HAI's with eleven of the participants categorizing it as a "concern". ***"I don't like putting my credit card number anywhere, especially online"*** (Female 24). This subject revealed general apprehension, especially when making online purchases. ***"These days you just don't know"*** (Male, 20).

**Identity theft** is the 2<sup>nd</sup> highest ranked concern within HAI's exhibited by a total of eight respondents identifying this category as a main concern. **Misleading fine print** and **cookies** are of the least concern out of the perceived risks identified.

#### 9.4 Ranking Aspects

| Table 3: Ranking of Purchasing aspects |      |
|--|------|
| Purchasing aspects                     | Rank |
| <i>Price</i>                           | 1    |
| <i>Human interaction</i>               | 6    |
| <i>Convenience</i>                     | 2    |
| <i>Speed of the transaction</i>        | 5    |
| <i>Ease of website</i>                 | 3    |
| <i>Security</i>                        | 4    |

As with most services/products **price** was shown to be the main concern of HAI's when making online ticket purchases. This group selected **convenience** as the second most important purchasing aspect. **Ease of website** is ranked 3<sup>rd</sup>, followed by **security** and **speed of the transaction**. HAI's view lack of **human interaction** as the least important aspect of making online ticket purchases.

#### 9.5 Company Loyalty

Of the 17 HAI's, 76% did not show loyalty to any particular airline. The remaining 24% of participants displayed loyalty to a specific airline based on their own motivations. **"I travel Southwest because they fly where I need to go"** (Male, 23). Another participant relates to past experiences that influenced their loyalty. **"I always fly United because my parents always did"** (Female, 20).

### 10. AFRICAN AMERICANS

#### 10.1 Frequency of Ticket Purchases Online/ Purchasing Comfort Levels

The frequency of ticket purchases online for African American Interviewee's averaged between two and four times per year. 8.4 was the average comfort level for these participants.

#### 10.2 Purchasing Channels

| Table 1                 |         |              |       |       |
|-------------------------|---------|--------------|-------|-------|
| Purchase channels       | Airline | Intermediary | Combo | Total |
| <i>Sample breakdown</i> | 4       | 7            | 6     | 17    |
| <i>(Percent)</i>        | 23.6%   | 41%          | 35.4% | 100%  |

Table 1 depicts 41% of AAI's preferring to purchase tickets through an intermediary. A combination of airline websites and intermediaries are used as service channels by 35.4% of this sample. AAI's chose to go directly to an airline's website only 23.6% of the time.

#### 10.3 Perceived Risks

| Table 2: Main Concerns: Perceived Risks |           |               |
|---|-----------|---------------|
| Sample size: 17                         |           |               |
| 4 votes per participant                 |           |               |
|   | Concerned | Not Concerned |
| <i>Identity theft</i>                   | 6         | 11            |
| <i>Credit card theft/fraud</i>          | 14        | 3             |
| <i>Cookies</i>                          | 6         | 11            |
| <i>Misleading fine print</i>            | 6         | 11            |
| <i>Overall view of perceived risks</i>  | 36        | 32            |

Table 2 depicts the majority of African American interviewees being highly concerned with the majority of the perceived risks. The table reveals that AAI's are most concerned with the **risk of credit card theft or fraud**. *"I just don't feel secure when I give away my credit card number"* (Female, 25), stated one interviewee. Another interviewee concurred, *"My sister bought the tickets so I'm not worried"* (Male, 20).

The AAI's were equally not concerned regarding **misleading find print, cookies** and **identity theft/fraud**. One interviewee alleviated any concerns regarding **identity theft/ fraud** by stating, *"I go straight to Jet Blue so I can hold them accountable if anything goes wrong"* (Male, 23). Another declared, *"I'm not worried. I use someone else's card"* (Female, 23).

#### 10.4 Ranking Aspects

| Table 3: Ranking of Purchasing aspects |      |
|--|------|
| Purchasing aspects                     | Rank |
| Price                                  | 1    |
| Human interaction                      | 5    |
| Convenience                            | 2    |
| Speed of the transaction               | 4    |
| Ease of website                        | 3    |
| Security                               | 1    |

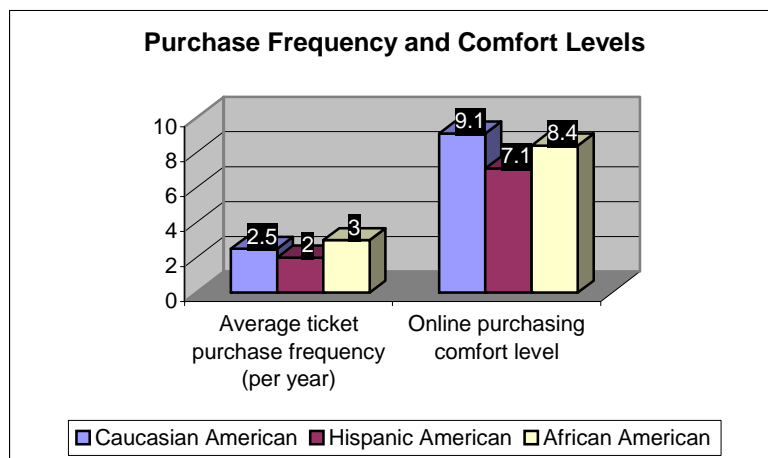
Table 3 reveals **price** and **security** to be the primary motivating factors when considering the use of online ticket purchasing channels. Consumers view online purchasing as a benefit due to **convenience, speed of transaction** and **ease of website use**. **Human interaction** is considered to be of the least importance during the online purchasing process.

#### 10.5 Company Loyalty

Nearly half (47%) of the AAI's were loyal to one particular airline while 53% of the participants showed no loyalty. Loyal consumers were faithful to an airline for reasons such as; *"I must because I am in a frequent flier program"* (Female, 24), *"I like the destination variety of United Airlines"* (Male, 26), and *"I am loyal to Southwest Airlines because they are courteous and always on time"* (Female, 23). The remaining interviewee's explained their disloyalty by stating price to be the only determining factor for purchase with an airline.

### 11. COMPARISONS AMONG ETHNIC GROUPS

#### 11.1 Purchase Frequency and Purchasing Comfort Level Compared

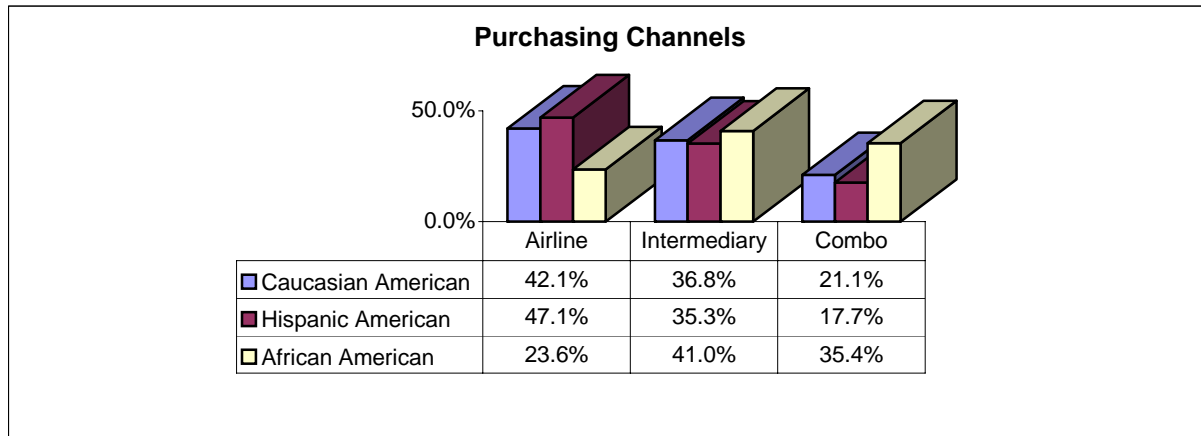


A comparison of all three ethnic groups shows similar purchase frequency. African Americans purchase airline tickets more frequently than Caucasian Americans market, while Hispanic Americans purchase fewer tickets online.

Caucasian Americans (CA's) are the most comfortable purchasing airline tickets online followed by African Americans (AA's) while Hispanic American (HA's) have the lowest comfort level. The results concur

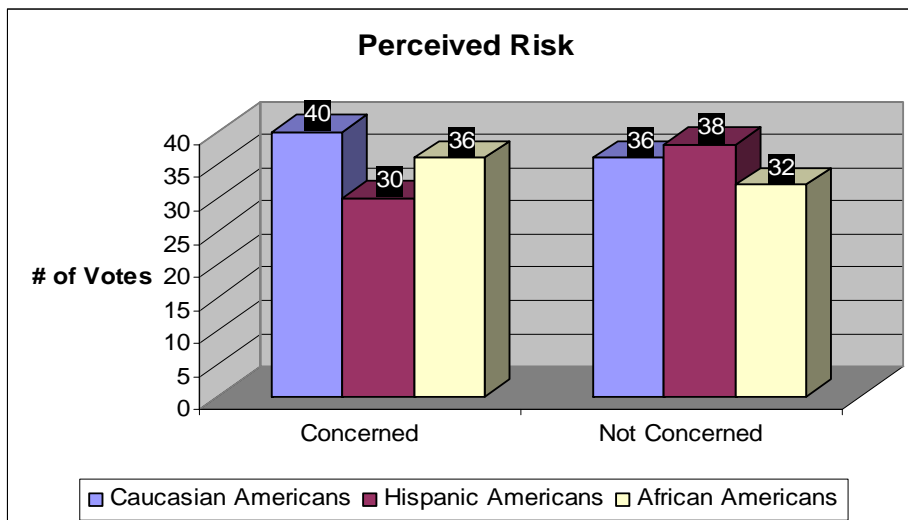
with previous studies finding CA's most confident. HA's are less comfortable making purchases online, and therefore make fewer ticket purchases. This conclusion is supported by previous research provided by Ebenkamp in "Divide and Culture", 2001.

## 11.2 Purchasing Channels Compared



The comparison of purchasing channels reveal a higher percentage (42.1 % Caucasian and 47.1% Hispanic) of the participants go directly to an airline's website to purchase tickets while only 23.6% of AA's use this method. 35% of AA's were found to use a combination of purchasing channels. This supports Cultural Access Group studies which suggest AA's view the internet more optimistically and may increase their future online purchases.

## 11.3 Perceived Risk Compared



The preceding graph depicts a similar view among all three ethnic groups. Perceived risk does not appear to affect online purchasing behavior of those already using the medium. This will bridge the gap between literature review findings regarding would-be purchasers and current online consumers.

## 11.4 Purchasing Aspects Ranking

Price was revealed to be the most important purchasing aspect among all three groups. The remaining areas of importance were ranked similarly with the exception of security. This aspect was ranked significantly lower by the HA's. Along with AA's, HA's may be exhibiting more optimism with regard to security and may also increase their future online purchases.



## 11.5 Loyalty

Loyalty was of little concern to the three ethnic groups. HA's showed the most disloyalty (76%). Price was used to determine whether or not the patron would use a particular airline consistently.

## 12. RECOMMENDATIONS

**CA's** are price conscious consumers looking for the lowest fares. These consumers also suggest the removal of misleading fees, specifically pertaining to ticket changes. Minor ticket changes, or even the reprinting of a ticket, can cost upwards of 50 to 100 dollars. The consumers also believe that the companies must make it easier to search for prices within their websites. One interviewee said: ***"It is too much extra work for me. Why can't the airlines provide all the possible price options on one single web page?" (Male, 21).*** More concise web page layouts, as well as a "help" function listed clearly on each web page will increase the CA's perception of convenience. This added convenience will increase an airline company's access to growing market share of price conscious consumers.

**HA's** were ranked the lowest of the three ethnic groups when considering online comfort levels. Increasing website ease of use, as well as transaction speed will directly affect the convenience experienced by HA's. This will ultimately increase online comfort levels, as well as, average tickets purchased per year. If the airline repeatedly provides a positive experience HA's will be more likely to develop loyalty regardless of price concerns.

Only 24% of **AA's** purchase tickets online directly from the airlines. In comparison, 42% of Caucasians and 47% of Hispanics go directly to the airline's website. Airlines have been encouraging the use of online booking practices due to increased savings through the use of these channels. The data collected reveals that the effort of reaching both Caucasian and Hispanic groups is succeeding, while attempts to reach African Americans are falling short. Furthermore, data indicates a growing percentage of AA's purchasing from both 3<sup>rd</sup> party service providers as well as directly from the airlines. This indicates a transition is occurring within the AA population. Future efforts by airlines to capture the AA market can increase profitability.

## 13. CONCLUSION

The study revealed similarities and differences involving the three ethnic groups after careful analysis of primary and secondary research. Analyzing these factors, as well as the different levels of online consumption will help to create an environment conducive to would-be purchasers. This will identify why current users choose to make purchases online, how comfortable they are in doing so, as well as how to improve these factors. Targeting of specific ethnic groups will improve by bridging the gap between perceived risk of current online consumers and the concerns of the would-be purchasers. Airline companies will now have the ability to increase online usage and long-term loyalty within several key demographics. This can be achieved by capturing market share within areas deemed most important. Ultimately, the profit gained from a loyal customer will far outweigh the cost of reacquiring that same customer again and again.

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# TRADITIONAL KNOWLEDGE MANAGEMENT: A PRESCRIPTION TO CONSIDER FOR THE MANAGEMENT OF KNOWLEDGE

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## ABSTRACT

*The World Intellectual Property Organization (WIPO) defines traditional knowledge (TK) as evolving information derived from a community, its experience, and its culture (WIPO, n.d.). TK has increasingly become a valuable means to develop new pharmaceuticals. The ownership rights of the knowledge and substantial revenues resulting from the products have become highly debated topics for the local communities and the development companies. As there is no unifying global intellectual property rights (IPR) protection guidelines, only specific cases can be discussed regarding the actual ownership rights, the question of quantifying the fair value of TK, and methods to compensate the TK owners. Two recent cases of the convergence of indigenous communities with modern business and the management of TK are discussed. Several models to protect and structure the compensation of TK are discussed.*

**Keywords:** Traditional Knowledge, Indigenous Knowledge, Intellectual Property Rights, World Intellectual Property Organization.

## 1. INTRODUCTION

Traditional knowledge (TK) is the information that people in a given community, based on experience and adaptation to a local culture and environment, have developed over time, and continue to develop. This knowledge is used to sustain the community and its culture and to maintain the genetic resources necessary for the continued survival of the community (Hansen & VanFleet, 2003).

The WIPO defines traditional knowledge to include indigenous knowledge (IK) (Oguamanam, 2004; Ghosh, 2003). Hansen and VanFleet (2003) state that "traditional knowledge includes mental inventories of local biological resources, animal breeds, and local plant, crop and tree species" (p. 3). Furthermore, TK "encompasses belief systems that play a fundamental role in people's livelihood, maintaining their health, and protecting and replenishing the environment" (Hansen & VanFleet, 2003, p. 3).

## 2. CURRENT PROTECTION

In 2004, it was reported that "the annual market value of pharmaceutical products derived from tropical rainforest plant-based medical knowledge of indigenous peoples exceeds \$32 billion" (Oguamanam, 2004). As demand for the development and commercialization of TK and revenues increase (Shetty, 2004), the desire to profit from and rightly assign the profits brings forth many issues. In order to correctly assign the rewards, ownership of the knowledge and its resulting product must be determined. Intellectual property rights (IPRs) are the rights granted to a person concerning their mental creations (WTO, 2004). The function of these protections is to reward the owner with economic incentive for the creation. The applicability and boundaries of the current conventional IPR laws and regulatory systems are tested (Oguamanam, 2004). Oguamanam (2004) suggests that the conventional IPR systems (e.g., *sui generis*) inherently are inadequate when considering the protection of TK for the following reasons:

1. TK is commonly considered community property resulting from community effort;
2. TK is the result of communal effort, therefore, confounding the concept of legal personality;
3. TK is felt to not comprise original information, because it is a compilation of historical, generational knowledge;
4. Until recently TK was typically maintained in an oral medium, consequently it is not presented in a written document;
5. Due to the evolving nature of TK, 'owners' of TK are reluctant to submit to the eventual timeline expiration of IPR protection;

6. The financial and system sophistication requirements is daunting to the typical TK community seeking to secure IPR protection;
7. For some communities quantifying sacred knowledge in financial terms is count-intuitive to the very basis of the TK.

## 2.1 Positive and Defensive Protection

The WIPO offers two forms of Intellectual Property (IP) protection described as positive protection and defensive protection. Positive protection is defined as the acknowledgment of IP rights in TK and defensive protection is defined as safeguarding TK against illegal use of IP. TK is interwoven into the cultural identity of many varied communities. As such, there exists no single solution for these diverse groups. The WIPO recognizes that an international system of agreed upon goals and principles is required. Among other issues, the WIPO's intent of positive protection is the following:

1. Recognition of value and promotion of respect for TK system;
2. Responsiveness to the actual needs of holders of TK;
3. Protection of tradition-based creativity and innovation;
4. Support of TK systems and empowerment of TK holders; and
5. Promotion of equitable benefit-sharing from use of TK (WIPO, n.d., p. 16).

Holders of TK who desire IP protection have available to them the current IP laws and legal systems and recently created *sui generis* systems that provide rights in TK. The current IP laws that TK holders seeking IP protection have available to them are limited. The laws regarding trademarks, trade secrets, and patents are difficult to utilize due to the very nature of TK. TK is based on knowledge that is held collectively by a community not by an individual, therefore, assigning ownership rights is difficult if not controversial. In some cases, the specific plant or tree that the process is based on thrives in multiple nations causing multiple groups of people and at times their representative governments to argue for the right of IP ownership. Also, TK results from generations of evolving knowledge and practices and is considered a component of cultural identity and many indigenous groups are concerned that the current IP laws are created with a definite expiration date at which time that knowledge becomes public domain. Beyond the loss of financial compensation resulting from TK IP ownership, these communities fear an impending cultural erosion impact.

Irregardless of these concerns there are several examples of TK holders employing current IP protection laws. The current market for traditional or alternative medicine has grown substantially with a reported worldwide sales estimated at \$30 billion in 2000 (Hansen & VanFleet, 2003). In 2001 China granted 3300 patents regarding innovation within the field of traditional Chinese medicine. Accordingly, China has designated a portion of its patent examiners in The Chinese State Intellectual Property Office to focus solely on traditional Chinese medicine patents (WIPO, n.d.).

Trade secrets have also been employed as a form of IP protection. The Tulalip Tribes of North America developed a digital anthology of their TK. Tribal leaders have made some of their TK information available for patent application review, while other information has been maintained for exclusive use and is considered undisclosed information. Accordingly, this undisclosed information must be held confidentially and appropriate procedures to prevent its outflow into the public domain must be maintained.

Beyond the current conventional IP protection laws, some countries have begun to protect TK by the use of *sui generis* rights. It is seen that the protection of TK requires a unique system to accommodate this type of subject matter. In 2002 the country of Peru established Law No. 27, 811. The goal of this law is:

to promote fair and equitable distribution of benefits, to ensure that the use of the knowledge takes place with the prior informed consent of the indigenous peoples, and to prevent misappropriation. Protection is afforded to collective knowledge of indigenous peoples associated to biological resources. The law grants indigenous peoples the right to consent to the use of TK. The law also

foresees the payment of equitable compensation for the use of certain types of TK into a national fund for Indigenous Development or directly to the TK holders. (WIPO, n.d., p. 21)

The WIPO (n.d.) describes additional legal avenues available for the protection of TK; these avenues are Prior Informed Consent (PIC), Equitable benefit-sharing, Unfair competition, and Respect for customary laws and practices. The Convention on Biological Diversity (CBD) employs the concept of PIC as a foundation to their concept of allowing access to genetic resources. The objective of PIC is to ensure the TK holders are consulted and an agreement reached prior to third parties accessing their information. Licenses and other such agreements are available that stipulate how benefits from the utilization of TK will be awarded.

Equitable benefit-sharing is based on the principle that a balance should be achieved between the general public and TK holders. The concept of equitable benefit-sharing is embodied in many national laws that administer the access and use of TK. The goal is that the TK holders should obtain an equitable share of the benefits derived from the usage and should be expressed in either the form of monetary or non-monetary compensation. This concept is considered when the granting of exclusive rights may not be desirable or prudent. This concept was employed between the traditional healers of Samoa and the researchers from the University of California, Berkeley.

A fundamental notion of IPR is the avoidance of unfair competition. The WIPO includes acts that mislead the public and defines unfair competition as “any act of competition contrary to honest practices in industrial or commercial matters” (WIPO, n.d., p. 25). Currently the concept of unfair competition has been considered as a means to protect TK from unjust commercialization.

Lastly, the category of respect for customary laws and practices may be employed to protect TK. As the WIPO states “customary laws, protocols and practices often define how traditional communities develop, hold and transmit TK” (WIPO, n.d., p. 25). These laws, protocols, and practices often classify TK holder's obligations, the nature in which TK can be used, the specific compensatory agenda, and the guidelines to handle disputes. In some North American Indian tribes traditional medical knowledge and rules of practices are shared as “medicine bundles” and are transferred or inherited along family generational lines. The actual ownership of the “medicine bundle” is often held as an exclusive right.

Defensive protection of TK is defined as safeguarding it against illegal use of IP rights. In essence, defensive tactics are employed to protect TK from exploitation. The patent process is the primary vehicle to safeguard that the TK is not patented by a third party. Unfortunately this exposes the TK to eventual exposure to the public domain once the patent expires. In order to establish a defensive position, the holder of TK must address two issues: the legal and practical issues (WIPO, n.d.). The legal issue requires that the TK meets the criteria of prior art. Specially, the WIPO (n.d.) warns that TK published in a journal prior to a patent application precludes the TK from being considered an invention. In other cases, TK has developed from a tradition of oral transmission; therefore, the information must be documented. Accordingly, as a practical matter the information comprising the TK must be available to patent examiners. As an example of this, a database was created based on the TK of the Inuit. The database provides a record mapping of “wildlife populations, human use and areas of archaeological significance” (WIPO, n.d., p. 27). The information was prepared for the Nunavut Planning Commission and is made available for search and retrieval purposes. The database served as a part of a comprehensive mapping documentation project, and the resulting IPR issues were addressed in order for both parties to benefit.

### **3. CLASSIFICATION**

The following are examples of two additional databases the WIPO (n.d.) discusses:

Traditional Knowledge Digital Library Project (TKDL)

Several government agencies of India proposed to document the disclosed traditional medicinal knowledge available in the public domain by collecting information on TK from Ayurvedic information. Based on a practice of over 5,000 years, the Ayurvedic medicine system is held to be India's traditional medicine system (Skeptdic, n.d.). The information is presented in a digitized format and translated into five

international languages. The work was preformed by a patent examiner and a team of interdisciplinary Ayurveda experts with assistance from information technology specialists. TKDL is a collaborative effort between the Indian National Institute of Science Communication and Information resources and the Department of Indian Systems of Medicine and Homeopathy, Ministry of Health and Family Welfare. The goal of TKDL is to acknowledge existing TK and ensure its protection from their party patenting.

#### Traditional Knowledge Resource Classification (TKRC)

TKRC is a classification method designed for the arrangement, dissemination, and retrieval of the TK information. The database was developed for approximately 5000 subgroups against a single international patent classification, AK61K35/78, associated with medicinal plants.

The WIPO administers a treaty, the Patent Cooperation Treaty (PCT), to promote cooperation regarding patents. The PCT is available during the patent process as a means for international search and examination prior to initiating a domestic patent application. By including almost a dozen TK associated information sources, the PCT is integral in locating protected TK (WIPO, n.d., p.29).

WIPO is instrumental in facilitating TK protection awareness beyond the boundaries of the IP system by promoting knowledge of the following organizations and programs. As a result, many organizations have been established regarding the protection of TK (see Table 1).

#### ORGANIZATIONS ESTABLISHED TO PROTECT TK

| Year established | Official name  | Founded by/ Resulted from                                     | Area covered & Objectives  |
|------------------|--|---|--|
| 1978             | Primary Health Care Declaration of Alma Ata  | World Health Organization (WHO)                               | Health<br>The importance of traditional medicine as a source of primary health care evidenced by the WHO establishing the WHO Traditional Medicine Strategy.   |
| 1983             | International Undertaking on Plant Genetic Resources<br>International Treaty on Plant Genetic Resources for Food and Agriculture | UN Food and Agriculture Organization                          | Food and Agriculture<br>Non-binding instrument to ensure that plant genetic resources for food and agriculture are preserved.<br>Provides for the recognition of farmers' rights, including "the protection of traditional knowledge relevant to plant genetic resources for food and agriculture. |
| 1992             | Convention on Biological Diversity (CBD)   | United Nations (UN) Conference on Environment and Development | Environment<br>To promote the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of benefits arising out of the utilization of genetic resources.   |
| 1993             | Declaration on the Rights of Indigenous Peoples (under negotiation)  |   | Indigenous Rights<br>The draft is concerned with the entitlement of indigenous peoples in relation to their cultural and IP.   |
| 1994             | UN Convention to Combat Desertification  | UN  | Environment<br>To protect TK in the ecological environment and to share the benefits resulting from any commercialization of the TK.   |



|               |   |                                 |  |
|---------------|---|---------------------------------|--|
| 1998 and 1999 | Intellectual Property Needs and Expectations of Traditional Knowledge Holders: WIPO Report on Fact-finding Missions (1998-1999) | WIPO                            | Over 3000 people, including indigenous communities, academics, and private sector representatives were consulted to identify the IP related needs and expectations of TK holders.  |
| 2000          | WIPO Intergovernmental Committee On Intellectual Property and Genetic Resources   | WIPO                            | Committee is to address and study both policy and practical relationships between the IP system and TK holders with the goal of an international understanding of shared objectives and principles to guide TK protection. |
| 2001          | World Trade Organization Agreement on Trade-Related Aspects of Intellectual Property (TRIPS)                                    | Doha WTO Ministerial Conference | Trade and Development Acknowledging that TRIPS provides no specific provisions regarding TK, the Conference instructed the TRIPS council to examine the protection of TK.  |
| 2004          | San Paolo Consensus   | UN Conference on Development    | Trade and Development Acknowledged the “lack of recognition of intellectual property rights for the protection of traditional knowledge”.  |
|               |   | UN Development Programme        | Trade and Development Conducts extensive work on TK, including aspects of legal protection and equitable benefit-sharing.  |

Adapted from the WIPO *Intellectual property and traditional knowledge*. [Booklet]. WIPO Publication No. 920(E). Retrieved March 17, 2005, from <http://www.wipo.int>.

#### 4. TK CASES

TK is in its initial stages of seeking and gaining IP protection. Two cases illustrate the uncharted territory that TK protection seekers encounter. The discovery of a naturally decaffeinated type of coffee plant occurred during a routine analysis of Ethiopian coffee seeds (Natural ‘decaf’ coffee, 2004). The seeds were gathered during a UN-sponsored research trip that had permission from the Ethiopian government (Storm in a coffee cup, 2004). Brazilian researchers discovered that the coffee produced minute caffeine levels. Current industrial processes to decaffeinate coffee beans result in a substantial undesirable impact on the flavor mechanism. This discovery has immense commercial value and as a result has created a dispute regarding the beneficiaries of the profits.

It was reported that living organisms cannot be patented in Brazil, while “cultivated varieties can be protected under the International Convention for the Protection of New Plant Varieties” (Natural ‘decaf’ coffee, 2004). The patenting of the cultivated variety will bar other parties from commercializing the product. It is intended that the coffee farmers will be the recipients of the profits from commercialization. This claim for profits has created a dispute regarding “the ownership of and rights to benefit from genetic resources” (Storm in a coffee cup, 2004), because the plants grown in Brazil were grown from seeds gathered in Ethiopia. The debate will continue regarding the genetic ownership of this commercially valuable product (Shetty, 2004), because the collection occurred before the establishment of international regulations concerning the international transportation of biological materials.

The CBD in 1992 signed into effect the recognition of a nation's sovereignty regarding its own biodiversity. In 2004, citing the right of sovereignty, the Samoan government and the University of California, Berkeley signed an agreement concerning the genome of the mamala tree bark (*homalanthus nutans*) (Field, 2005). A potential anti-HIV drug, prostratin, is derived from the bark of the mamala tree (Shetty, 2004). The agreement between the Samoa government and the University of California, Berkeley is a novel arrangement in that the proceeds will be shared equally between the parties (Samoa claims rights, 2004), and "that portion will be further split: 50% to the Samoan government, 33% to a particular village, and the rest to other villages and the descendants of the two healers who identified the medicinal properties of the tree bark" (Samoa faces patent struggles, 2004). Although "it is debatable whether mamala is unique to Samoa, as the *homalanthus* genus occurs across the Pacific" (Field, 2005), this is believed to be the first claim of national sovereignty by indigenous people over a gene sequence. Dr. Paul Cox, who was instrumental in the agreement's formation, stated:

Samoa's extension of sovereignty over the gene sequence for prostratin falls well within the scope of the CBD, since the discovery of the anti-viral properties of prostratin, a molecule derived from the bark of the mamala tree, can be traced directly to traditional healing knowledge of the Samoan people. (Field, 2005)

In response to other nations that claim rights to the mamala tree, Dr. Cox declared that the Samoan government freely collaborated with the researchers and that no other nation's IK resulted in a similar or like discovery of anti-viral properties (Field, 2005). Currently the research tests are being conducted and revenues have not yet been enjoyed; therefore, the debate will continue.

## **5. SUGGESTIONS FOR IMPROVEMENT**

Ghosh (2003) proposed four models "to separate ownership and control...for structuring rights over traditional knowledge" (p. 112). The models offered were the public domain model, the commercial use model, the trust model, and the ownership model. TK as seen by "the public domain model...is not owned by anyone, and everyone is free to use it" (Ghosh, 2003, p. 112). In lieu of establishing a "formal intellectual property law or maintaining the status quo, the commercial use model would protect the right of the first entity to make commercial use of the traditional knowledge" (Ghosh, 2003, p. 115). The trust model provides that "the right created by law is assigned to an entity other than the traditional knowledge community" (Ghosh, 2003, p. 117). Lastly, the ownership model provides that "rights would be assigned to an individual or group within the traditional knowledge community" (Ghosh, 2003, p. 118).

The four models proposed by Ghosh (2003) attempt to address the unique problems TK holders face when seeking IPR protection. The problems TK holders encounter include the documentation of information embodied in an oral tradition, summarizing information resulting from communal effort, and assigning awards to specific people. The ownership model follows the present treatment of IP in established legal systems and has received some attention. Although ownership rights are assigned to an individual or the community itself, the economic exploitation of the TK contradicts the nature of TK in that it may be considered sacred and should not be capitalized.

## **6. CONCLUSION**

TK is a result of an evolutionary process. The WIPO defines TK as evolving information created by a community, its experiences, and its culture. The market value of TK has substantially grown for several reasons including its contribution to the pharmaceutical industry. A natural partnership or transaction is created between an indigenous community holding the TK and a business entity seeking the TK. The agreement between the Samoan government and University of California, Berkeley and the Inuit creating a database to provide information for research present examples of the complexity and importance of these interactions.

TK holders who seek protection test the current IPR conventions and regulations. The commercialization and protection of TK is in a state of infancy and without precedent. The WIPO has established the basic

definitions and guidelines, although the compensation and protection of TK remains without a standard. Also, the vary nature of TK in its evolution from communal efforts, preservation in an oral tradition, and not being confined to specific, identifiable nation but rather cultures complicates the protection of and compensation for the knowledge. The ownership model (Ghosh, 2003) offers TK holders and their potential business partners a realistic avenue by assigning rights to an individual or a community. The future of TK is uncharted, yet hopeful as it grows in importance in the international community.

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# **SURVEYING COMPANIES THAT PROVIDE DIGITAL MUSIC/FILE SHARING SOFTWARE, AND THE FUTURE OF DIGITAL TECHNOLOGY IN RELATION TO E-COMMERCE**

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## **ABSTRACT**

*By researching a handful of companies involved in the evolution of digital music/file sharing technology through e-commerce, the subtle differences (centralized network or peer-to-peer network) from company-to-company are gauged by how they view their business practices related to legality. Currently there are no concrete laws regarding how e-commerce transactions of music/file sharing are conducted. Through an examination of the subtle differences among each company, the hope is to reach an understanding of potential threatening legal issues facing the companies. In the same vein of file sharing, companies facilitating private network applications will also be reviewed. An analysis of the effects music sharing has on artists' livelihood will also be explored. Finally, will be an overview of where the future of digital music sharing technology is headed. Clearly, not defined.*

**KEYWORDS:** *Digital Music, Digital Technology, File Sharing, E-Commerce, Ethics.*

## **1. INTRODUCTION**

Through an analysis of six companies offering digital music/file sharing software, the utilization of peer-to-peer technology is a common theme among the services they provide. How the companies utilize the peer-to-peer technology is currently the highly controversial issue. Due to a lack of concrete laws regarding music sharing and e-commerce, the companies have had to reach their own conclusions about how to conduct legitimate business transactions with their users. Each of the six companies have taken somewhat similar precautions to avoid legal troubles. Through analysis it becomes apparent that some of the companies have attempted to adapt to the changing times in an effort to conduct legitimate business transactions, while others feel comfortable taking their chances with services they provide with regards to legality.

## **2. LITERATURE REVIEW**

### **2.1 Companies providing digital music/file sharing software**

#### **2.1.1 Napster**

In 1999, the file sharing company Napster was the first to arrive on the scene. In the beginning Napster was a centralized network. (Napster.com, 2005) The centralized network was a single source where a user could obtain copyrighted music files for free. Consumers could go to the Napster website, and download anything available through the network. The question arose as to whether this practice was legal or illegal? In 2001, the recording industry made efforts to see an end to Napster's practice. The recording industry filed a lawsuit, and were successfully able to curtail the Napster service. Although the company has faced harsh scrutiny for its past illegal practices, it has been able to maintain a viable business by changing with the times. Napster's website offers several appealing features that its users can take advantage of. Consumers are able to browse through catalogs of music, and search for songs from the Billboard charts. They are also able to browse through other user's collections, and organize their own digital music on their computer. Consumers can also either listen to music online, or download it to their hard drive. (Napster.com, 2005)

One of the services that Napster now offers is called "Napster Light". With "Napster Light" a user is able to download and transfer as much music as they wish, without paying for each track they have listened to. Users can download 30-second clips from a catalog of 1 million songs that can be listened to free of charge. The user is then able to select each requested track for either 99¢, or make their own CD starting at \$6.95. (Napster.com, 2005) Another of Napster's newest features is the "Napster To Go" service. "Napster To Go" is a subscription for music. The user is able to download the maximum capacity of songs their MP3 player is capable of holding. The user is then charged a flat fee of \$15 per month. At

the end of the month the music files essentially disappear from the individual's MP3 player. In essence the consumer is renting music. Once the subscription is up, the user is no longer the holder of the music. The user must pay another \$15 the next month to begin with a new set of tracks that will also be returned. (Napster.com, 2005) Fanning's latest software is called Snocap. (Webb, 2004) The software is a "peer-to-peer" network where copyright holders can set terms and conditions where consumers are able to purchase their music legally. The new software brings together the record companies so avidly against file sharing with the original file-sharing pioneer Shawn Fanning. The once archenemies are now looking to each other for resolution.

### **2.1.2 KaZaa**

KaZaa is another peer-to-peer file sharing service. (Kazaa.com, 2005) It is free software that is used to download music to MP3 players via the internet. First the user must download the software. The only hitch is that it runs on Windows operating system only. Once KaZaa has the users information, it then facilitates the sharing of files between other users. Some other features with KaZaa include: unlimited free online calls, promotion of the users blog(personal online journal), publication of the users personal documents, etc. Music, movies, games, software, and various images can all be downloaded. KaZaa maintains that it is "100% legal", to use their software. (Kazaa.com, 2005) The user must comply with the "Kazaa end user license agreement". This means that as long as the user obeys copyright laws, they shouldn't have legal problems.

### **2.1.3 Grokster**

Grokster is a free peer-to-peer file-sharing network. (Grokster.com, 2005) Users are able to share photos, videos, audio, and their own personal documents. The main service being provided is users are able to publish their documents through the software. Grokster maintains that it is a simple process. All the consumer has to do is save what they want to their own hard disk, and they will be able to share personal documents with family and friends via Grokster. Other services available through Grokster include features such as tell a friend and free newsletters. Grokster has a disclaimer on it's site warning users that they should "share responsibly and respect copyright laws". (Grokster.com, 2005)

### **2.1.4 eDonkey**

eDonkey is a peer-to-peer network that allows it's users to share MP3's, images, software, and video. (eDonkey.com, 2005) eDonkey Pro is one of the versions of software that is available to purchase for a flat fee of \$19.95. Other versions of the eDonkey software are also available. Some features of the basic service include: private messaging, the ability to share and download any kind of file and ease of use. eDonkey can run on Linux, Mac, OS X, and Windows operating systems. eDonkey claims it is, "the most advanced peer-to-peer file-sharing technology available". (eDonkey.com, 2005) The company attributes this to it's use of Overnet. Overnet is a search network that is used to find files. eDonkey advises it's users to read the section on their site about copyright and consumer information.

### **2.1.5 Limewire**

Limewire claims to be the fastest, peer-to-peer file-sharing program. (Limewire.com, 2005) Unlike some other file sharing software companies, Limewire does not require users to have Spyware or Adware attached as part of their sale. Limewire can facilitate the needs of Mac and Windows users. The software is also available in many languages. Limewire does not list it's cost until a customer selects the download button. On Limewire's site user's are advised to read about how to safely use peer-to-peer software.

### **2.1.6 Bit Torrent**

A man named Bram Cohen has developed a new type of software specific to file sharing. The new technology is called BitTorrent. The software makes downloading music files easier. (Schiesel, 2004) Mr. Cohen discusses how in the past, file-sharing providers such as Napster and KaZaa had significant file sharing capabilities, but low bandwidth bogged users down. The low bandwidth used to download the files was taking some systems a long time to complete tasks. Cohen felt that there had to be a better way to fully expedite smaller bandwidth capabilities. (Schiesel, 2004) Traditionally very large files are exchanged through the uploading and downloading process. Cohen's new software takes a file and

breaks it up into smaller pieces. Each piece is sent one at a time. More importantly a piece of the file can be uploading at the same time another piece is being downloaded. This process allows large files to be exchanged among large numbers of people. Another aspect about the BitTorrent program is that all files are not coming from one main source. The file sharing is among users of the software. Best of all the software is for free.

## 2.2 Concluding analysis of the six digital music/file sharing companies

Through analysis of the six companies we find that the majority of the companies have found an avenue for getting around the legality of the service they provide. One of the companies, namely Napster, had to completely rework the way they conducted business in an effort to maintain their business. Four of the six companies namely KaZaa, Grokster, eDonkey, and Limewire all had disclaimers to avoid legal problems. These four companies have placed sole responsibility on their users for making ethical decisions on how they utilize the software.

## 2.3 The market for peer-to-peer software

As depicted in the graph below, we see that as of May 2, 2005 companies are seeing up to 3 million consumers utilizing their services.

**TABLE 1: TOP 7 PEER-TO-PEER SOFTWARE USERS**

| Network       | Users     |
|---------------|-----------|
| eDonkey2k     | 3,358,931 |
| FastTrack     | 2,684,070 |
| Gnutella      | 1,491,315 |
| Overnet       | 630,784   |
| DirectConnect | 387,710   |
| MP2P          | 251,137   |
| Filetopia     | 5,089     |

Source: <http://www.slyck.com/newsphp?story=465>

## 2.4 Companies facilitating private network applications

A man named Ray Ozzie created Groove. Groove is one of the first private application networks available. The main tool that Groove provides is a “virtual workspace” for businesspeople. (Metz, 2005) Any of the daily activities businesspeople carry out can be carried out through this system. Some of the tools include discussion boards, calendars, and chats with clients.

The second of the three companies known as “private network application” is Grouper. Grouper allows users to share personal documents such as pictures, type written documents, or spreadsheets. Their service also allows users to share “music streams” with one another. Grouper maintains that their method of music sharing is legal. It seems that the problem with Grouper is that although its services are primarily meant for sharing personal documents, people are mainly using their system in an effort to obtain music and movies illegally. (Metz, 2005)

The third company offering private network application software is Qnext. Many businesspeople favor this file-sharing company. Often times business people need to send large documents to one another. Typically they would send their large documents via direct mail, or email. Through Qnext’s file sharing technology, business people are able to send their documents fast and efficiently. The catch is that if businesses want to communicate with each other via Qnext, they must all have the program for the service to work. (Metz, 2005)



### **3. LEGAL ISSUES FACING FILE-SHARING SERVICE PROVIDERS**

The entertainment industry is targeting the companies Grokster and StreamCast. (Kladko, 2005) These two companies maintain that the entertainment industry has always had a problem with technological innovation. In 1983 the Supreme Court reviewed a case where the technology industry was up against the entertainment industry regarding the videocassette recorder. (Kladko, 2005) The court ruled 5-4 in favor of the VCR. The difference between the file sharing technology and the VCR is that file sharing is being used mainly for piracy. On March 29, 2005 the Supreme Court began reviewing a case where individuals representing the recording and filming industry have a claim against file-sharing service providers allegedly in violation of copyright laws. (Hansell, Leeds, 2005)

The file-sharing providers Morpheus and Grokster are two companies who prevailed in the lower courts. If the ruling is overturned there will be an indication of troubling times for other file-sharing providers such as Limewire and Sharman Networks, the creator of KaZaa. The article also mentions that the Supreme Court may use this case to "redefine the reach of copyright in the era of iPods and TiVo". (Hansell, Leeds, 2005) Andrew Lack of Sony BMG Music Entertainment believes that this case will have a significant effect on the music industry as a whole. He also believes that the ruling of the court will have an effect on how people obtain music through the Internet via file sharing, and in turn effect how music is bought and sold. As long as technology and its capabilities with the Internet continue to be explored, there will never be a concrete resolution. An interesting point is that there will always be file sharing. (Hansell, Leeds, 2005) This is because there are music artists who *are* willing to allow file-sharing companies to put their songs on the software, even though they may be amongst illegal copyrights of their own music.

### **4. FILE SHARING DOES NOT APPEAR TO BE A CRITICAL FACTOR TO ARTISTS' LIVELIHOOD**

Two professors from Harvard Business School and University of North Carolina, Chapel Hill don't think file-sharing is a problem with regards to an artist's livelihood. The professors share results from surveys they conducted. Felix Oberholzer-Gee of Harvard Business School in Boston and Professor Koleman Strumpf of the University of North Carolina, Chapel Hill, found that in the second half of the year 2002 file sharing didn't have an effect on the purchase of CD's. (Aisner, 2004) Another finding was that the music being shared is predominantly current popular music; songs from the Billboard Charts. The next most popular music to download is alternative, hard rock, and then catalogue. It wouldn't be very typical to see genres of music such as jazz, Latin, or new artists downloaded as often. (Aisner, 2004)

Findings of the two professors suggest that marketing strategies from the music industry remain to be heavily influential on what people are listening to. If Music Television (MTV), plays a video repeatedly, the chances of the artist's CD being purchased or downloaded is greatly increased. (Aisner, 2004) Overall the findings suggest that the massive exposure these artists are getting from the internet has actually had a positive effect on their sales. One of the studies proved that for every 150 downloads an artist's work gets, one copy of their CD is purchased.

Further studies by the two Harvard professors suggest that the United States has the largest number of file sharers at 31%, followed by Germany at 13%, Italy at 11%, Japan at 8%, and France at 7%. (Aisner, 2004) The professors also found that Germany is the most important supplier of music files. The professors were able to uncover these statistics by researching data from a file-sharing server. The professors maintain that by using surveys the statistical evidence may not be accurate. Some individuals may not give their most honest response.

### **5. THE FUTURE OF DIGITAL MUSIC/FILE SHARING**

#### **5.1 File sharing capabilities**

According to BigChampagne, the "technology-driven market research and marketing consulting firm specializing in peer-to-peer technology", this is only the beginning of file sharing capabilities. The

company states that, “there is extraordinary opportunity that P2P architecture can offer content creators in improving distribution, customer profiling, and true permission-based marketing”. (BigChampagne.com, 2005) On BigChampagne’s website there is a discussion of the far reach the file sharing networks have had. The company states that this kind of network has infiltrated the banking and entertainment industries.

## 5.2 Sharing of popular music is now the biggest trend

The professors Felix Oberholzer-Gee of Harvard Business School in Boston, and Professor Koleman Strumpf of the University of North Carolina, Chapel Hill, came to the same conclusions as BigChampagne that current popular music is shared most often. According to BigChampagne, the company lists the “topSwaps”, as of April 25, 2005 to May 2, 2005 as depicted in the table below. (BigChampagne.com, 2005) In the 21<sup>st</sup> century, more consumers are obtaining music through the internet rather than purchasing the traditional CD.

TABLE 2: TOP 10 MOST SHARED SONGS

| #  | Artist          | Track          |
|----|-----------------|----------------|
| 1  | Akon            | Lonely         |
| 2  | Ciara           | Oh             |
| 3  | 50 Cent         | Just A Lil Bit |
| 4  | Jennifer Lopez  | Hold You Down  |
| 5  | 50 Cent         | Candy Shop     |
| 6  | The Killers     | Mr. Brightside |
| 7  | Usher           | Caught Up      |
| 8  | Natalie         | Goin’ Crazy    |
| 9  | Ying Yang Twins | Wait           |
| 10 | Destiny’s Child | Girl           |

Source: www.bigchampagne.com

## 5.3 Enlightening new wave of file sharing companies offering peer-to-peer broadcast radio

A new company named Mercora Inc. offers a new way to legally share music through the internet. (Vauhini, 2005) Mr. Sampath, the founder of Mercora Inc. believes he has found a great alternative to peer-to-peer file-sharing. Instead of pure peer-to-peer file sharing, the new technology Sampath’s company offers is called peer-to-peer radio, which allows it’s users to browse through play lists and broadcast their choices to other Mercora users. The user is essentially creating a music station with music from their own collection on their PC. When the user has created the play list and is broadcasted online, as soon as the user goes offline, the station can’t be listened to until the user is online again. Mercora Inc., currently has 300,000 users. (Vauhini, 2005)

The next company involved in the peer-to-peer radio broadcasting is Live365 that’s based in Foster City, California. The company typically gets 3 million listeners per month. According to Raghav Gupta, Live365’s chief operating officer, “this technology opens the world to much more variety and diversity”. (Vauhini, 2005) Users can listen to anything from Croation rock to Bollywood film songs. (Vauhini, 2005) Live365 enables amateur broadcasters to upload their music to the company’s central server for a fee. Once uploaded to the server, Live365 sends the music to the listeners’ PCs.

## 6. CONCLUSION

Companies such as Mercora Inc., and Live365 have legitimized the use of peer-to-peer technology. “Mercora Inc., and Live365 pay annual royalties to nonprofit groups such as SoundExchange Inc., and the American Society of Composers, Authors and Publishers, or Ascap, which pass royalties along to

copyright holders based on the service's estimated range of listeners." (Vauhini, 2005) Some file/music sharing companies such as KaZaa and eDonkey mentioned earlier, avoid the legal issues surrounding the services they provide. To avoid responsibility for the illegal activity of users on the peer-to-peer file-sharing websites, its companies have disclaimers warning users of how to appropriately use their services. This is a clear example of the ethical dilemma facing companies using peer-to-peer file sharing technology. Companies can either appropriately utilize an artist's copyrighted music, or take advantage of it. Mercora Inc., and Live365 have clearly found a way to properly utilize the peer-to-peer file sharing technology and copyrighted music for a legitimate profit. Peer-to-peer radio is just one of the new ways to utilize digital music/file sharing technology. We are just now beginning to see the potential digital technology has with regards to e-commerce.

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# EMO/POP-PUNK BANDS: A CONTENT ANALYSIS LOOKING INTO THEIR ONLINE MARKETING IMPLICATIONS

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## ABSTRACT

*Emo/Pop-Punk is a genre of music that is finding its way into the music collections of today's youth. Its niche market segment is expanding at an exponential rate. This study looks into the Online presence and degree of online promotion of many bands that have pioneered this genre of music.*

**Keywords:** *Emo,Pop-Punk, Online Promotion, Dashboard Confessional, Myspace, Purevolume, Music, Napster, Kazza, Morpheus, Downloads, Online Store, Online Community*

## 1. INTRODUCTION:

With the ever-changing demand for music and the formats in which it is being delivered, it has become imperative for marketers and bands alike to look outside the box when considering music promotion. The Internet and digital revolution has changed the way people are able to obtain music (legal or otherwise). This study looks at a variety of bands and the degree to which they promote themselves online. It considers factors such as the presence of an online shop and whether merchandise or media can be purchased or downloaded through the websites. The study will also examine whether bands have secondary websites such as "Myspace" or "Purevolume" accounts through which their music is promoted.

This study will investigate several bands in the Emo/Pop Punk genre, which has become increasingly popular among today's youth. The purpose of this study is to closely examine the online presence of today's Emo/ Pop Punk bands in order to give marketers and bands an insight into the current trends of online band promotion.

## 2. LITERATURE REVIEW:

The 21<sup>st</sup> century is shaping music distribution in ways never seen before. "Online music downloading services are dramatically changing the music distribution business, which until recently has centered on sales of CDs. Online services offer a host of new ways of selling music, including sales of single songs" (Download sites set music biz shakin'). Traditionally, music has been sold through a variety of media including records (vinyl), 8-tracks, tapes, CD's and mp3's. The emerging digital revolution calls for smaller, more user friendly formats which can easily be purchased, traded, downloaded, and heard. Toby L, creator of rockfeedback.com stated in an interview for Music Week, "I think the older media standards have gone out the window, really. The wise PRs are the ones who are working closer with online partners and trying to further the word"(Building the Online buzz). Of the many formats (ex: Wav, Wma, Ogg, Mp+, Mp3, Mp4) Mp3's have become the most popular because of its relative small size which makes downloads faster than other formats.

Music is being distributed through "peer-to-peer file sharing, streaming content over high-speed connections and simple pay-per-song downloading" (Abram, 2004). More recently, online companies such as MusicNow ([www.musicnow.com](http://www.musicnow.com)), EZ-Tracks ([www.ez-tracks.com](http://www.ez-tracks.com)), and Napster ([www.napster.com](http://www.napster.com)) are offering online subscriptions where the end user pays a set fee per month for the usage of online libraries. The service varies slightly from company to company as far as how many downloads an individual can have or which songs can be downloaded, but the basic service is the same. Many companies such as Kazza ([www.Kazza.com](http://www.Kazza.com)), Winmx ([www.winmx.com](http://www.winmx.com)) and Morpheus ([www.Morpheus.com](http://www.Morpheus.com)) still offer illegal downloads despite recent lawsuits filed by the Recording Industry Association of America(RIAA). In addition to Mp3 formats, bands are starting to offer "streaming audio" or "live audio" on their websites so fans can listen to the band's music while viewing the website. This makes for a stickier website and encourages more frequent visits. Apple's iPod is another revolution in the music-formatting world. Apple is offering music downloads for 99¢ and most albums can be purchased for \$9.99([www.iTunes.com](http://www.iTunes.com)). This has become increasingly popular as "apple's iPods are being handed out to incoming students at some colleges" (Abram, 2004). "iTunes uses a format called mp4 pr

“protected AAC” which means users can listen to purchased music only through the iTunes software or on an iPod, not other players” (Abram, 2004).

With online music distribution becoming more prevalent in today’s music scene, “the web is providing bands and their record labels with new marketing opportunities in an environment where users can buy their products direct” (Bands Rise to Online Demand). Through bands’ websites and secondary websites such as [www.purevolume.com](http://www.purevolume.com) and [www.myspace.com](http://www.myspace.com), bands can promote their music, shows, and upcoming news, as well as chat, send e-mails, post pictures, and blogs to their fans. “High-profile portals”(like myspace and purevolume)”are the places to maximize your public relations effort and your bands profile...feeding music, online content, and interview opportunities to smaller sites may not significantly drive sales, but it contributes to an early buzz “(Building the Online Buzz). David Balfour, editor of music community site Record of the day ([www.recordoftheday.com](http://www.recordoftheday.com)), says “online media has been a huge boom for bands that would otherwise struggle to be heard: for bands that don’t have a record label behind them, the internet offers a vital means of marketing”(Bands Rise to Online Demand).

Bands are not only posting shows, blogs or streaming audio on their websites, but are coming up with creative ways to promote themselves online. “The band Thirteen Senses ([www.thirteensenses.com](http://www.thirteensenses.com)) launched an online ‘barcode’ competition, inviting fans to input the barcodes of the three different formats of their new release, Thru The Glass, and win a chance to meet the band”(Bands Rise to Online Demand).

Another band, Mr. Scruff, host a website with sticky content and games to keep fans engaged and interacting on the forum. Points are earned when fans do something to promote the band online which are redeemable for merchandise. Mr. Scruff held a competition to find their greatest fan. The greatest fan was the person who promoted them best through banner ads; the winner of the competition was flown to Australia to meet the band (Bands rise to online demand). Another innovative way to get fans involved was implemented by The Chemical Brothers, an electronic/alternative band out of New York, “used message boards to compile a singles compilation album in 2003” (Bands Rise to Online Demand) in order to find out which songs fans liked best.

### 3. METHODOLOGY:

This study used a content analysis of several parameters to look into the online presence of bands in the Emo/Pop Punk industry. The study looked at six measures that could potentially raise awareness of the bands as well as the music and other products they offer. The six measures studied are as follows:

**Measure#1** - A Myspace account and the degree of activity.

**Measure#2** - 1. A Purevolume account – 2. Active or not

**Measure#3** - Presence of a primary online website

**Measure#4** - The presence of an online store

**Measure#5** - An online board where the band can organize a “Street Team” to do promotions for them.

**Measure#6** – Existing online community where fans can interact with each other as well as with the band

These measures were studied from the following web sites :

[www.breandnewrock.com](http://www.breandnewrock.com), [www.dashboardconfessional.com](http://www.dashboardconfessional.com), [www.fallourboyrock.com](http://www.fallourboyrock.com),  
[www.takingbacksunday.com](http://www.takingbacksunday.com), [www.jamisonparker.com](http://www.jamisonparker.com), [www.jimmyeatworld.com](http://www.jimmyeatworld.com),  
[www.whatismae.com](http://www.whatismae.com), [www.myspace.com](http://www.myspace.com), [www.newfoundglory.com/](http://www.newfoundglory.com/), [www.purevolume.com](http://www.purevolume.com),  
[www.somethingcorporate.com](http://www.somethingcorporate.com), [www.yellowcardrock.com](http://www.yellowcardrock.com)

These websites were chosen due to the fact that the bands involved represent a random sample in the Emo/Pop-punk genre. Other websites listed were chosen to view the extent to which these bands promote themselves on the website. Michael B. Giudici, California State University Chico, generated all tabulations.

### 4. ANALYSIS AND RESULTS:

This content analysis looked at 10 bands, Dashboard Confessional, Jimmy Eat World, Brand New, New Found Glory, Fall Out Boy, YellowCard, Mae, Something Corporate, Taking Back Sunday, and Jamison Parker. These bands have made a name for themselves in the Emo/Pop-Punk community through catchy riffs and brilliant lyrics. The study looked at the band’s primary websites, their promotional activities such as an online store,

presence of a street team, and an online community, as well as the degree to which the bands promoted themselves online. Myspace.com was chosen not only because of its ever-increasing popularity with over one million users, but because Myspace “is the number one ranked social networking site in terms of page views, according to Nielsen Net Ratings, the leading online measurement tool” (The social Software Web Blog). Purevolume, although not as prolific as Myspace, has over 100,000 bands and is becoming one of the largest music profiling sites on the World Wide Web today.

The table below outlines the presence and level of activity across the ten bands in regards to their involvement on myspace.com and purevolume.com. It also illustrates the presence of a street team, primary website, and an online community such as blogs, forums, and chat rooms.

**TABLE 1. BANDS BY RELATIVE ONLINE PRESENCE.**

| Band Name              | Myspace            | PureVolume    | Primary Website | Online Store | Street Team | Online Community |
|------------------------|--------------------|---------------|-----------------|--------------|-------------|------------------|
| Dashboard Confessional | (no activity)      | (no activity) |                 |              |             |                  |
| My Eat World           | (active)           | (very active) |                 |              |             |                  |
| And New                | (not active)       | (no activity) |                 |              |             |                  |
| Found Glory            | (active)           | (active)      |                 |              |             |                  |
| Out boy                | (very active)      | (very active) |                 |              |             |                  |
| owCard                 | (minimal activity) | (no activity) |                 |              |             |                  |
|                        | (very active)      | (very active) |                 |              |             |                  |
| Nothing Corporate      | (very active)      | (very active) |                 |              |             |                  |
| ing Back Sunday        | (very active)      | (very active) |                 |              |             |                  |
| ison Parker            | (active)           | (active)      |                 |              |             |                  |

The study shows that it is 90% of the bands studied have at least a minimal presence on myspace.com and that 50% are very active. The degree of activity was assessed by several components:

1. Recent Show listings
2. Recent Songs up loaded (if any were uploaded)
3. Recent Blog postings
4. Recent Picture up loads

Bands that had recent postings and uploads were considered very active. Bands that had activity within 6 months were listed as active, and bands that did not have a page on this secondary site were considered inactive. The same assessments were made for Purevolume.com. Of the bands in the study 70% had an active purevolume account with 60% being very active.

60% of bands showed a section on their primary websites where fans could communicate and organize meetings and promotional ideas for the band. Known as “street teams”, these areas are a great way for bands to encourage their fans to spread the word through viral marketing. Surprisingly, only 60% of the bands studied offered an online community. These communities consisted of chat rooms, blogs, and forums where fans are able to talk amongst themselves or to the band concerning anything from the way their day went to what they thought of the bands new CD. These measures are great for increasing the stickiness of the website.

## 5. MANAGER/MARKETING IMPLICATIONS:

Based on the results of this study, it can be determined that online presence is a huge component of today's marketing strategy. The above figures give insight into what is currently being done as far as the online promotion of bands in the Emo/Pop-Punk genre. It can be inferred that with the increase in technology and an ever increasing populous of online users, online promotion will continue to increase.

In conclusion, it would be interesting to continue this study to determine the exact market segments that this type of music attracts. By looking at this niche market, its demographics, and potential market, marketers and band managers alike can further apply this information towards marketing implications in order to maximize market penetration.



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## COMPUTERIZED ASSESSMENT'S TECHNOLOGICAL FRAMEWORK

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### ABSTRACT

*Technological framework that can assist instructors in preparation and delivery of online examinations has been discussed in this paper. Learning technology allow on-line examinations contents providers to focus on creating effective assessment questions using technology rather than focusing on the technology itself. In the paper we present technological framework pertinent to three elements of assessments: question's (problems) presentations, grading, and feedback. There exist several technologies suitable for online exams; some might not be suitable for summative assessments, others are universal in the sense that they can be used across the whole examination process. We have also discussed online exam documentation aspect of computerized.*

**Keywords:** Assessments, Formative, Summative, Online examination

### 1. INTRODUCTION

One of the earliest applications of the Internet has been education that uses Internet for remote access to libraries and research resources, as well as communication medium between instructors and students. Its utilization in the last several years grew due to the development and delivery of on-line courses, digital libraries, and other tools and resources. Integration of WWW into education process in terms of courses delivery, creation of virtual laboratories, establishment of online assessment tools and databases, as well as searches for references has been very well established (Poindexter & Heck, 1999).

One of the aspects of education process is an examination practice through which students' knowledge in the course can be evaluated. It is necessary to measure the final learning outcomes of the students that are the result of their learning activities in a course. It is also an important way of students receiving feedback on their state of learning (Knight, 1995). There are two main functions of assessment: formative assessment and summative assessment (Biggs, 1999). Summative assessments are used to grade students at the end of the courses, while formative assessments' results are feedback to students to help them in their learning. Evaluation of students' knowledge while taking a course is a critical aspect of any course design. Measurements of the final student learning outcomes (summative) as well as on-going outcomes (formative) are necessary parts of student learning and assessment (Knight, 1995). As student's numbers and instructors' workloads increase, traditional methods of assessment in the form of pencil-and-paper examinations graded by instructor are increasingly difficult to conduct effectively and efficiently. Feedback on student's performance is a valuable tool in the learning process enabling students to assess their own progress and understanding any weakness uncovered by the assessment process (Zakrzewski & Bull, 1999). The issues of feedback can be addressed by the development of computer-based assessments available commonly to students; an assessment system particularly useful when dealing with large student population. There are also additional aspects of developing on-line examination system. Many universities provide on-line education for remotely located students. Many offer international degree programs. In such cases it is impossible for the student to take in-class exam. The solution is the creation of an on-line examination system. Several researchers have documented the contribution of formative computer-based assessments on improvements in students learning outcomes, particularly formative assessment packages that provide instant feedback (Buchanan, 2000). Others have found that computer-based on-line assessments are no different that conventional methods in terms of students performance as measured by their final marks (Peat & Franklin, 2004). Such conclusion is highly valuable for computer-based systems for their cost-effective advantages over conventional systems.

## **2. COMPUTERIZED ASSESSMENT PROCESS**

For the last decade accrediting agencies have required assessment as one of the important aspects of education process. Examining is one of the most useful assessments of both teaching and learning.

Several institutions enhanced their competitiveness through a flexible delivery of their programs (online delivery, TV broadcast, etc). One of the important aspect of flexible delivery of programs is an assessment component and, as Williams (2000) shows, flexible assessment delivered online are effective, easy to administer, and popular with the student body.

Good assessment includes a variety of ways of appraising student work and achievement including: performance assessment as well as “forced answer testing”. Performance assessment like student’s dancing or visual art works is extremely difficult (currently almost impossible) to be computerized. A rubric to describe appropriate responses can help in assessment but only for human evaluators (Herberger College, 2004).

Forced answer testing are the best candidates for the use in online examinations, or other forms of computer-based assessments. The elements of this type of testing are: multiple choice, multiple answers, fill in the blank, short answers, true-false, matching, and completion. A good testing program will use a mixture of the above formats (Illinois State Board of Education, 1995). Multiple choices item consist of response alternatives and the answer can be evaluated “mechanically”. Due to the easiness of evaluation it is the most popular item in online examinations. True-false questions are special case of multiple choices with two choices only, although it can be complemented with follow-up questions. Multiple answers item is similar to multiple choices with the exception that it can be more than one correct answer to the question. Scoring of this type of question is also very efficient and accurate. In matching item of the exam students are required to match the response with a given stimulus in an environment of several stimuli and responses. This item provides highly reliable test scores; they are efficient and accurate in computerized systems. Fill in the blank, short answers, and completion items belong to the same category of items and require students to answer a question or to finish an incomplete statement by filling in the blank with the correct word or phrase.

Online examinations used in higher education range from formative self-test to summative final exam. Exams can be offered offsite and onsite. When they are offered offsite there is a concern with student authentication. In case of timed exams particular consideration needs to be made for students with special needs. Summative exams should only be put online at the last possible moment before examination to avoid any frauds.

Existence of these two types of assessments together with several different forms of examinations questions make it important to learn implementations technologies for on-line examinations, as some of them are more suitable than others for a particular situation. Learning implementation technologies can provide uniform and stable learning marketplace. Learning implementations technologies allow on-line examinations contents providers to focus on creating effective assessment questions using technology rather than focusing on the technology itself (Milowski, 2001).

In this paper we will present three categories of technologies that are pertinent to three elements of assessments: questions (problems) presentations to students, grading, and feedback.

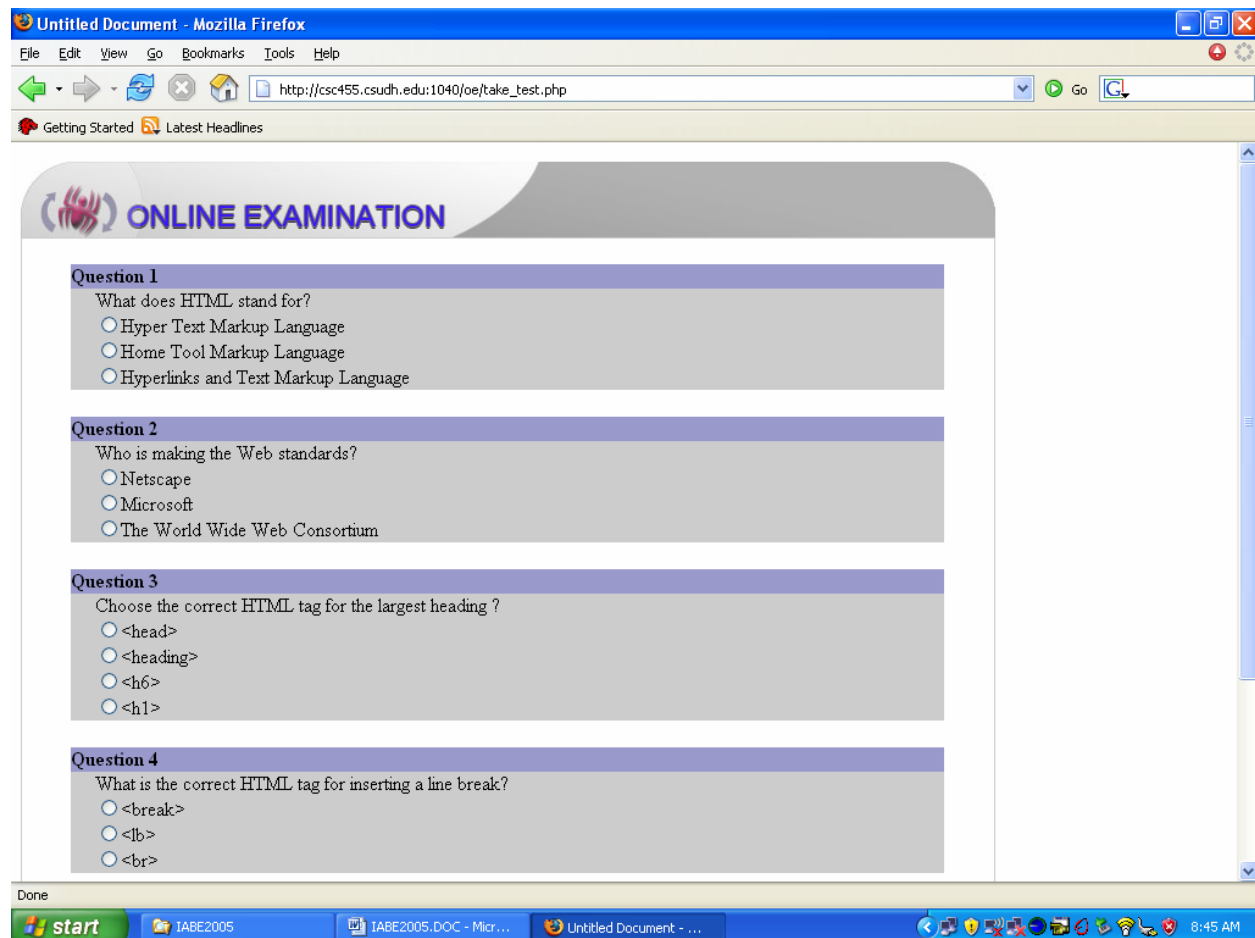
## **3. EXAM DELIVERY**

Online exams are delivered to users (students) using http protocol that is implemented on websites by several possible software solutions like: apache web server, Microsoft’s IIS server, Sun’s JavaWebServer or similar. On the user side web browsers are used to retrieve an exam from the server (using http protocol) and present the exam on the user’s screen. The most popular among browsers are: Microsoft’s Internet Explorer, Netscape’s navigator, and Opera browser (Deitel, Deitel, Goldberg, 2004).

Online exams are delivered in the form of web pages. Figure 1 present an example of such page.

The most popular technology of creating a web page is HTML language. It is by far the most popular because it is the easiest to learn, and there are software tools available for creating WebPages without even learning HTML language. Although this technology is very efficient in presentation the exam it might create problems (for some instructors) related to grading the exam and presenting feedback to the user (student).

The other technology that allows presenting an exam in the web page is Java applet technology (Horstman, 2002). An applet is computer program that allows to display an exam and also to process (grade) an exam. Feedback to the user (with exam results) can also easily be implemented in similar fashion to the questions presentation.



**FIG. 1: AN EXAMPLE OF EXAM'S WEBPAGE**

The newest technology that is used in presenting an exam is XML with Active Server Pages and HTML (Najeeb, 2004). In this technology coding an exam is even easier than using HTML language. It allows easy expansion of the exam, easy modification, and an exam has very structured form.

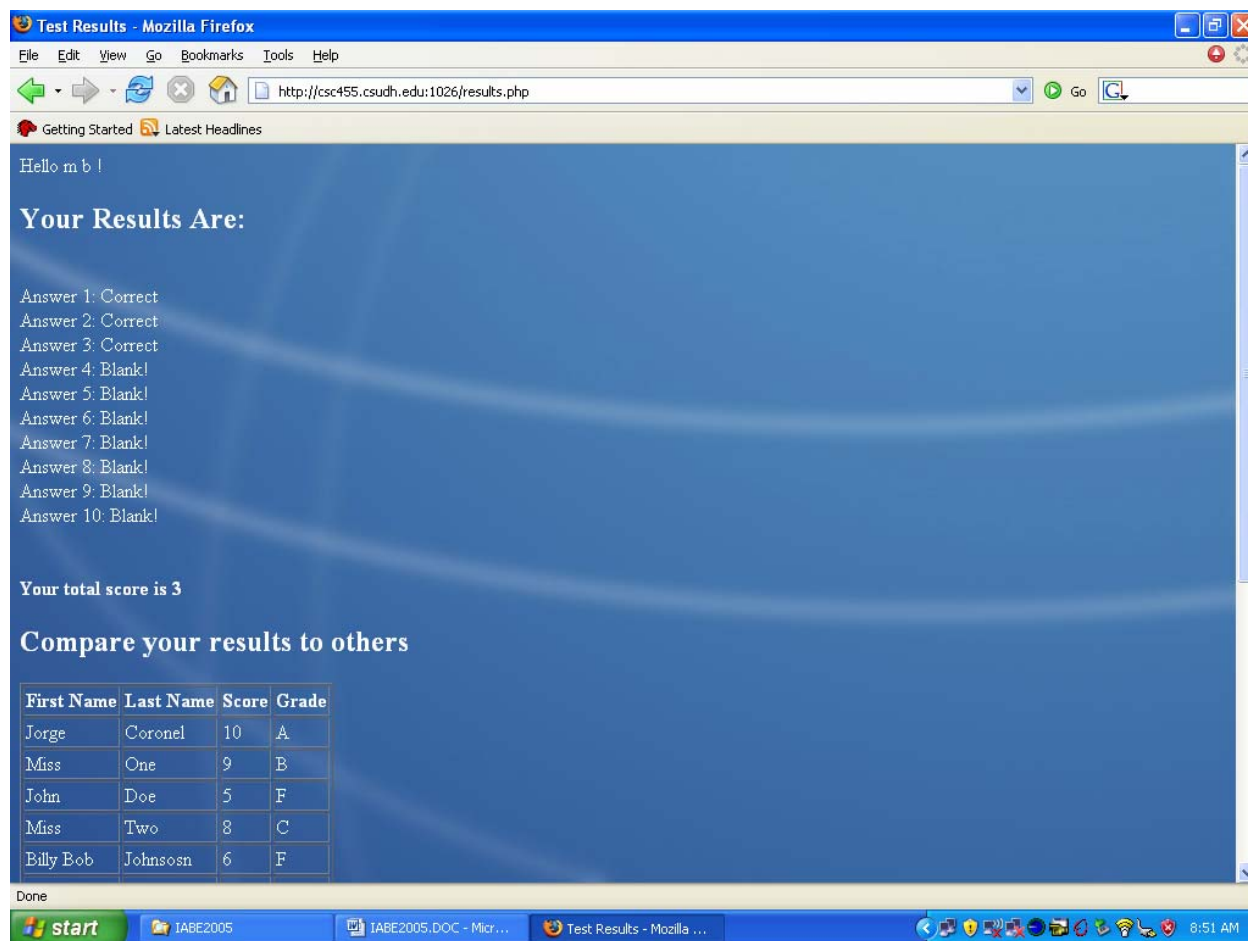
#### **4. EXAM GRADING**

There are several technologies that can be used for grading online exam, and they (most often) are related to presentation technologies. The most popular grading technology that is strongly related to HTML language is "scripting languages" technology. JavaScript (Barrett, 2003) programming/scripting language is most often used for coding evaluation process, correcting process and scoring process. After completing the form (by answering questions) student can press Submit button on the form that JavaScript program that performs two actions: it checks the completeness of the information filled by the

student and checks the correctness of answers giving the student immediate feedback for every incorrect answer.

The system that uses JavaScript to evaluate student's answers on client computer, can only be used for formative self-testing due to the fact, that all correct answers have to be coded in the JavaScript program, and that program is available for viewing by the student (with some computer knowledge).

Another scripting language that can be used for grading, and where source code is not available to students, is the PHP scripting language (Meloni, 2003). PHP script checks the correctness of answers, and calculates overall score of the exam (it can also assign the grade based on the score) (SourceForge.net, 2004).



**FIG.2: GRADING RESULTS WEBPAGE**

Scripting languages described above, as well as some other scripting languages like Perl, Tcl/Tk, etc can only be used together with HTML language. Java applet technology contains in one applet all three elements of online examination: presentation, grading, and feedback

Grading (scoring) and presentation portion of the XML & ASP exams can be seen at Najeeb's website at: <http://www.xmlfiles.com/articles/misc/exam.asp> (Najeeb, 2004).



## 5. FEEDBACK TO EXAM TAKER

The third element of online exam is “feedback” to students. After the exam is graded by “grading” portion of the system the results can be presented to students in, basically, two different forms: *feedback webpage* or *e-mail to student*.

Feedback webpage can be created as separate webpage or it can be a part of online exam presentation page. In case of HTML language presentation with JavaScript grading the result of grading can be presented to a student on the same webpage that contains examination questions, by adding extra HTML’s form element where JavaScript will “write” the score (or grade). JavaScript program can also use extra display fields to provide correct answers to every question, or correct answers for incorrect answers only. Another possibility is to use “alert windows” where JavaScript can display correct answers for each question.

In case of HTML language with PHP grading scripts (or Perl, etc) feedback webpage is created dynamically by the grading script and is displayed as separate (from presentation portion of the exam) webpage. It can contain correct answers and score (or grade).

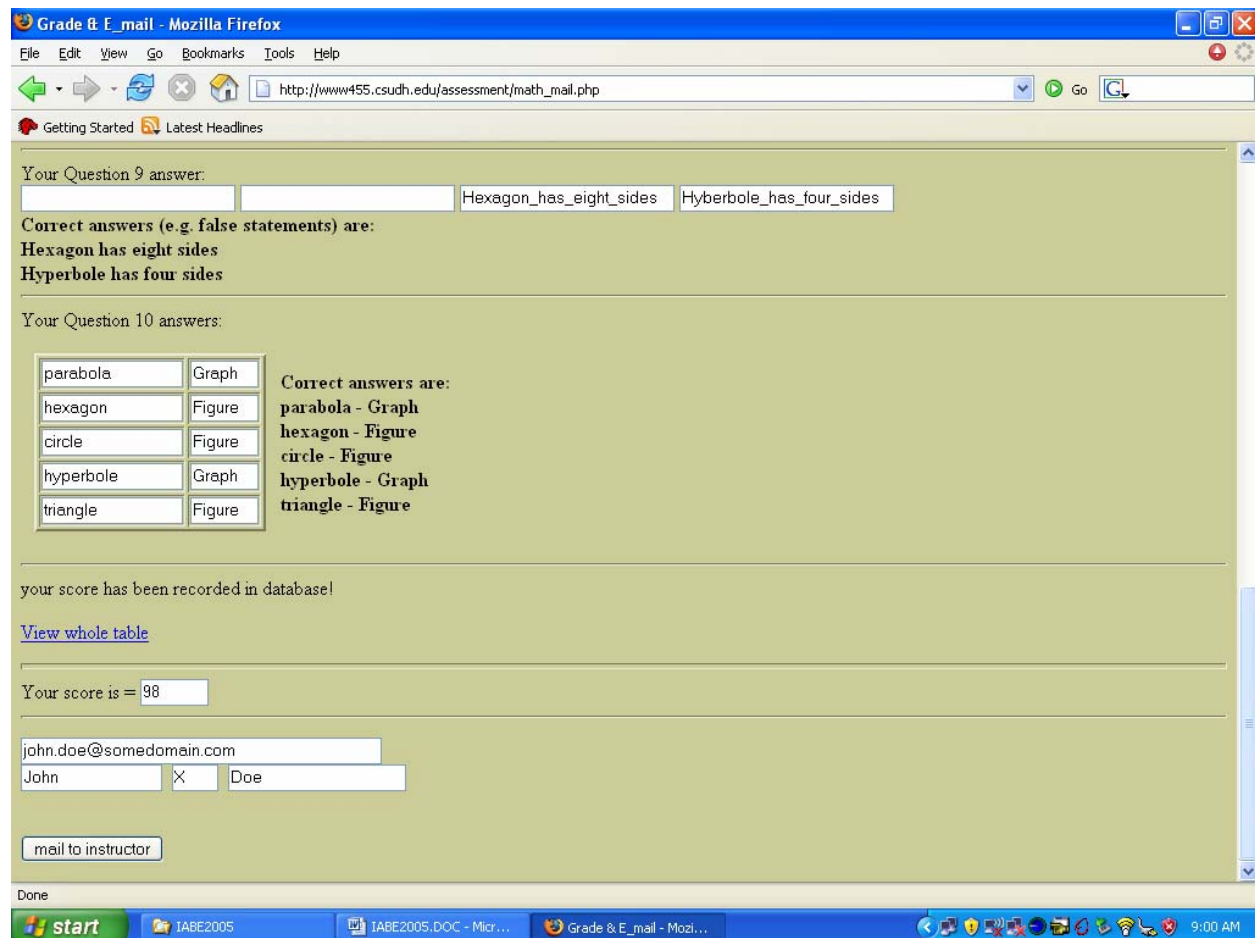
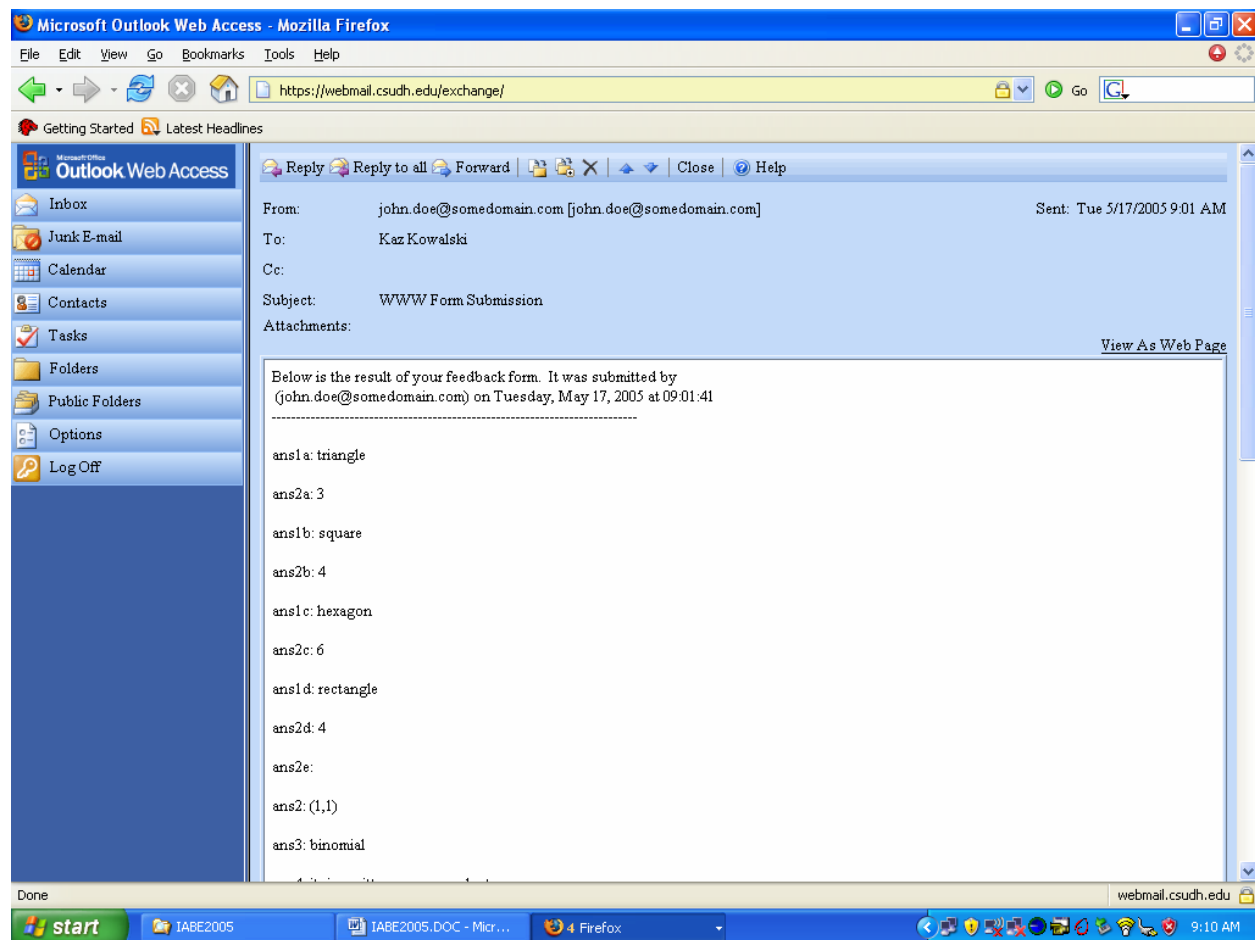


FIG. 3: AN EXAMPLE OF FEEDBACK WEBPAGE

In case of Java applets technologies, similarly to JavaScript grading, the result of grading can be presented to a student in the same applet that contains examination questions, by adding extra applet’s field element where Java will “write” the score (or grade). Java applet can also use extra display fields to

provide correct answers to every question, or correct answers for incorrect answers only. The use of “Tabbed Pane” as displaying pane for questions and answers will create a feeling that questions and answers are displayed as separate items in separate “views”. In case of XML&ASP exam score is displayed as separate “view” (or page) at the end of the exam, conceptually indistinguishable from earlier “views” that displays examination questions.

Feedback WebPages are the most popular forms of displaying exam results due to immediate availability of display screen to the student. Another form of providing feedback to the student is by the use of e-mails. Wright (2002) has created universal script using Perl scripting language that can send an e-mail to any address that is provided in the examination/grading form that uses HTML language technology. By using an e-mail an instructor has the tool to “document” the exam by sending an e-mail to himself (Kowalski, Eyadat, 2004), therefore creating soft copy of an exam.



**FIG. 4: AN EXAMPLE OF E-MAIL AS EXAM'S DOCUMENTATION**

## 6. CONCLUSIONS

In this paper we have discussed several technologies that can be used in online examination. We have divided an examination process into three logically separate parts, and we presented technologies suitable for each part. We have found that there exist several technologies suitable for online exams; some of them might not be acceptable in one of the two assessment types. HTML language technology that is suitable for presentation, and is very easy to use might not be the best choice for summative assessments, when combined with JavaScript grading technology, due to the availability of grading program source (unencrypted) code to the student. Therefore HTML with JavaScript is suitable for formative assessment, while HTML with PHP is suitable for summative assessment. Java applet

technology is good for both types of assessment, and its benefits lies in the fact that the same programming skills are necessary for all three parts of online exam, e.g. presentation, grading, and feedback. XML&ASP technology is similar to Java applet technology in the sense that the same programming skills are used across the whole examination process. Usage of e-mail script allows instructors to collect information about student's performance.

We have created and tested all types of online examination systems and found that they are very much appreciated by students in both self-testing and in real examinations.

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## RESPONSES OF PEOPLE AND BUSINESSES TO THE TSUNAMI: A CASE OF ALTRUISM OR NOT?

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### ABSTRACT

*After the December 26, 2004 tsunami people and businesses throughout the world provided extraordinary financial contributions and came forth with many other generous offers of assistance. One might be inclined to quickly characterize the widespread responses of people and businesses as a powerful illustration of the altruistic nature of human beings and their social institutions. Unfortunately, considerable evidence exists to indicate that these responses were not necessarily purely altruistic. This paper explores the nature of altruism; proposes a theoretical framework that identifies four possible forms of altruism — impure altruism, reciprocal altruism, partial altruism, and pure altruism — in relation to the moral alternatives of selfishness, self-fullness, and selflessness; and then analyzes the responses of people and businesses to the tsunami in the context of this framework. This analysis enables us to address the question of whether responses to the tsunami were altruistic or not.*

**Keywords:** Altruism; Degrees of Altruism; Moral Alternatives; Selflessness; Selfishness, Self-fullness; Tsunami; Responses to Disasters.

### 1. INTRODUCTION

On December 26, 2004 an earthquake underneath the Indian Ocean produced a destructive and devastating tsunami. Enormous loss of life and destruction of property occurred in the adjacent land areas. Given the magnitude of the disaster, enormous sums of money were raised quickly throughout the world to aid the victims. Offers of help came from people and businesses in many quarters. Surely, some of these donations were made out of a sense of kindness and generosity that reflected altruistic motives. Many contributions and offers of help, however, may have been made on the basis of motives other than acting in a purely altruistic fashion. At the very least, the motives of those giving aid and making contributions were certainly perceived as being less than pure by some of the residents of the stricken areas. For instance, Indonesian Muslims feared that some relief organizations had the ulterior motive of converting the tsunami-orphaned children to Christianity (Harsono, 2005).

Given the suspicions that some tsunami aid-givers may have been motivated by something other than altruism, it is useful and instructive to explore the concept of altruism and to assess how that concept can help inform humanity regarding the global response to the December 26 tsunami. First, we explore the nature of altruism, seeking to develop a meaningful characterization of altruistic behavior. Second, we examine how altruism is differentiated from the decisions and actions that define other human endeavors. Third, we develop the notion that altruism exists in varying degrees rather than simply being totally selfless. Fourth, we link the degrees of altruism to a framework of moral alternatives that describes the range of possible decision and action orientations that people and businesses can pursue. Fifth, we use this framework of moral alternatives and the degrees of altruism to analyze the responses of people and businesses to the December 26, 2004 tsunami. Finally, we attempt to answer the question of whether responses to the tsunami were altruistic or not.

### 2. THE NATURE OF ALTRUISM

Most, if not all, people probably have some personal conception of what altruism means. Some people would say that altruism could be “generally understood as sacrificing one’s own good for someone else’s well-being” (Osiatynski, 2000, p. 2 of 7). Others would say that treating people “altruistically, in a moral sense, is to care for them as particular persons, displaying specific concern for their needs, feelings, and experiences” (Clohesy, 2000, p. 246). There have even been claims that altruism is simply a “tendency

for individuals to care about something other than their own short or long run consumption” (Gassler, 1998, p. 174). Overall, “by the strictest definition, the altruist is someone who does something for the other and for the other’s sake, rather than as a means to self-promotion or internal well-being” (Post, 2002, pp. 53-54).

Although external rewards are not present in altruism, internal rewards can exist. Even the most selfless giver receives an internal reward because whenever one gives of oneself, one in turn gives back to oneself (Clarke, 2003, p. 1 of 2). Even though the motivation to act altruistically could be designed around increasing another person’s welfare, the person acting in an altruistic fashion most likely would be pleased by attaining this desired goal — so even this apparent altruism would actually be a product of egoism (Post, 2002, p. 90).

Although the intentions involved in these actions may seem to be purely altruistic at first glance, it is important to recognize that one may be motivated to act altruistically by a variety of different desires or objectives. One may be motivated by the desire to earn friendship, social acclaim, or other objectives relevant to self-concern, reciprocity, and direct benefits (Hu and Liu, 2003, p. 680). Altruistic tendencies may also be motivated by various emotional states of mind, including care, compassion, sympathy, beneficence, and companionship — all of which are different manifestations of love (Post, 2002, p. 51).

From a more stringent social science perspective, altruism involves acting out of love for other people. “An altruist intentionally acts for the sake of the other’s sake as an end in itself, rather than as a means to public recognition or internal well-being. The altruist no longer perceives of self alone as the center of worth” (Peterson and Seligman, 2004, p. 327). Moreover, altruism is “commonly considered a foundation of spiritual and moral life” (Peterson and Seligman, 2004, p. 327).

Our own conception of altruism builds on these preceding conceptions. In this paper we characterize altruism as acts of kindness directed towards benefiting another individual or group in need. Further, in exhibiting these acts of kindness toward others, the altruistic person does not receive any external reward but incurs a high risk, makes a sacrifice, and/or experiences suffering.

### **3. DIFFERENTIATING ALTRUISM FROM OTHER FROM OTHER HUMAN ENDEAVORS**

Altruism exists only when certain critical factors are present. Altruistic acts reflect action that is driven by goals directed toward benefiting another person or group of people; in addition, there is no expectation of rewards and the risk of reduction to the altruistic actor’s well-being is present.

“From the perspective of intention, altruism can be defined as a concern for someone else’s economic bundles besides one’s own” (Hu and Liu, 2003, p. 679). [It should be noted that bundles are sets of goods that individuals care about (Gassler, 1998, p. 177).] Good intentions and even well-meaning thoughts are not enough to be considered true altruism; rather, action must be taken. These actions must cause a person to sacrifice his/her “own good for someone else’s well-being” (Osiatynski, 200, p. 2 of 7). Yet, the actor must also have a goal, whether it’s conscious or reflexive; and the goal must be designed to help another (Post, 2002, p. 107).

Also, an action cannot be considered altruistic when the welfare of another is an unintended or secondary consequence. Nor can an action be considered altruistic when the ultimate goal is to further one’s own welfare, because the consequences of potentially altruistic actions are far less important when the intentions are egoistic (Post, 2002, p. 107). More importantly, altruism sets no conditions because the purpose of altruistic acts is to help another, and true altruists do not expect to receive anything in return. Altruists plan on giving without receiving, which is a truly selfless act.

Altruistic actions must also carry the risk of diminution — a person must risk his/her own welfare because the ultimate goal of these acts cannot be to promote one’s own personal development while, consequently, helping another (Post, 2002, p. 107).



#### 4. DEGREES OF ALTRUISM

Altruism can be thought of as acts of kindness, compassion, and care directed towards others to promote their well-being. Although this conception appears simple, it is, in fact, relatively complex because there are varying degrees of altruism. Given that degrees of altruism exist, it is appropriate to regard altruism as existing on a continuum (Post, 2002, p. 123), where pure altruism lies at one end and impure altruism is at the other end, with partial and reciprocal altruism occurring in-between the two extremes. Visually, this continuum would appear as shown in Figure 1. Other authors have identified the concepts of impure altruism, reciprocal altruism, and pure altruism. The concept of partial altruism is unique to the present work.

**FIGURE 1: DEGREES OF ALTRUISM ARRAYED ON A CONTINUUM**



Although the continuum in Figure 1 reads from left to right in terms of increasing degrees of altruism, the following discussion will proceed from right to left on the figure because each lesser degree of altruism is explained, and perhaps is best understood, within the context of a purer form of altruism.

##### 4.1 Pure Altruism

When analyzing the purely altruistic acts on the continuum, it is important to understand that altruism cannot be considered pure if there is any amount of self-centered or self-promoting intentions involved in the act. These acts are not made in the pursuit of personal gain; rather they are made in an effort to promote another individual's well-being. Those who provide for others, while basing their actions on their relationship to a Deity, can be considered purely altruistic as long as they are not acting as a means to internal well-being. Pure altruists act for the sake of another rather than acting for their own personal gratification.

It may seem as though all acts of altruism can be considered pure; however, an altruistic action cannot be considered purely altruistic when internal rewards or self-directed desires are present. To explain further, "internal rewards are the psychological benefits one receives by performing certain other-regarding actions. [These] include such benefits as the avoidance of guilt, the avoidance of painful memories, and the attainment of warm, fuzzy feelings" (Brunero, 2002, p. 413). Thus, any seemingly selfless action that enables the actor to experience positive emotions or avoid negative emotions is less than pure altruism.

##### 4.2 Partial Altruism

Individuals who promote another's well-being while receiving internal reward benefits are considered to be acting in a partially altruistic manner. They may be acting altruistically but they have some ultimate desires that are self-directed rather than other-oriented; therefore they cannot be considered to be purely altruistic. When these internal reward factors are present, these individuals are gaining the possibility of friendship or social approval through being generous, helpful, or giving (Hu and Liu, 2003, p. 680). Although the claims of altruists and egoists appear to be similar where ultimate desires are a part of the human experience, the difference lies within the origin of an individual's ultimate desires. Egoists claim that "all of our ultimate desires are self-directed," but altruists claim that "some of our ultimate desires are other-directed and benevolent" (Brunero, 2002, p. 413). After viewing the claims of the egoists and altruists, we conclude that individuals may have self-directed desires while also possessing desires that are other-oriented; therefore this individual can only be considered partially altruistic because he/she is not solely focused on the others' well-being.

##### 4.3 Reciprocal Altruism

Reciprocal altruism is another form of altruism present on the continuum. Altruism takes this form when economic benefits can be received by making contributions to the welfare of people in need. These

individuals are considered reciprocators and not purely or partially altruistic individuals because they contribute in hopes of getting something in return. They believe their contributions to another will provide more of an incentive for that individual to contribute back to them, since they provided for the others in the first place.

However, strong evidence suggests that reciprocators are less likely to provide for another if they know the recipient is unwilling to repay them at a later time (Fehr and Fischbacher, 2003). Even though this occurs, these individuals can still be viewed as altruists because they are giving of themselves and are promoting the well-being of another individual. On the contrary, they cannot be considered pure or even partial altruists because they are hoping and, at times, expecting a material reward in return for their 'altruistic contributions' to another.

#### 4.4 Impure Altruism

The last part of the continuum is impure altruism where the actions of an individual are primarily egoistic. The individual is conducting himself/herself according to his/her own self-interest and not according to the needs of another individual or group. If there is no altruistic tendency behind the individual's actions and the "acts are purely tactical, then there is no genuine psychological altruism present, and the action is primarily egoistic" (Post, 2002, p. 53-54). Individuals acting in an impurely altruistic manner are self-interested and are "primarily seeking material advantage through bargaining with others" (Anderson, 2003, p. 842). These people are not truly acting in a manner consistent with the principles of a Deity; rather, they are influenced by their own self-worth and not that of another person in need.

### 5. MORAL ORIENTATION REGARDING DEGREES OF ALTRUISM

The four degrees of altruism developed in the present analysis can be linked to the continuum of alternative moral journeys developed in McCuddy (2005), which can be seen in Figure 2. This continuum identifies three distinct categories of moral journeys — selfishness, self-fullness, and selflessness — and each category theoretically has many variants. The moral journey of selfishness involves pursuing one's self-interest and seeking to maximize one's utility. The opposing category is the moral journey of selflessness, which involves sharing for the common good. Self-fullness is a mid-range category that involves the simultaneous pursuit of reasonable self-interest and reasonable concern for the common good.

**FIGURE 2: CONTINUUM OF ALTERNATIVE MORAL JOURNEYS**

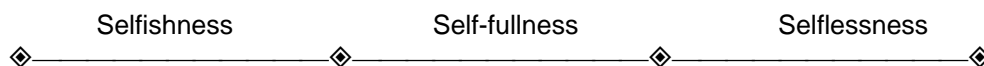
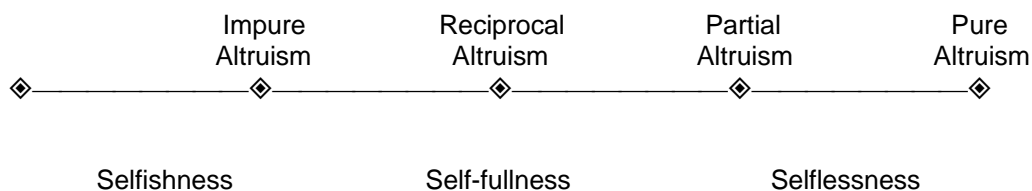
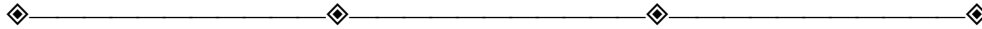


Figure 3 links the degrees of altruism discussed in the preceding section of the paper to the moral journeys of selfishness, self-fullness, and selflessness. The upper continuum of Figure 3 identifies how the four degrees of altruism might link theoretically to the continuum of moral journeys. In short, each of the four forms of altruism can be linked to points within the categories of selfishness, self-fullness, and selflessness. It is appropriate to view these two continua simultaneously since they go hand-in-hand with each another.

**FIGURE 3: DEGREES OF ALTRUISM IN RELATION TO THE CONTINUUM OF ALTERNATIVE MORAL JOURNEYS**





### **5.1 Pure Altruism Versus Selflessness**

When analyzing the degrees of altruism in relation to the continuum of alternative moral journeys, pure altruism would correspond to the most extreme form of selflessness — both pure altruism and extreme selflessness exist in total service to others without regard for even a smidgen of any form of self-interest. Individuals acting in this state would not feel any rewards of internal satisfaction and would be acting completely from the purest state of giving of self to others.

In the analysis in section 4.1, pure altruism was explained as any act that is not made in the pursuit of personal gain but in an effort to promote another individual's well-being. This explanation is very similar to that of the most extreme form of selflessness where there are no self-promoting desires involved in an individual's actions. Thus, any seemingly selfless action that enables the actor to experience positive emotions or avoid negative emotions is less than pure and cannot be considered to be extreme selflessness. With this said, it is appropriate to view these actions as representing less than a pure degree of altruism or as reflective of a different moral journey such as self-fullness.

### **5.2 Partial Altruism Versus Selflessness and Self-fullness**

On the top continuum of Figure 3 partial altruism would fall midway between reciprocal altruism and pure altruism. Individuals acting with partial altruism do not have pure other-directed desires; rather some of their ultimate desires are self-directed rather than other-oriented even though they are acting in service of others. Partial altruism cannot be considered to be the purest form of altruism nor the most extreme form of selflessness. However, there are selfless tendencies involved in the partial altruist's actions, which is why it is depicted to be within the selflessness range in Figure 3. However, partial altruism does not cross into the self-fullness range of the continuum because there is not an equal amount of self-directed and other-oriented desires.

Partial altruists' actions are more oriented towards that of others than toward fulfilling their own needs and desires. Although it seems extremely selfless to act in this manner, the discrepancy of this notion is that partial altruists receive feelings of inner satisfaction. Individuals acting from this altruistic state are not assisting others totally out of the goodness of their hearts but they allow their minds to drive their desire to help. They act from their minds telling them that they will "feel better" about themselves if they do help someone in need.

### **5.3 Reciprocal Altruism Versus Self-fullness**

Analyzing Figure 3 further, one can see that reciprocal altruism coincides with the midpoint of the self-fullness range. Reciprocal altruism is a process whereby benefits accrue to the individual actor when he/she contributes to the welfare of others. This is comparable to the simultaneous pursuit of self-interest and community interests. In reciprocal altruism an individual gives of him/herself in order to promote the well-being of another individual or individuals. The reciprocal altruist may participate in an altruistic act in hopes of gaining some contribution in return for others' help, but he/she is still motivated by desires to aid another in need. Consequently, reciprocal altruism can be classified as an archetype of self-fullness.

There is an equal amount of self-fulfillment and other-orientation in their actions, but reciprocal altruists do not have a completely selfish demeanor about them nor are they acting in a truly selfless manner. Rather, they are giving of themselves in hopes of receiving something for themselves in a way that would fulfill them.

### **5.4 Impure Altruism Versus Selfishness and Self-fullness**

Impure altruism would fall to the left of reciprocal altruism on the upper continuum of Figure 3 but breaks apart selfishness and self-fullness on the lower continuum. There is some degree of selfishness involved with impure altruism but it is not the extreme variant that reflects "the unbridled pursuit of greed and the uncaring exploitation of other individuals, communities, institutions, and natural resources" (McCuddy,

2005, p. 1196). We place impure altruism in the right-hand portion of the selfishness category because the actions of the individual are primarily, not solely, egoistic. The reasoning is that impure altruism cannot be considered to have reached neither the state of pure selfishness nor the state of complete self-fullness.

As stated before, the degree of impure altruism coincides with the primarily egoistic actions of an individual. This does not mean that all of the person's actions are purely egocentric but that the majority of these actions are based around his/her own self-interest and well-being rather than providing aid to someone in need — which is why impure altruism cannot be classified as pure selfishness. On the other hand, impure altruism cannot be viewed as being completely self-full either. This is due to the fact that an individual acting in an impurely altruistic manner does not possess an equal amount of self-benefiting desires and other-oriented desires when involving him/herself in a seemingly altruistic act. Impure altruists' feelings are directed more toward bettering themselves rather than toward the betterment of another individual or group. Without the fulfillment of self-promoting desires in conjunction with the desires to benefit another, such behavior cannot be classified as reflecting self-fullness.

## 6. THE ASIAN TSUNAMI

As noted earlier in the paper, people often engage in altruistic acts or exhibit compassion because doing so generates feelings of personal satisfaction. This is as true with the aid provided to the December 26, 2004 tsunami victims as it is in any other realm of human endeavor. As noted by some commentators (Futrelle, 2005; Tom, 2005), the warm or self-righteous glow that can result from helping others is perhaps a priceless but nonetheless self-serving commodity.

Many of the places devastated by the December 26, 2004 tsunami were popular vacation resorts for citizens of western nations. One observer suggested that perhaps the outpouring of Western aid to these places reflects people's greater compassion toward those with whom they can identify — and Westerners should be able to identify with people in their favorite vacation destinations (Phillips, 2005). Compassion that grows out of familiarity and identification is consistent with Wight and Hicks' observation that "[s]elfishness is at times overcome by even stronger passions for benevolence and justice — but only when we can experience the passions of others" (2005, p. 9). Thus, the benevolence and justice embedded in some of the aid from western nations may have been greatly influenced by a familiarity and identification factor.

As Emma Tom, a columnist for *The Australian*, observed, "[a]cts of generosity do involve many motivations. Some are lofty. Some are base. But if we accept offerings only from those who are 100 percent pure of heart, the coffers would be empty" (2005, p. 2 of 2). Tom also notes, "[p]erhaps all those pundits concerned about 'genuine' charity should talk to a few of the hungry kids in Banda Aceh to see whether they care about the purity of motive of the food providers" (Tom, 2005, p. 2 of 2).

Substantial aid came from the corporate community, and most likely the vast majority of it was not motivated by pure altruism. Rather, these acts might be classified more accurately as partial altruism or reciprocal altruism. In addition to the so-called "Christmas effect" of individuals and corporations being touched emotionally during the holidays, other, perhaps more powerful and plausible, explanations exist for the substantial amount of corporate tsunami aid. These include the close ties of large U.S. companies to Asian suppliers and markets; sensitivities to company image, given the high profile corporate scandals of the past few years; tax write-offs for product donations at market value rather than at cost; boosting the pride and productivity of employees; and maintaining good relationships with customers who pay attention to companies' philanthropic and environmental initiatives (Cooperman, 2005; Iwata, 2005). The contributions of celebrities, companies, and governments were often "uncomfortably ostentatious" and "often seemed to have as much to do with self-promotion as it did with helping" the victims of the tsunami (Tom, 2005, p. 1 of 2).

Other actions, ostensibly undertaken to help the tsunami survivors — particularly the orphaned children, were at best impure altruism and more likely examples of the most egregious forms of selfishness known

to humankind. The less vile acts included bogus fundraising via the Internet and e-mail, with con artists and scammers posing as legitimate charities seeking to help the tsunami victims ("Bogus Web Site...", 2005). For instance, Oxfam, a charity in Hong Kong, warned the public about bogus e-mail soliciting funds in its name ("Human Vermin Prey...", 2005). Other more vile acts involved the exploitation of children. Officials of *Save the Children* warned that when man-made disasters or natural catastrophes, like the Asian tsunami, occur, youngsters are especially vulnerable to exploitation ("Human Vermin Prey...", 2005). When disasters strike and people die, compassion and aid arrive promptly — along with predators who exploit the victims (Brown, 2005), often under the guise of helping them. Orphaned child survivors have been abducted by gangs posing as aid workers or family friends but with the intent of sexually exploiting the children, or in the case of young teenage boys, pressing them into the service of rebel militias (Brown, 2005; Shears and Williams, 2005).

Hoaxers, thieves, kidnappers, and rapists targeted tsunami survivors and the families of tsunami victims in refugee camps and hospitals. This happened in both the tsunami-affected countries and the home countries of tourists who perished in the tsunami. For instance, Sweden, which was the hardest hit European country in terms of loss of life among its vacationing citizens, would not release the names of vacationing Swedes who were missing. Officials did this out of fear the victims' homes would be robbed ("Human Vermin Prey...", 2005). Meanwhile, part way around the globe, thieves, disguised as police and rescue workers, looted hotel safes and stole luggage around Khao Lak beach in Thailand, where at least 3,000 people were killed ("Human Vermin Prey...", 2005).

## **7. RESPONSES TO THE TSUNAMI: ALTRUISM OR NOT?**

Given the perspectives and arguments about altruism that we have presented, it is appropriate to return to the question posed in the title of this paper — namely, "Were the responses of people and businesses to the tsunami acts of altruism or not?" Answering this question is no simple matter; rather, the question captures a complex issue and deserves a similarly complex answer. With the feel-good attitudes of helpfulness and giving that mushroomed after the tsunami, one might be tempted to congratulate the world for its outpouring of seemingly altruistic acts. On the other hand, with the rampant cynicism that seems to characterize a good deal of the contemporary world, it is tempting to suggest that altruism is more myth than reality. We believe, however, that the most useful characterization of the modern world is a position between these two extremes — or, as we might describe it, altruism is both myth and reality.

The reality is that most, if not all, human beings are capable of exhibiting some form of altruistic behavior. Some people choose to eschew any form of altruistic behavior, but that does not obviate their potential to engage in some degree of altruism. The other side of the reality is that even with people's widespread capacity for altruistic behavior, the vast majority of human actions still will have elements of self-interest embedded in them.

The myth is that pure altruism is a frequently occurring state of human behavior. We do not deny that pure altruism exists; however, we do assert that it exists in only the rarest of cases. We assert that pure altruism, wherein self and self-interest are totally sacrificed for the benefit of others, is a rarity.

We believe that people and businesses possess more partial, reciprocal, and impure altruistic tendencies than pure altruistic tendencies. In part, this occurs because many of us never have the opportunity to meet individuals with the mind strength and capacity to act in a purely altruistic fashion; therefore close personal role models of pure altruism are often lacking. To the contrary, people often immerse themselves in egoistic thoughts and desires wherein they attempt to promote their own self-worth because they are, all too often, focused on the happiness or complacency in their own lives. We suggest that altruistic tendencies are often attenuated by the pursuit of some degree of self-interest — a state that keeps people and businesses from exhibiting pure altruism.

Since pure altruism is a rarity and many humans lack the capacity to conform to a purely altruistic lifestyle, it is important to recognize the utility and viability of the mid-range moral journey of self-fullness. This moral orientation category incorporates reciprocal altruism, which we view as a positive lifestyle that



integrates equivalent amounts of self-benefiting and other-oriented desires. When individuals continually attempt to be purely altruistic by putting themselves in harms way — indeed, even suffering at the hands of those for whom they do good — and to persistently think in terms of others, these actions can become a self-destructive habit. “It is important that we refrain from morally repulsive overdoses of self-destructive altruism” (Barash, 2003, p. 2 of 6).

Human beings, individually and collectively through society’s various institutions, should act altruistically toward others when feelings of empathy, sympathy, kindness, and generosity come into play. However, humans also desire to live a self-fulfilling life where one’s own interests are taken into account. This does not mean that people should consistently think in terms of egotistically benefiting themselves; rather, it means that people must act altruistically towards others in a self-fulfilling manner.

This lesson should also be taken to heart by the various institutions of society, not the least of which is business. Business is perhaps the most pervasive social institution in the modern world because of how it affects and occupies a major portion of people’s lives. As such, businesses have the embedded potential to serve humanity while doing that which it is primarily designed to do — to earn a fair and reasonable profit for the owners. Accomplishing both objectives — earning a fair and reasonable profit and serving humanity — can only be achieved by pursuing forms of altruism that embrace both concern for self and concern for others in some appropriate combination. We argue that the most appropriate course of action for businesses would be reciprocal altruism because it falls precisely in the middle of the self-fullness category of moral alternatives. This seems to be the approach used by many businesses in responding to the tsunami crisis. Individuals, however, do and should enjoy more flexibility in selecting the combination of concern for self and concern for others that they pursue. Thus, either reciprocal altruism or partial altruism represent viable ways for individual human beings to take effective and satisfying moral action in the contemporary world.

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## **TWO DECADES LATER: AN ASSESSMENT OF THE INTERNATIONAL IMPACT OF THE TRANSITION IN THE NEWLY INDEPENDENT STATES (EVIDENCE RELATING TO AFRICA)**

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### **ABSTRACT**

*The global transitional reforms which began in the mid 1980s in Russia and later in Central and Eastern Europe (CEE) have in many ways transformed economic and financial relationships worldwide. The very nature and characteristics of the transformations are very diverse and complex, and the geographical scope is limitless. The current research represents an effort to investigate some of the observable results of the fallout, some two decades after the transformations began to unfold. Along this line of objective, the investigation focuses on two regions: the Newly Independent States of the former Soviet Union (NIS)- the birthplace of the transition, and sub-Saharan Africa (SSA)- a region that represents the other parts of the globe impacted or transformed by NIS reforms.*

*In view of the territorial expansiveness of the two regions (each consisting of a large number of politically independent or newly formed sovereign states), rather than attempt to investigate two huge regions devastated by an ongoing structural transformation (the final outcome of which might not be fully discernible, talk less, quantifiable for still many years to come), the investigation is based on the experience of two countries from each of the two regions- Russia and Nigeria. Specifically, the paper attempts to study how the Russian transitional reforms have impacted the Nigerian economy.*

*Taking also into consideration that it is impossible to distinctively mark out all areas of the Nigerian economy that have been possibly impacted or transformed by an externally originating event, the study narrows its focus to one area- international resource flow to Nigeria. Specifically, it attempts to investigate if the flow of international resources to Russia, in support of reform initiatives there, has in any way diverted regional flow to Nigeria.*

*The study's results are very revealing. The evidence uncovers traces of divergent trends in resource supplies to both countries. But the greater implication for future research in the subject area is the finding that resource supplies to both nations appear to be driven by non-traditional factors.*

**Keywords:** Newly Independent States (NIS), Central and Eastern Europe (CEE), Sub-Saharan Africa (SSA), Transition, Economic and Political Reforms, Systemic Transformation.

### **1. INTRODUCTION**

#### **1.1 Background and Justification**

In many respects, the attempt to investigate NIS transitional reforms some two decades after its evolution, and study its impact on the rest of the world, and particularly on sub-Saharan Africa is an important one. It is an initiative justified by cogent reasons.

First and foremost, the acknowledgement finally, by the former Soviet Union, that it needed to restructure its moribund economy signaled the very beginning of the end for the long, grueling battle between capitalism and socialism for global supremacy. Finally, the market system has proved itself a more superior system, based among other things, on its inherent flexibility and adaptive capability. Since the bastion of the global socialist empire was itself on the verge of an imminent collapse, it was not unexpected that the other countries of the bloc would follow suit. Two decades afterward, if only for the sake of curiosity and knowledge enrichment, it is important to follow up and study the impact of the fallout, with a view to appraise the transformations subsequently provoked.

Second, while the Soviet socialist empire was imploding and Russia was beginning to loose its base ideological influence, the world was beginning to enter into a period of unprecedented transformation

reaction- the intensity of transformation ranging from mild, and moderate, to deep, fundamental. From the standpoint of history- some two decades after the turbulence was stirred up- it is absolutely important to find out to what extent the reforms have endured.

Third, during the era of the cold war, Africa was a region divided against itself along the line of pro-capitalist and pro-communist ideologies. Some scholars actually blame the cold war for the region's underdevelopment. To be able to rebut or affirm the credibility of this theory, it does make sense to reinvestigate performance in the region after the end of the cold war, and compare it to the region's track record during the cold war era.

Fourth, scholars have always linked the NIS and sub-Saharan Africa together by circumstances of their domestic reforms. There are scholars (Stein, 1999), who perceive that the two regions have received an unequal attention from the international donor community in matters relating to their domestic reforms. According to this viewpoint, while Russia in particular, have benefited substantially from international assistance as a result of its domestic reforms, sub-Saharan Africa, despite parallel reforms there, appears to have been marginalized. Some scholars actually claim that Russia has continued to receive resources even when the legitimate need was clearly questionable (Mortikov and Volonkin, 1999). Others have written to highlight the background of weak infrastructure and domestic constraints against which Russia was continually favored with international aid. (Eberstadt, 1992; Kharas, Pinto, et. al., 2001). The current study presents an opportunity to investigate these viewpoints.

Fifth, with respect to Nigeria, the Russian and Nigerian societies have always born some striking similarities: (i) Historically, the two countries are internationally recognized as important, strategic leaders in their respective regions. Not to compare Nigeria's military strength to Russia's, but the two countries are known to be key players in strategic matters involving military and regional conflicts in their respective regions. (ii) Each country is equally endowed with abundant natural resources, including large reserves of crude petroleum and natural gas. They both have their region's largest populations and most educated labor force, many of which (coincidentally in both countries) have emigrated abroad. If their domestic strengths are honestly tapped, the two countries are strategically positioned and equally capable of turning around, full circle, their ailing regional economies.

## **1.2 Past Studies**

Since the mid-1980s, numerous studies have been done on the CEE reforms and their global impact. A few has also been done on Africa. Some of the studies were done by individual scholars who were motivated by sheer curiosity, while many others were carried out by international financial institutions, motivated by the desire to rationalize their funding priorities in transitional economies. Many of these works provide a reference point for the current study. Prominent ones include Estrin (2002), Due and Schmidt (1995), Eberstadt (1994), and Stein (1999). Others are Buiter and Lago (2001), Blanchard and Shleifer (2001), and Roland (2000), to mention just a few.

In his 1999 working paper (Stein, 1999), Howard Stein addressed the questions of globalization, adjustment and transformation in Africa and the role of international financial institutions. He observed that despite the ongoing structural adjustment taking place in many countries of the region under the auspices of official multilateral institutions, overall regional performance continues to be disappointing, and the region continues to be marginalized from the global economy. He traced the failure to the neoclassical approach favored by the international creditor establishment. According to him, reforms in Africa has failed primarily because the neoclassical model on which they are based leaves out vital elements which define indigenous conditions and region-specific problems.

In another paper (Estrin, 2000), Estrin compared the experience of the transitional economies of Central and Eastern Europe with those in Africa. According to him, to enable them improve reform management, researchers and practitioners need to study the differences and similarities in the underlying trends. He outlined the following differences. First, while privatization in Africa was primarily driven by the need to improve economic performance, overcome budget constraints, and attract foreign investment, the privatization motivation in CEE arose out of the need to completely overhaul an economy that was

saddled with inefficient state industries. The privatization desire in CEE was, therefore, more fueled by political and ideological motives. Second, while the African reform program, specifically, targeted, inefficient state enterprises, the privatization initiative in CEE was an all-inclusive, economy-wide undertaking, aimed at all enterprises- since practically all enterprises were state-owned. Hence, the mass privatization approach used in CEE. Third, privatization in both regions proceeded from different platforms, reflecting the dissimilarities in the overall setting of the economies of both regions. Noticeably, African countries have not quite suffered from “overindustrialization” to the same extent as the CEE countries; their agricultural sector is comparatively larger; and in many cases, their service sector moderately more developed than that of many CEE countries. Therefore, unlike in CEE, privatization in African countries could proceed more smoothly without a huge social or displacement cost, since the labor force displaced from the downsized industries could be reabsorbed by the other sectors of the economy with little or no social costs. Fourth, in African economies, unlike in CEE, the state sector was comparatively smaller in size, and in many cases similar to that of many western countries. The result is that while African reforms could benefit from western experience (for example, Britain in the early 1980s), CEE with its virtual state sector economy had no earlier experience to benefit from.

Estrin concluded that given the performance observed in CEE, mass privatization as a method of privatization, should only be cautiously applied or not applied at all in African countries. He suggested basing reforms there on regional peculiarities, and, as applicable, on learning experience from around the world, including the experience of the west, Asia, and former communist countries.

Also, in their 1995 paper, Due and Schmidt examined the manner by which two formerly socialist countries of Eastern Africa (Tanzania and Zambia) and Bulgaria in Eastern Europe proceeded through privatization. They observed that at the beginning of their reforms, while the Bulgarian economy was virtually state-controlled, the Tanzanian and Zambian economies already had a mix of private and state-owned enterprises. And again as pointed out by Estrin, while the goal in the Eastern African countries was to improve state budgetary position, the need in Bulgaria was to restructure the entire economy. They also noted that Bulgaria was, comparatively, more successful in attracting foreign investors, given the strength of its economy. But the differences notwithstanding, there were some striking similarities. According to them, in all the three countries, privatization was being implemented before the enabling infrastructure was put in place, and the leadership will to reform was not particularly strong.

While the studies cited above, generally, provide a useful reference guide into current literature on transitional reforms in Africa and Central and Eastern Europe, specifically none of them studied the impact of Central and Eastern European reforms on African countries. In this respect, none of them really addressed the primary concern of the current study. As far as known to the authors, the existing literature on transitional reforms are, for the most part, studies based on the experience of Central and Eastern European countries, Asian countries, and some Latin American countries. For the most part, the reform experience of African countries has not caught the attention of western scholars.

There are several reasons for this. First, rather unfortunately, reforms today are, generally perceived and evaluated by western standards, which are, for the most part, exclusively founded on the requirements of neo-classical economic philosophy (typically, trade and exchange rate liberalization, monetary restraint, privatization through open market operations, etc). Only those countries that satisfy these requirements are recognized as “true reformers”. Second, this accepted view of economic reform is what constitutes the backbone of decision-making by the international financial establishment. Rather unfortunately, the “true reforms” that meet the above-outlined criteria are, generally, the ones that catch the attention of scholars.

The inherent flaw of this approach is that both international creditors and scholars ignominiously lose sight of the “home-grown” initiatives conceptualized by individual African countries, which are tailor-designed to specifically address the peculiar needs of individual countries. Stein was probably accurate in attributing Africa’s poor economic performance to an adjustment model that is based on theoretical premises or abstraction which leaves out vital indigenous elements. With this on mind, among the works cited above, Stein’s research- even though it addressed a different problem- has the greatest relevance for the current study.

## 2. METHODOLOGY

### 2.1 Research Questions

The current investigation provokes a quest for answers to the following related research questions.

The primary research question is stated as thus: *Did NIS reforms divert international resource flows from Africa?* While the research focal point for NIS reforms is the Russian reforms, Nigeria is the focal point for studying the impact of NIS reforms on SSA. Thus, the primary research question, stated in the context of the investigation focal point, is: *Did Russian reforms divert international resource flow from Nigeria?*

The quest for answers to the primary research question, in turn, provokes a search for answers to the following related secondary questions:

1. *Compared to the pre-transition years, did international resource flow to Russia since it began to institutionalize reforms, increase? if at all it did, was it a slow, moderate, or sharp increase?*
2. *Did international resource flow to Nigeria, during the same period, decrease? Or alternatively stated: Did international resource flow to Nigeria decline concurrently with the institutionalization of Russian reforms? If at all it did, was it a slow, moderate, or sharp decrease?*
3. *In the event that a trend of concurrent decline of resource flow to Nigeria is uncovered, are there credible evidences that portray the trend as a consequence of resource diversion to Russia?*
4. *If a trend of declining resource flow to Nigeria is uncovered and found to be reasonably unlinkable to Russian reforms, then what other set of factors or events might be accountable?*
5. *What standards/criteria did the international donor community use in allotting resources to Russia as it responded to reform initiatives there? Are those criteria comparable or different from those used in Nigeria?*

### 2.2 Investigation Procedure

The following research steps are progressively undertaken in connection with the investigation.

#### 1. Organize the Study into a Congruent Investigation Timeline

We organize our data into a timeline that is consistent with study objectives. For the purpose at hand, the investigation is structured into two adjoining observation periods. The first period (1970 to 1989) represents the years preceding Russian reforms, and the second period (1990 to 2003) represents the years that follow the institutionalization of Russian reforms. The timeline is consistent with the evolution of market system in Russia and its aftermath. While preliminary efforts- in the form of “glasnost” (Russian word for “openness”) and “perestroika” (Russian word for “restructure”)- originally intended only at structurally improving the Russian command system began to take roots around 1985, initiatives to actually institutionalize reforms and totally transform did not begin until around 1990. Hence, the years preceding 1990 are viewed as pre-reform years, and the years after, as reform years.

#### 2. Compare Flow Trends and Characteristics

For each country, we compare resource flows in-between the two periods. The purpose is to scan for changes in trends and characteristics between the pre-reform and reform years. We monitor the changes in trend characteristics through appropriate descriptive statistics.

#### 3. Analyze Trends and Characteristics

Next, we make an attempt to uncover and rationalize the factors that underlie the trends uncovered in the previous step.

#### 4. Hypothesis Test



In view of the fact that the claim being investigated is that Russian reforms have diverted international resource flow from sub-Saharan Africa (in this case Nigeria), we set our null hypothesis to assume that Russian reforms have diverted international resources from Nigeria. The alternative hypothesis assumes the opposite. Next, we specify a model, run a regression test, and draw a conclusion, based on the test results. Consistent with the primary research question stated earlier (see above), we measure the statistical significance of test variables using a two-tailed test. If the coefficients representing traditional factors- i.e. factors that we consider unlinkable to Russian reforms (see below)- are found to be more statistically significant, the ground is established for rejecting the hypothesis that Russian reforms did divert international resources from sub-Saharan Africa (i.e. Nigeria). If, on the other hand, factors that we consider linkable to Russian reforms (see below) are found to be more statistically significant, we accept the validity of the claim that Russian reforms were, in fact, instrumental in diverting international resources from sub-Saharan Africa (i.e. Nigeria).

### 2.3 Model Specification

For our investigation purposes, we specify a regression model that we consider most appropriate. We use the same model to investigate each country, using corresponding data set.

#### Dependent Variables

For our dependent variable, we needed a variable which can adequately represent and reliably estimate the annual flow of international resources to each country. We considered several possible alternatives. Among them, Aggregate Net Resource Flows, Official Net Resource Flows, Private Net Resource Flows, Aggregate Net Transfers, Official Net Transfers, and Private Net Transfers. After a careful consideration of their different features and uses, we picked Aggregate Net Resource Flows as the most appropriate for our study. Our rationale is based on facts outlined below.

First, Aggregate Net Resource Flow is the broadest and most inclusive of all flow variables that measure the annual flow of international resources to a country. Unlike Net Transfers on Debt (calculated as debt disbursements minus debt service payments), and Aggregate Net Transfers (calculated as aggregate net resource flows minus loan interest and FDI profits), Aggregate Net Resource flows do not exclude interest payments. We consider it logical to not subtract interest payments from total resource flow to a country. Generally speaking, many developing and reforming nations are either always behind in their debt service obligations, or sometimes, do not pay and are eventually forgiven portions thereof (for example, see the debt relief proposals at June 2005 G-8 Summit). Since the payments are made only sporadically, the estimates of amount paid are not very reliable. From a methodological standpoint, it therefore, does make sense to include payable interests- which are due in a current year but not paid in that year and perhaps in the future- as part of total international resource flows, which stays in that country during that year. Second, compared to the other variables, the data on aggregate net resource flows is more readily available and more reliable. Third, aggregate net resource flow is a more comprehensive measure of international resource flow since it combines estimates of both official and private flows.

Aggregate Net Resource Flow is computed by deducting from a country's annual loan disbursements its principal payments (a figure that equals net resource flows on debt), and adding to it, foreign direct investment, portfolio equity flows, and official grants in a particular year.

$$AgNRF_t = LnDbt_t - PrRpt_t + (FDI_t + PEqFl_t + OfGrt_t) \quad (1)$$

where, AgNRF denotes aggregate net resource flows during the year; LnDbt denotes loan disbursement during the year; PrRpt denotes sum of principal repayments during the year; FDI denotes foreign direct investment during the year; PEqFl denotes portfolio equity flows during the year; OfGrt denotes official grants during the year; and  $t$  is the year of investigation. The data on aggregate net resource flows are compiled from *Global Development Finance*, published annually by the World Bank.

#### Independent Variables

In deciding what independent variables to include in the model, we needed proxy variables that can reliably monitor performance in the following areas of each country: economic growth, economic reform,



political reform, and linkage with the rest of the world. Again, after a careful consideration of different possible alternatives, we chose the following four as the most appropriate: GDP annual growth rate, economic freedom index, political freedom index, and OECD growth rate.

GDP growth rate is a proxy variable for tracking the attractiveness of each country's economic environment. It is traditionally considered a "pull" factor affecting a country's demand for external resources. OECD GDP growth rate is a proxy variable for tracking growth in developed countries as a factor affecting the availability of funds to reforming nations. It is traditionally considered a "push" factor on resource supply.

The economic reform and political reform variables are non-traditional "pull" variables specifically designed to monitor the progress and credibility of reform in each country. Political freedom, based on *House of Freedom* data, is calculated by averaging civil liberties and political rights indexes. The lower the scale rating, the greater the political freedom, and vice versa. Economic reform is based on *Fraser Institute's* data. It computed based on average ratings in five major areas: government size; legal structure and property rights; access to sound money; international trade; regulation of credit, labor and business. The higher the scale rating, the greater the economic freedom, and vice versa. Considering the overriding objective of the current study, which is aimed at investigating the relevance of Russian reforms in the supply of external resources to Nigeria, the reform variables are viewed as prominent variables. Since the ongoing reforms in SSA took their roots in the Russian reforms, we envisage that the reform variables will be instrumental in investigating the impact of Russian reforms on resource supply to Nigeria.

The independent variables are grouped into two different statistically measurable categories. Group I variables (GDP growth rate for each country, and OECD GDP growth rate) represent traditional variables that would normally explain international resource flow to a country. They are viewed as factors unrelated to Russian reforms and do not perceive the observed trends in resource flow as a consequence of Russian reforms. Group II variables (economic reform index and political reform index) are the non-traditional variables, perceiving the resource flow trends observed, as a consequence of Russian reforms. The data on GDP annual growth rate for both countries are compiled from *World Development Indicators*, published annually by the World Bank, while OECD GDP data are compiled from official OECD web sites.

### 3. RESULTS

In interpreting the study results, we take into account the fact that global reforms provoked by the dissolution of the former Soviet Union are still in their infancy. In view of that, the timeframe since their evolution is somewhat still too short to allow for a conclusive investigation of results. Moreover, in many reforming countries, the enabling processes and institutions that are necessary to fully implement reforms are still being formed. On that account, the final outcomes of post-soviet reforms may not be fully complete for still many years, or possibly decades, to come. The current study, therefore, is somewhat limited by the time horizon within which the investigation is being done. In an effort to minimize this constraint, using the SAS statistical software, we converted the data set representing each variable in model from annual to quarterly data points, thereby increasing the number of observations. This effort, we believe, helped to improve the general efficiency of our model and enhanced the accuracy of results.

But the early stage notwithstanding, the results already reveal interesting details concerning the two countries investigated. It is particularly interesting to observe the sharp divergence in the characteristics of resource flows to both countries in between the two periods. During the years preceding reforms (1970-1989), aggregate net resource flow to Nigeria stood at approximately 1.4 billion dollars on an average annual basis. The same figure for Russia, for only nine years of the same period, stood at 3.0 billion dollars. [This refers to the nine years (1981-1989) of the pre-reform period (1970-1989) for which data on aggregate net resource flow to Russia was available]. Stated on a per capita basis, in just nine years of the pre-reform period, Russia attracted three times more resources than Nigeria did in twenty years. The situation for Nigeria during the reform period is even worse. Between 1990 and 2001, aggregate net resource flow to Nigeria, on an average annual basis, declined by almost 60 percent to 0.6 billion dollars, while the corresponding figure for Russia registered a sharp increase, rising by 134 percent to 7.1 billion dollars. Stated on a per capita basis, during the reform period, Russia attracted almost

seventeen times more resources than Nigeria. We mark out a clearly discernible trend: measured in both aggregate and per capital terms, noticeably, more international resources are going to Russia during the reform period, and dramatically less to Nigeria.

Further investigations also reveal that the increase in aggregate funding to Russia in between the two periods is very disproportionately divided between official and private flows. While official funding, alone, increased by a whopping 837 percent, private sources increased by an intangible 75 percent. The 837 percent increase in official funding is a stark contrast to the 137 percent increase in aggregate flows. A similar disproportion is also noticeable in the funding decline to Nigeria, though not nearly as sharp as Russia's. In between the two periods, the percentage decrease in official flows, on an average annual basis, is -175.4, compared to a 30 percent decline in private flows, and a 60 percent decline in total flows.

Next, we compare the background of divergent flow trends observed in the two countries against the prevailing domestic economic conditions in each country. We discovered that the divergence could not be justified by domestic economic conditions. While during the pre-reform years, average annual GDP growth rates in both countries were comparably close- Russia, 4.3 percent, and Nigeria, approximately 4 percent; during the reform years, they were not. During the reform period, the average annual GDP growth rate in Nigeria increased by 3.19 percent, when it actually declined by 3.0 percent in Russia. We, again, draw attention to the fact that during the reform years, Russia attracted a dramatic increase in international resources against the background of declining economic conditions, while Nigeria, on the other hand, despite a measurably improving economic condition, experienced a severe decline.

We also compare the resource flow trends with the reform environment in each country. We noticed that during the pre-reform period, political freedom in Russia, on a mean scale of approximately 6.5 indexes was higher than that of Nigeria, at 4.6. This corresponds well with the scale methodology used, appropriately highlighting the unequal platform of political tolerance in both countries (see footnote at the bottom of Table 1 for details). It generally portrays that despite its turbulent political and civil rights history, the political atmosphere in Nigeria, during the pre-reform period, can generally be considered to be more tolerant than that of Russia. During the reform years, however, Russia, measurably, forged ahead of Nigeria. The general political atmosphere in Russia dramatically improved, with the index appreciably decreasing to 3.83. Again, this is consistent with the general improvement in the political tolerance and civil liberty conditions in that country, especially at the beginning of its reforms. On the contrary, the political tolerance conditions in Nigeria, for the same period, grew worse, with the index increasing to approximately 5.3. This can be appropriately explained by the deterioration of political rights and civil liberty conditions during the Babangida and Abacha dictatorship years.

The mean characteristics portrayed by the economic freedom index, in both countries, is also consistent with realities. In between the pre-reform and reform years, the economic freedom index in Russia increased from 1.25 to 3.4, which is consistent with the institutionalization of economic reforms there. In Nigeria, we also observe an improvement (an increase from 3.56 to 4.2), but generally, very weak, compared to Russia's performance. Again, all the scale movements are, generally, consistent with the scale methodology used (see footnote at the bottom of Table 1 for details).

The observations made above lead us to deduce that even though Russia's economic conditions during the reform years could not reasonably justify the sharp increase in international resource supply to it, the economic and political reforms implemented there could probably have justified the trend. Even though the general economic conditions in Nigeria during the reform years might have been a little more stable than that of Russia, Russia was definitely more aggressive in executing political and economic reforms, and apparently, was internationally recognized and rewarded for it. This factor, more than anything else, appear to be the key driver of international resource flows to Russia.

Our regression results further corroborate the tendencies portrayed through the descriptive statistics. We see that if Russia's economic conditions played any role at all in attracting resources to it, it did so in a non-conventional manner. While, in the general sense, one would expect GDP decline to be directly correlated with international resource flow, it registered a negative correlation for Russia. This can

probably be explained by the fact that Russia's economic conditions rapidly deteriorated during the early stages of its reforms, for which reason it relied heavily on official loans to stabilize its economy and correct financial imbalances. On the other hand, Nigeria's growth, even though positive, did not get the attention of creditors. If it did at all, it did so only after a lag of one year. We attribute this to what we think is a newly unfolding pattern in the dynamics, characteristics, and mix of factors that drive international resource flows. At a time of increasing wave of reforms around the world, foreign creditors were probably becoming less interested in traditional signals of economic performance associated with GDP growth; rather, they were becoming more and more drawn to evidence of aggressive reforms.

Consistent with our earlier observation that Nigeria's economic reform program was generally weaker than Russia's, creditors failed to recognize Nigeria for her reform effort. Probably, the poor international recognition for Nigeria's reform efforts can also be explained by credibility issues, in light of the stigma of mismanagement and fraudulent accountability associated with the country's leadership (For details, see *Transparency International's* annual reports on Nigeria for years between 2001-2005).

Our other traditional variable, OECD growth rate, also played unequal role in both countries. While the coefficient is significant for Russia, it is not for Nigeria. Again, this can probably be explained by the fact that OECD countries, encouraged by Russia's reforms, decided to support it though its turmoil, in an effort to prevent the reform effort from failing. This is also consistent with earlier observations by scholars (some of them, mentioned above), who had claimed that most of the official resources- including OECD's- allotted to Russia at the beginning of its reforms cannot be justified by Russia's economic conditions. Rather, they were funds provided, for the most part, as a gesture of support and an encouragement to Russia's political leadership for making a bold, aggressive attempt to institutionalize reforms.

#### **4. CONCLUSIONS**

The study results set the stage for answering the questions raised earlier in paper. Vividly portrayed, following the institutionalization of reforms in Russia, the flow of international resources to it picked up, and it did so very sharply. Furthermore, we notice a sharp concurrent decline in resource flow to Nigeria during the same period. While, apparently, a positive economic growth was not an important driver of resources to Nigeria, on the contrary, a negative economic growth seem to have helped Russia, as institutional creditors, in the face of economic meltdown there, somehow felt obligated to assist it through.

But rather than argue that international investors used a different set of criteria in financing Russia, we attribute their financing decision to what we see as the changing dynamics in the mix of factors that seem to drive the global supply of funds. Beginning from the late 1980s and early 1990s and following the wave of post-soviet reforms around the globe, international creditors, in deciding resource allocation, are no longer satisfied with traditional factors indicative of domestic economic performance, such as quantitative growth in real GDP. Beyond that, they seem to be looking for evidences of grassroots, institutional reforms. Considering the fact that credible domestic reforms do increase a country's potential for future growth and stability- even if GDP appears to be stalled in the short-term- this line of thinking, probably, does make sense, and it seems to have favored Russia. While the political leadership in Nigeria, all through the 1990s, was saddled with indecisions and lack of will over its reform decisions, Russia on the other hand, demonstrated a solid, convincing evidence of bold, aggressive leadership in executing reforms. As reform-sensitive factors begin to overshadow traditional factors in resource allocation decisions, countries that aggressively reform will get the most attention.

In addition, we would also like to deduce that the institutional creditors, particularly the Breton Woods institutions, probably sensed a historical opportunity in assisting Russia to dismantle its command economy. We presume two possible reasons. First, as far as the official creditors were concerned, the disintegration of the former Soviet Union provided a historical opportunity to assimilate Russia into mainstream global processes and, hopefully in doing so, move the world toward greater stability- not only in financial and economic matters, but particularly in the more complex political and military matters. Second, institutional creditors were probably optimistic that a successfully transformed Russia will touch

off parallel reforms in other parts of the globe. Considering the spate of reforms around the world, provoked by the soviet implosion, this line of thinking appeared to have yielded huge dividends.

The evidence in study seems to weigh in favor of the null hypothesis stating that Russian reforms did divert international resources from sub-Saharan Africa (Nigeria). However, the evidence only portrays that a decline in resource flow to Nigeria is concurrent with a trend of increase to Russia; it is still not sufficient to justify a conclusion that the resources made available to Russia were made at the expense of resources that would have been supplied to Nigeria. As far as it is known to the authors, the international creditor community does not have a particular fund specifically designated for African countries on need-basis alone, regardless of regional performance there. Generally speaking, the “push” and “pull” factors that determine global resource supply remain the same for all countries, and each nation still has to compete for available resources; even though we do acknowledge the fact that different regions tend to have different supply elasticities, portraying their peculiarities.

As mentioned earlier, most of the studies done on global reforms have not included sub-Saharan Africa. We hope that the current study will be instrumental in turning the attention of scholars to parallel reforms in that region. Even though the study does not represent aggregate data for the regions investigated, we think the results are accurate enough to help make some general conclusions regarding the implications of global reforms for sub-Saharan African countries, and how reform programs in the region are generally viewed by external creditors. Moreover, the model can be expanded to investigate the entire region.

**TABLE 1<sup>(1)</sup>: ECONOMIC AND POLITICAL FREEDOM INDEXES**

| Period                    | Econ. Freedom Index <sup>2</sup> |                 | Political Freedom Index <sup>3</sup> |                 |
|---------------------------|----------------------------------|-----------------|--------------------------------------|-----------------|
|                           | Russia                           | Nigeria         | Russia                               | Nigeria         |
| 1970                      | 1                                | 3.4             | 7                                    | N/A             |
| 1975                      | 1                                | 3.6             | 7                                    | 5.5             |
| 1980                      | 1                                | 3.5             | 7                                    | 2.5             |
| 1985                      | 2                                | 3.7             | 5                                    | 6               |
| 1986                      | 2                                | 3.6             | 5                                    | 5.5             |
| 1987                      | 2                                | 3.6             | 5                                    | 5               |
| 1988                      | 2                                | 3.6             | 5                                    | 5.5             |
| 1989                      | 2                                | 3.6             | 4.5                                  | 5               |
| <b>Pre-reform average</b> | <b>1.25</b>                      | <b>3.56</b>     | <b>6.475</b>                         | <b>4.611111</b> |
| 1990                      | 2                                | 3.5             | 3.5                                  | 5               |
| 1995                      | 3.7                              | 3.8             | 3.5                                  | 7               |
| 1996                      | 4.3                              | 4.55            | 3.5                                  | 6.5             |
| 1997                      | 4.3                              | 4.55            | 3.5                                  | 6.5             |
| 1998                      | 4.3                              | 4.55            | 4                                    | 5               |
| 1999                      | 4.3                              | 4.55            | 4.5                                  | 3.5             |
| 2000                      | 4.9                              | 5.3             | 5                                    | 4               |
| 2001                      | 4.9                              | 5.5             | 5                                    | 4.5             |
| <b>Reform average</b>     | <b>3.391667</b>                  | <b>4.241667</b> | <b>3.833333</b>                      | <b>5.291667</b> |

Footnotes:

<sup>1</sup>The data for the years that have no available data are authors' estimates. They are computed from the averages of those years for which data is available.

<sup>2</sup>Computed on a scale of 1.0 to 7.0 (The higher the scale, the lower the degree of freedom, and vice versa): 1.0 – 2.5 means “FREE”; 3.0 – 5.5 means “PARTLY FREE”; 5.5 – 7.0 means “NOT FREE”.

Source: Based on data from “*Economic Freedom of the World*” published by the *Fraser Institute* (annual reports).

<sup>3</sup>Computed on a scale of 0 to 10 (The higher the scale, the greater the degree of freedom, and vice versa): 0 means “NOT FREE” or “LEAST FREE”; 10 means “MOST FREE”.

Source: Based on data published by the *House of Freedom* (annual reports).

**TABLE 2: DESCRIPTIVE STATISTICS**

|                 |                |                     | <b>Pre-reform Period<br/>(1970-1989)</b> |                     | <b>Reform Period<br/>(1990-2001)</b> |
|-----------------|----------------|---------------------|--|---------------------|--------------------------------------|
| <b>Variable</b> | <b>Country</b> | <b>Observations</b> | <b>Mean</b>                              | <b>Observations</b> | <b>Mean</b>                          |
| AgNRF           | Nigeria        | 20                  | 1,418,799,594                            | 12                  | 608,101,664                          |
|                 | Russia         | 9                   | 3,042,094,417                            | 12                  | 7,126,089,894                        |
| GDPGr           | Nigeria        | 20                  | 3.967                                    | 12                  | 3.194                                |
|                 | Russia         | 20                  | 4.280                                    | 12                  | -2.997                               |
| EcFrdm          | Nigeria        | 20                  | 3.560                                    | 12                  | 4.242                                |
|                 | Russia         | 20                  | 1.250                                    | 12                  | 3.392                                |
| PFrdm           | Nigeria        | 18                  | 4.611                                    | 12                  | 5.292                                |
|                 | Russia         | 20                  | 6.475                                    | 12                  | 3.833                                |
| OECDGr          | OECD           | 20                  | 3.332                                    | 12                  | 2.320                                |

AgNRF = Aggregate net resource flow in US dollars;

EcFrdm = Economic freedom index;

PFrdm = Political freedom index;

GDPGr = GDP growth rate;

OECDGr = OECD GDP growth.

**TABLE 3: REGRESSION OUTPUT**  
(t-values in parenthesis)

|                   | <b>RUSSIA</b>         | <b>NIGERIA</b>       |
|-------------------|-----------------------|----------------------|
| <b>Variable</b>   | <b>Coefficient</b>    | <b>Coefficient</b>   |
| Intercept         | 19.237                | 21.922               |
|                   | (16.760)              | (37.330)             |
|                   |                       |                      |
| GDP Growth        | -0.214                | 0.004                |
|                   | (-5.260) <sup>1</sup> | (0.300)              |
|                   |                       |                      |
| Lag of GDP Growth | 0.064                 | 0.027                |
|                   | (2.060)               | (2.340) <sup>1</sup> |
|                   |                       |                      |
| OECD Growth       | 0.809                 | -0.009               |
|                   | (3.200) <sup>1</sup>  | (-0.230)             |
|                   |                       |                      |
| Reform            | 1.146                 | 0.166                |
|                   | (1.290)               | (1.290)              |
|                   |                       |                      |
| Economic Freedom  | N/A <sup>2</sup>      | -0.379               |
|                   |                       | (-3.520)             |
|                   |                       |                      |
| Political Freedom | N/A <sup>2</sup>      | 0.065                |
|                   |                       | (1.200)              |
|                   |                       |                      |
| Observations      | 128                   | 128                  |
| Total R-Square    | 0.711                 | 0.894                |
| Durbin-Watson     | 3.756                 | 1.676                |

<sup>1</sup> Denotes statistical significance at 0.05 (two-tailed test).

<sup>2</sup> There were no pre-reform observations for Russia.

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## THE EVOLUTION OF ONLINE BANKING

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### ABSTRACT

*In its infancy, online banking was expected to be the wave of the future. However, as financial institutions attempted to implement successful online operations, the difficulties and intricacies of online banking showed their faces. Online banking experienced a variety of difficulties that led to it being an unsuccessful and unappealing option in the eyes of the consumer. Over the years, branchless banks have learned from their mistakes and are now implementing successful operations. This paper reviews their blunders and details the strategies they have implemented to become a viable alternative to traditional branch banking.*

**Keywords:** Online banking, technology advantages, disadvantages, customer service, unique features, security, privacy.

### 1. INTRODUCTION

Traditionally, banking has been a face-to-face transaction industry. With the technological innovations of the late 20<sup>th</sup> and early 21<sup>st</sup> centuries (mainly the Internet and the increase in the speed of microprocessors), the process of banking is evolving. No longer is it necessary for a bank customer to be physically present at their bank's branch to conduct business. With a computer and Internet access, their accounts and corresponding transactions are a click away. This sounds like a match made in heaven, but the realities of such an evolutionary change were far from perfect.

In the late 1990s and early 2000s, financial institutions attempted to implement successful integrations of their branch operation models to the Internet. However, they failed to realize fully the intricacies and implications of conducting business in an online forum. The result was failed business models and large numbers of extremely dissatisfied customers.

The challenge to the online banking industry was to find a model that suited their needs and satisfied the needs of their customers. The big question was, could they develop strategies and successfully implement them in the eyes of the consumer?

The aim of this study is to analyze the blunders that have historically plagued online banking and to evaluate how the industry has dealt with these issues. Specifically, we will address the issues of customer service, privacy/security, unique features, and ease and speed of customer transactions.

### 2. LITERATURE REVIEW

In the early years of online banking the potential for success appeared slim. The well-publicized failures of online banking pioneers such as Wingspan were grim testament to the difficulties in migrating a well-established brick and mortar business to the Internet. In the last ten years, society has embraced the Internet and it in turn has become increasingly safe, reliable and easy to use. In 1995, only 9% of American adults had access to the Internet, according to John Ginovsky, author of the article: Online Banking by the Numbers. "Today, 73% have Internet access, translating to 150 million people who could bank online if they wanted to." Millions of people are now using some form of online banking. Approximately 44% of people who have Internet access use online banking; however, 26% of those people still prefer face-to-face interaction over online banking (Ginovsky,). In 2000, online banks were thought to be the trend of the future, but as many consumers found out, online banking was not quite ready for the challenges it presented. However, as our society has continued to evolve into a culture that is time-oriented, fast-paced, and technology-driven, successful business models of online banking have emerged.

In 1995 personal-finance software, mainly Intuit's Quicken and Microsoft's Money, began including tools that let dozens of bank's customers view their account information online (Yakal). Consumers and banks both realized the major advantages of electronic transactions. The potential to cut the administrative costs of paper transactions were appealing to banks, and the potential to pay their bills without commuting was appealing to consumers. To realize this potential, banks began to create websites with tools similar to Quicken and Microsoft Money. Of the 100 largest financial institution in the US, 49 currently offer online banking (Yakal, 2).

While online banking had the potential to be beneficial for both the consumer and the bank, in actuality early implementations proved to be a nightmare for consumers and a haphazard mess for banks. "The problem is that banks are "treating" the Internet as a new, separate channel run by a separate division, creating customer service trouble." (Hallerman) This caused a slow rate of acceptance of online banking and some very dissatisfied customers. In the words of Larry Freed, ForSee's CEO, "If online banking was even close to meeting expectations, you would see higher satisfaction scores for Web banking than (sic) traditional banking, especially from busier, savvier, wealthier consumers." (Ginovsky)

To correct this dissatisfaction, numerous studies were conducted about online banking which analyzed such areas as ease and speed of customer transactions, customer service/satisfaction, privacy/security issues, and unique features.

Studies looking at the ease and speed of transactions found that not all online banks were created equal. "Most banks promise to process bills within 3 to 5 days, for example, but some said they might take as long as 10 days. Only six banks promised to pay penalties if a payment arrives late. These variations were evidence of the immaturity of online banking models. However, as business models continue to develop and become more profitable, companies are establishing similar processes which may eliminate the inconsistency.

Poor customer satisfaction was one of the major problems that contributed to the demise of early online banks. "Without branches, online banks lack a concrete place for customers to resolve problems. Tales of frustration litter Gomez Advisors Inc.'s Web site, [www.gomez.com](http://www.gomez.com), which solicits customer opinions on Internet products." (Business Week) "Getting things done at traditional banks can take a long time, but some reports from online bank customers make them look speedy." "It took four months to get deposit slips for my account," gripes a USABancShares.com Inc. customer on the Gomez site, "and not one e-mail to the bank has ever been returned." (Business Week)

Ginovsky stipulates that customers want individualized service. Many people seek personal advice when it comes to sensitive information, such as personal finances. Every person has a unique set of circumstances and financial planning requires special expertise. Therefore, it is difficult for many people to accept a standardized process of banking. Online banking companies lacked across-the-board standards of service. "Although all the banks we tested paid a bill well enough (few of our survey respondents had complaints), we found big differences in fees and levels of service, with Etrade and Citibank coming out on top." (Consumer Reports, 2002)

Along with the Internet came new challenges in securing one's personal information. Consumers were wary of providing personal identifying information over the Internet for fear of identity theft. "Consumers are much more vulnerable in the online world than going face-to-face with brick-and-mortar banks," says Anthony Plastino, Internet security engineer at Luminant Worldwide, which provides Internet and e-commerce services to large companies." (PC World, 2000) Consumers were also concerned with the processing of their personal information. The same article offered consumers some advice on how to deal with these issues. "Check a site's privacy policy before you ante up a single iota of information-make sure the site won't share any of your information without your permission. Once you open an account, be cautious about sharing your social security number or mother's maiden name with anyone, since that information could help a cyber-thief gain access to your accounts." Given the wide publication of security problems, consumers became cautious of distributing personal information over the Internet.

### **3. ADVANTAGES**

The advantages that accompany online banking are many; most financially significant for the customer is the higher rate of return offered. Because online banks are branchless, they do not have the overhead costs or capital investments associated with a physical location. With online banking, banks avoid the costs associated with the paper trails that branch banks incur. Online banking also provides banks with the opportunity to reach and serve a broad customer segment in geographically dispersed locations without brick and mortar. Therefore, they are able to pass these savings on to consumers through accounts that pay a higher rate of interest and lower fees for services.

A major advantage of online banking is convenience. Consumers can access their accounts 24 hours a day from anywhere in the world. They no longer have to fight traffic congestion and brave long lines to conduct their banking transactions. All the services they typically use are now accessible with the click of a mouse.

### **4. DISADVANTAGES**

The major and most obvious disadvantage of online banking is the requirement of a computer with Internet access. The next issue is the lack of face-to-face interaction. Many people enjoy the personal interactions that they have with their banker and are hesitant to give them up. Currently, the technology needed to conduct a face-to-face interaction over the internet is not a viable option for most consumers. This may be possible in the future. With the lack of personal interaction, sending and receiving feedback is delayed. In a physical branch you ask a question and receive an immediate response; there has been a time-lag for online banks.

### **5. METHODOLOGY**

We conducted a content analysis of 14 strictly branchless banks to determine if online banks have emerged with successful business models to deal with the problems they faced in the early years. The fourteen banks that were selected were devised from a list generated by alexa.com and through a search conducted using Google and Yahoo search engines. Examples of the 14 banks analyzed include: [home.ingdirect.com](http://home.ingdirect.com), [www.bankofinternet.com](http://www.bankofinternet.com), and [www.bankcaroline.com](http://www.bankcaroline.com).

In conducting the analysis of the selected 14 websites, we thoroughly explored each website to obtain an overall understanding of the company, its services, its mission, and its targeted consumer segments. Particular attention was given to the individual companies' security and privacy issues, customer

### **6. PRIVACY**

A key concern for online bank customers is privacy. A variety of tools are incorporated by each online bank to protect the privacy of their customers. Online banks commonly feature a page dedicated to their privacy policy in which they spell out in great detail what they will and will not do with your personal information. Tools used by online banks to inform and protect consumers' privacy include company privacy statements, affiliate company information, and frequently-asked questions (FAQ). The FAQ sections are focused primarily on three key issues: information processing, information security and sharing, monitoring policies. An important topic related to information sharing, discussed by [www.umbrellabank.com](http://www.umbrellabank.com) is the amount of information available to their employees. Vital personal information is restricted to those employees who need the information to perform work-related tasks. This design minimizes the opportunity for an employee participating in identity theft through the banks database. A similar policy is in place at [www.giantbank.com](http://www.giantbank.com). New technologies are constantly emerging which can serve to threaten to the privacy of electronic information. To ensure the safety/security of this information, Internet banks have established monitoring

policies in response. For example, [www.umbrellabank.com](http://www.umbrellabank.com) continues to monitor and review the privacy measures it has in place to protect customer information. These measures are updated as practices change and new technology becomes available.”

Along with the information sharing and monitoring policies, online banks detail their uses of information processing. Bank Caroline states, “Some reasons that we use your information are the following: to protect and administer your records, to comply with certain laws and regulations, to help us design and improve our products and services, and to better understand and meet your financial needs.” Many banks state that the information is shared between their affiliate companies. However, if customers disapprove of this practice, banks provide an “opt-out” option. When the opt-out option is selected, banks are restricted from sharing information with other companies, including their partners and affiliates.. Information may only be shared with the explicit consent of the consumer. Alternatively, some banks, provide opt-in lists, meaning that they will not share information unless their customers specifically authorize it.

## **7. SECURITY**

Internet banks host an array of software, which keep their sites secure. NetBan offers their customers message encryption, user IDs and passwords, and software firewalls. Additionally, their system meets the requirements of the FDIC, which provides additional assurance to its customers. Bank direct offers customers secure transactions by “Operating from a ICSCA-certified (TruSecure) data center, BankDirect's Online Banking System allows users to transfer funds, verify balances, pay bills, and more.” Lastly, E-trade offers perhaps the most creative form of security. Members have the option to use a keychain, which changes their account access number every 60 seconds.

In contrast to banks with physical locations, online banks make a concentrated effort to educate consumers about basic Internet terms and technologies. More specifically, consumers are provided information about computers and how they operate, how to access accounts online, data transmission, companies' banking systems, and preventing identity theft. Additionally, Federal Deposit Insurance Corporation (FDIC) protection is a key element for Internet banks to support consumers' security concerns. Due to customer fears of identity theft and lack of technical knowledge, it is very important that all Internet banks provide extensive amounts of security information for their current and/or potential customers.

Umbrella.com educates its customers using a FAQ section. Consumers can learn about digital secure socket layers, cookies, E-mail, connecting to their servers, account access, and Internet browsers. INGDirect.com has a unique method of educating their customers. They host seminars and have café's in Los Angeles, New York, and Philadelphia that customers can go to for coffee and information about the company.

## **8. CUSTOMER SERVICE**

The levels of customer service that online banking institutions are currently providing far exceed their former selves. The online banks that we analyzed have put much more focus on fulfilling the customers' needs in a timely manner. They are using customer service as one of many tools to distinguish themselves from competitors. As well, online banks now offer a huge selection of services that appeal to a variety of customer segments.

In addition to the standard 1-800 number helpline, online banks have created a technology-based approach in order to alleviate some of the confusion associated with navigating and utilizing their services. Three of the online banks analyzed had a demonstration module that guided the user through the website and all of its features. This attribute allowed the user to “see” how to use a feature or conduct a transaction rather than simply read instructions.

In the services we reviewed, the problem of communicating questions and concerns in a timely manner with online financial institutions has been effectively addressed. To determine this, we sent an e-mail to each of the 14 banks that we analyzed. The e-mail stated that we had some questions that were unanswered by the website to which we needed a prompt response. Of the 14 banks, 13 replied within 24



hours, and the 14<sup>th</sup> replied within one business day. Of the 13 that responded within 24 hours, five responded within 3 hours. This is an incredible change from the horror stories of past performance.

One online bank offered a personal banker to their customers in order to overcome the impersonal nature of online banking that some consumers find unappealing. "You get a personal banker who is responsible to you, knows you by name, and will assist you in any way possible" (virtualbank.com). In the responses to our e-mail inquiries, all 14 were personally written by a banking representative who provided a personal greeting as well as their name and contact information. All of these features and personalized services provide evidence that the online banking industry has seriously contemplated its previous failures and devised successful methods for alleviating them.

## **9. UNIQUE FEATURES**

The unique features offered by online banking institutions give them a competitive advantage, a means by which they can differentiate themselves from brick and mortar and other online competitors. The variety of features offered is intended to appeal to a diverse customer segment.

For example, ING Direct offers a variety of services designed to appeal to teachers. They offer educational tools, lesson plans, and quizzes that teachers can use to help bring learning about finances to the classroom. In addition, the website has a curriculum matrix where one can search for lesson plans by topic or by state, grade level and subject area.

To appeal to travelers, NetBank provides a service in which a customer can "order foreign currency or foreign travelers checks in a specific currency, and it is delivered to your doorstep as rapidly as overnight." NetBank also offers a service in which their customers can "drop off your NetBank deposits and mortgage loan payments at and The UPS Store location in the U.S. for delivery to NetBank via UPS Next Day Air – free of charge"([www.netbank.com](http://www.netbank.com)).

Online banks face a switching-cost condition that is unique to online companies. Switching costs in this situation refer to the steps necessary to switch from one bank to another. These costs deter customer movement between online banks. These include changing automatic deposits and withdrawals, re-entering all of your personal information, getting new checks, ATM cards, etc. The Principle Financial Group has developed a unique approach to overcome these switching costs. "Principle Bank has made moving your accounts fast and convenient with our Switch Kit. These online tools include everything you need to switch. Simply print out the paperwork and send it to the appropriate party" ([www.principle.com](http://www.principle.com)). This feature lowers the switching costs and helps ease the transition from one bank to another. Other unique features identified include:

- consolidated view of all online accounts-regardless of source
- account information delivered wirelessly to your digital phone, web enabled phone (WAP) or Palm VII.
- free postage to send and receive necessary paper documents
- free access to the last 15 months of statements
- reimbursement for ATM fees charged by other banks
- free online access to canceled and cleared check images, front and back sides
- mail physical checks to companies where no online medium exists
- e-mail reminders for important dates- birthdays, account notices, etc.
- individual RSA SecurID - an optional keychain-sized token which displays a unique six digit number that changes every sixty seconds (your personal online access code)
- financial seminar information and registration

## **10. IMPLICATIONS**

As the research has suggested, business models are currently in place that successfully address consumers' needs and provide them with unique benefits over brick and mortar counterparts. The future growth and success of online banking depends on technological innovations and the bank's continual

commitment to meeting and exceeding customer needs. History has shown us that when a company loses touch with its customers the results can be ruinous. Online banks can continue to grow and be prosperous if they establish mutually beneficial, close, personal relationships between online financial institutions and their clients and close attention to customer needs and wants,

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## INTERNET LAW AND CONSUMER FRAUD

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### ABSTRACT

*The growth of our technological expertise has brought great opportunity to the business world. Unfortunately, a counterpart to these great opportunities is the increased risk that is involved. The Internet is a very technologically advancing and beneficial tool in our corporate world today. However, it is still important to be aware of potential hazards that the Internet can and does pose. Acting in an ethically responsible way is only the first step in protecting yourself in both your professional and personal life. Further supporting this growing desire for protection, are numerous Consumer Fraud Protection Groups including Consumer Sentinel, and the 419 Coalition. These groups have not only established consumer complaint databases in order to increase the awareness of specific forms of fraud, but they have also taken the time to develop a sophisticated series of guidelines that consumers can follow to prevent themselves from becoming victims of online fraud. By taking the simple precautions and immediately notifying the necessary protection groups of any suspicious activity, one can be confident that they are doing their best in this fight against a rising area of crime.*

**Keywords:** Internet Crime, Online Fraud, Online Ethics, Internet Legislation, Consumer Protection, Consumer Support Groups, Preventative Techniques, Consumer Sentinel, the 419 Coalition, California Legislation.

### 1. INTRODUCTION

"As time moves on and our world becomes more technologically dependant, the same old time-tested crimes evolve to fit the arena of the Net" (Catmull, 2000). Today businesses and individuals alike are most likely to find themselves victims of internet crimes consisting of forgery, assault, fraud, and theft. It is critical in corporate culture today for businesses and individuals to designate the necessary time needed to fully protect themselves and their companies from these crimes. While one might believe identity theft isn't that common and only happens to other people, the reality of the situation can be shown by some previously conducted studies.

### 2. LITERATURE REVIEW (INCLUDES PAST STUDIES/RESEARCH OBJECTIVES)

According to Consumer Sentinel, a fraud complaint database developed and maintained by the Federal Trade Commission (FTC), consumers experienced enormous losses due to fraud of more than \$547 million dollars in 2004. The Sentinel database was created in 1997 and involves collecting information about identity theft and consumer fraud occurrences from the FTC and nearly 150 other organizations. Consumer Sentinel is accessible to over 1,200 law enforcement agencies including every state attorney general in the United States and consumer protection agencies in 19 different nations. The Better Business Bureau (BBB), the Internet Crime Center, and the Federal Bureau of Investigation are only a few of Sentinel's leading partners and data contributors. And while they report over 2 million complaints, they themselves even indicate that reported numbers can drastically change in only a matter of months.

Recent reports from Sentinel indicate that of the 635,000 complaints during the year 2004, 61% represented fraud and 39% were related to identity theft. They also reported that the leading complaint for fraud was online-related, and came from consumers that were involved with internet auctions. An unbelievable 53% of all fraud complaints were internet-related complaints and involved monetary losses of more than \$265 million. Crime trend analyses indicate that internet crime is on the rise. In the past 3 years the number of internet-related complaints has risen a full 2%.

It was also reported that the majority of fraud victims, both online and off, were in the age range of 30 to 39 years old, and the second largest segment being those between 40 and 49. It would appear that these fraud criminals are quite knowledgeable about the consumer segment they are targeting. It

appears to be the Generation X category, a hardworking, sophisticated group of consumers that tend to be highly concerned with financial and emotional security. If this data still does not peak your concerns, maybe this will; the fact that in California alone, there were 43,839 reported victims of fraud in 2004. Of those 43,839 victims, nearly 12,000 were victims of internet auctions.

While all this data was indeed accurate in 2004 when the majority of this research was conducted, it is possible that things could have changed significantly as we approach the year 2006; an age of even more knowledge and more advanced technologies, especially high-tech and internet related advancements. So why stop the research here? It's important to take historical reports and use them in future preparations for the security of our business world and our personal lives. This paper will be a discussion on the details of internet-related crime. In any growing industry, there is also an increased risk for problems. The research will help in understanding the details of these problems and how they impact our daily lives.

The research objectives of this paper are critical to the overall understanding of internet crime. The results will provide a better understanding of the importance and accuracy of crime trend analysis in respect to the future. This paper will also discuss whether or not literary sources are consistent in their analysis on the likelihood of occurrence, as well as the severity and implications for businesses and individuals for each of these internet related crimes. It might be that people can only speculate at best which areas of internet crime should be the focal point of our concerns. For example, sometimes there is a lot of media about credit card fraud, but perhaps that should be the least of our concerns. Based on research so far, it appears that internet fraud and something as obscure as internet auctions pose a larger threat. The research conducted for this paper will be justified in the way that it will be an in-depth research assignment using a variety of different sources.

After delving into the concepts of ethics, specific forms of online consumer fraud, and government as well as company initiatives in preventing these types of crimes, I hope to develop an overall conceptual model on how internet-based crime affects our daily lives and what individuals and businesses can do to protect themselves.

### **3. ETHICS**

Anything involving the law can eventually be narrowed down to a broad concept of "right vs. wrong". Ethics are the principles and standards that guide our behavior toward other people. Ethics in a computer sense are often focused around the idea of ePolicies, which are policies and procedures that address the ethical use of computers and internet usage in the business environment (Haag, Baltzan, and Phillips, 2005). CIO Magazine, along with 100 other CIO's (chief information officer) came up with the idea that ePolicies typically include six different elements and that a business organization should encompass all six within their companies. These ePolicies include an ethical computer use policy, information privacy policy, acceptable use policy, e-mail privacy policy, internet use policy, and an anti-spam policy. Incorporating these different policies into ones company would be very beneficial in developing a value-oriented and ethical work environment.

"The truth is that information has no ethics. Information does not care how it is used. It will not stop itself from spamming customers, sharing itself if it is sensitive or personal, or revealing details to third parties. Information cannot delete or preserve itself. Therefore, it falls on the shoulders of those who lord over the information to develop ethical guidelines on how to manage it" (Haag, Baltzan, Phillips, 2005). Technology has opened a lot of doors in today's world. However, it has also created several ethical dilemmas in our electronic world. Below are some of the ethical issues that have emerged because of technological advances. The material in the chart came from Business Driven Technology, an information systems book written by authors: Stephen Haag, Paige Baltzan, and Amy Phillips.

**TABLE 1: EMERGING ETHICAL ISSUES**

|                       |  |
|-----------------------|--|
| Intellectual Property | Intangible creative work that is embodied in physical form.  |
| Copyright             | The legal protection afforded an expression of an idea, such as a song, video game, and some types of proprietary documents. |
| Fair Use Doctrine     | In certain situations, it is legal to use copyrighted material (education).  |
| Pirated Software      | The unauthorized use, duplication, distribution, or sale of copyrighted software.  |
| Counterfeit Software  | Software that is manufactured to look like the real thing and sold as such.  |

#### **4. COMMON FORMS OF INTERNET FRAUD**

It would be nice if the world took these ethical standards and cushioned them nicely into their own personal lives. Unfortunately this is not the case and increasingly high numbers of internet related criminal cases are reported every day. According to the National Internet Fraud Watch Information Center, there are 10 common internet related scams. Auction fraud was the number one scam in terms of number of complaints. Auction scams typically involve goods that are either misinterpreted, or are simply never delivered. This is an area of crime that would most commonly take place on websites like ebay.com. In fact, in 2003 eBay officially took the link off their website representing the National Consumers League's (NCL) fraud center. Perhaps this was to keep the idea out of the minds of consumers that auction based fraud is actually quite common. The NCL believes they would have received nearly 33,000 complaints had their link remained on eBay's website, representing 86% of all internet crime complaints. So basically, criminal activity is growing but it isn't as convenient for consumers to report it. The second most common internet scam is through General Merchandise. General Merchandise scams include non-auction based sales from merchandise that are either misrepresented or never delivered. This area represents 20% of all complaints.

The third most common form of internet fraud consists of Nigerian Money Offers, which can go by many names (West African/Nigerian 419 Fraud, Advance Fee Fraud etc.) and represents 8% of all complaints. Victims have reported this type of fraud in the forms of letters, faxes, and most commonly today, email. These Nigerian Money Offers are scams based on the idea that some major event, such as the overthrow of a government, has resulted in a large amount of money being held in a country by a person who is trying to have it sent overseas. The message sender usually offers a reward to arrange the transfer. If someone responds, they are asked for a specified amount of money in exchange for a last minute bribe. Once they have given up their money, they never hear from the original sender again (Crime & Policing, 2005).

"Phishing" is the next largest category of crime, resulting in 5% of all complaints. It involves emails pretending to be from well-known individuals asking for a confirmation of personal information. For example, every once in a while consumers receive emails claiming to be their bank and asking for a password and/or account number to verify their records. Unfortunately many consumers do not read their privacy statements provided by their banks. Most bank privacy statements specifically indicate that they will never ask a customer for personal information through email and warn you to be on the lookout for such fraudulent messages. Sort of along the same lines are Information/Adult service scams, which are when cost and terms of services are misrepresented or not disclosed. Frauds along these lines represent 3% of the total complaints. It is not as important to go into the details of the bottom five areas of consumer fraud because according to recent statistics, they only total to 9% of the total complaints which is quite insignificant in the grand scheme of it all.

These different types of frauds are relatively new, as they have grown increasingly with the advancement of technology. It is often difficult to track a computer criminal who is an expert in remaining anonymous and changing identities almost instantly. And while the growth of technology is a huge factor in the growth of internet crime, so is the growing interest in E-commerce and all that it entails.

## **5. INTERNET CRIME LEGISLATION**

Since E-Commerce has done so much for our world in terms of advancements and business opportunities, it would be better if individuals would take the time to learn how to properly protect themselves from these frauds rather than eliminate the possibility of gaining from the wonderful opportunities that the internet presents. The procedures can be quite simple if properly followed.

Countries all across the globe have joined in the fight against internet crime and making sure it doesn't escalate any further. The United States government has undergone several initiatives to control hi-tech crime. Not only have several fraud complaint services been established both online and off, but many government laws have also been created in attempts to scare any individual who might consider violating the ethical standards of computer usage. In 1998 the federal government established the Identity Theft and Assumption Deterrence Act which helped strengthen the criminal laws governing identity theft by making it a federal crime to use or transfer identification belonging to another individual. It also established a central federal service for victims. On a milder level, the CAN-Spam Act was established more recently in 2003. Its goal was to regulate interstate commerce by imposing limitations and penalties on businesses sending unsolicited e-mail to consumers. The law strictly forbids deceptive headlines and return addresses, as well as the harvesting of email addresses from websites. Businesses that send spam are now required to maintain a do-not-spam list and include a postal mailing address in the message. Businesses, as well as individuals, need to be held accountable for their own online violations. Consumers/businesses need to have a sense of security in regards to other consumers/businesses.

One very important piece of legislation is the Computer Fraud and Abuse Act (CFAA), which was passed by Congress in the mid 1980's. The act had been amended several times but its central focus remains the same. The purpose of this law is to combat crimes involving computers. This act prohibits, among other things, transmitting programs or codes that damage computer networks, as well as gaining access to a computer for the purpose of fraud. Violators of this law are subject to both large fines and jail time. In one such instance, a student from Cornell University designed a "worm" that would basically be sent out to millions of computers and overload them with data until they would crash. The results of the worm cost victims nearly \$100 million in losses and the student was severely punished. Other such laws also come with significant fines and/or jail time. In the mid 1950's the Federal Wire Fraud Statute was passed. The statute focuses on crimes involving telephone lines such as corrupting a money wire transfer. This law has also been effective regarding cases where computer software was illegally copied against its copyright. Fines for crimes under this statute can often reach seven figures (Herman Davis & Associates, 2000).

While there have been many initiatives on a federal level in preventing hi-tech crime from spreading, it is important to remember that individual states have their own beliefs on these crimes and appropriate consequences that should follow. For example, the state of California has recently enacted a serious Anti-Spam Law (SB186) in which violators who send spam into or from California will be penalized with a hefty \$1000.00 fine at the minimum for each message that is sent. In 2000, Governor Gray Davis signed a bill which was aimed at computer hackers who flood websites with a lot of useless information, causing them to overload and shutdown. Spreading a virus used to be an infraction with a \$250 dollar fine but the new bill made it so that hackers now face fines of up to \$5,000 for a first offense and up to three years in a state prison if the virus causes more than \$10,000 in damage. Other bills that have been passed allow for individuals who have become victims of identity theft to join a registry which will assist them in clearing their names and damaged credit (CNET News, 2005).

## **6. CONSUMER GROUPS**



Individual consumers are joining forces in hopes of putting an end to some of the worst internet crimes. A great example of one of these consumer groups is the 419 Coalition. This is an online, public service organization that fights the scam free of charge, and is non-affiliated with any government agencies. As a quick reminder, the Nigerian Advanced Fee Fraud is a \$5 billion worldwide scam that has been around since the 1980's and represents the third largest industry in the country of Nigeria. The specific efforts and overall mission of the 419 Coalition are focused on gathering data and information on the Scam, analyzing that information, and posting it on the net for all to see with a view towards educating the demand-side of the equation out of participating in the scam and to press the Government of Nigeria to take substantive actions against the supply-side of the scam. The Coalition is apolitical and also provides information and maintains a sample list of scammers.

Another excellent online organization that aids in the protection of consumers is Fraud Watch International. Their mission is to "reduce the incidence of Internet Fraud, and protect consumers from Identity Theft where personal and credit information is collected by fraudulent and deceptive means on the Internet" (Fraud Watch, 2003). Fraud Watch International also provides consumers, free of charge, information on existing frauds and ways to protect oneself from each of them. Fraud Watch International attempts to accomplish its mission in a few distinct ways. First, this organization protects consumers by educating them about current fraud alerts through an informative web site and newsletter. The organization also works with authorities not only to shut down fraudulent activities on the internet, but also prosecute criminals who use the internet to defraud consumers. These protection groups understand that everyone is a potential victim and deserves to be protected.

## **7. PRECAUTIONARY MEASURES**

While these different fraud alert groups can provide valuable expertise on the detailed steps in protecting oneself from potential scams, simplified and condensed information is also available. Other research studies show that if individuals take the following precautions, they are less likely to become victims of these crimes.

- Avoid any business opportunity whose backbone is the recruitment of new investors like yourself.
- Never send money in response to an unsolicited email or posting you spot on the web.
- Check out any and all opportunities you discover with the Better Business Bureau as well as the office of your state's attorney general.
- Acquire and use encryption software, especially for companies and particularly if you send email containing confidential or sensitive information.
- Be alert for any unwanted mailing list subscriptions, someone might be testing your email address.
- Install virus protection software and update it on a regular basis.
- Change passwords frequently.

Business and professional individuals need to be aware that there are even more steps involved in protecting an organization. First and foremost it is wise to educate all employees about current internet scams so that they can be on the lookout for potential criminal activity. Secondly, it is important to make sure that all conditions of any offer are completely understood and that once a transaction has been made, to verify all bills and invoices. Finally, guarding any financial information is crucial. Only give out information if it is necessary to complete a transaction with someone or some business that has already established a trustworthy relationship with yourself or your organization.

## **8. CONCLUSION**

Internet crimes are on the rise because of our recent advances in technology and the rapid success of e-commerce related businesses. This research has shown that sources are consistent in terms of which areas of crime are the most common and should be the most feared. Internet auctions pose the largest threat, answering the research objective on which areas should be of the most concern. The data used in this paper was consistent among the different sources, indicating that so far crime trend analysis is working and is indeed critical to our understanding of internet crime and its impact on our future.

There are indeed trends on the growth of internet crime, as well as the specific types of crime. While it is evident now that the computer industry might not be as safe as some people think, it is important to remember that the rise of technology has led to an enormous amount of opportunity for the business world. By taking the simple precautions and immediately notifying the necessary protection groups of any suspicious activity, one can be courageous and show confidence that they are doing their best in this fight against a rising area of crime. The internet and such advancements should not be avoided because of a select number of individuals who take pleasure in creating problematic situations. After all, the benefits of the booming technology of the internet so far seem to outweigh any risks. Generally the greater the outcome, the greater the risks are to achieve that outcome.

"You will never do anything in this world without courage. It is the greatest quality of the mind next to honor". -Aristotle (Ancient Greek Philosopher, scientist and physician, 384 BC-322 BC).

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## **NEW INCENTIVES FOR MORE ACTIVE ATTRACTION OF FOREIGN INVESTMENTS INTO THE PRIVATIZATION PROCESS OF STATE OWNED PROPERTY IN UZBEKISTAN**

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### **INTRODUCTION**

Global reforms in economy of Uzbekistan are connected with creation of establishment of institutional basis of sovereign state, structural reforms of economy, and reforms of ownership as the results of consistent realization of Uzbek model of building socially oriented economy of market type.

It is being run broad spectrum of measures of liberalizing currency regulation system and foreign activity of financial sector, accelerated development of small business and strengthening private sector. In this case attraction of foreign investments is very significant. Foreign investments are as essential condition of attraction of the modern technology, creation of new jobs, diversification of production and export of goods, establishment of joint ventures on production of goods with high value added through use of local rough materials, introduction of international quality standards and market methods of management of production, development of privatization process.

### **ATTRACTION OF FOREIGN DIRECT INVESTMENTS IN PRIVATIZATION PROCESS**

The subject of special and permanent attention of the Government of the Republic of Uzbekistan is improvement of the investment environment and creation of favourable conditions for attraction of foreign investments into the economy of the country and for more active participation of foreign investors in privatization and demonopolization, in manufacturing products competitive on the world markets.

Uzbekistan is actively pursuing reforms of the structure of economy. For this purpose, the substantial investments, including foreign capital, are being directed into the process.

Today, one of the principal directions in investment policy of the Republic is attraction of foreign investments into state-owned entities, which are under privatization.

Foreign investors are entitled to participate in privatization process of state-owned property by acquiring stakes of shares joint-stock companies entirely or partially. Current legal acts of the country regulate procedures and terms of participation of foreign investors in privatization process, as well as preferences and guaranties for investors. Stakes of shares or real estates of joint-stock companies are sold to foreign investors for hard and national currencies. Payment of transaction costs can be carried out in accordance with the contract provisions fully or partially for hard and/or national currencies compliant with investment commitments of an investor on supply of technological equipment or other property through purchasing cost.

With aim at stable and dynamic growth of foreign investment inflow into the privatization process, the Government is undertaking more efficient measures. Especially, it's being remarkable for the last years. This, the Government has significantly broadened spheres for participation of foreign investors in the privatization of enterprises. Investors are offered assets of large-scale enterprises of basic industries, such as National Holding Company Uzbekneftegas (Oil & Gas), Association Uzlegprom (Light Industry), Association Uzhlopkoprom (Cotton Industry), Company Uzdonmakhsulot (Bakery) and others. Stakes of shares of enterprises of the mentioned industries and enterprises as a whole are sold to private ownership. The Number of such enterprises comprises 539.

The Privatization Program also comprises 212 enterprises, the operation of which is of great importance for the country's economy and the state share in their charter fund comprises 25% and more. In accordance with the Privatization Program, the state share of these enterprises is subject to full sales on the stock exchange and of -the –counter market, including to foreign investors. According to this list,

foreign investors are offered up to 25% of state share of 25 (or 11.8%) of enterprises, and 25% and more of 187 (88.2%) enterprises.

**What legal framework provides the legislation of the Republic of Uzbekistan to foreign investors and foreign investments?**

The Laws of the Republic of Uzbekistan On Foreign Investments, on Guaranties and Measures of Protection of Foreign Investors' Rights, On Guaranties of the Freedoms of Entrepreneurial Activity, On Production Sharing Agreement are, at present, the main legislations which guarantee protection of foreign investments, provide broad guaranties in protection of rights and legitimate interests of foreign investor.

The state guaranties and protects the rights of foreign investors in pursuing investment activity within the Republic of Uzbekistan. Foreign investors and foreign investments are provided equal regime, complete and permanent protection and security. Such regime can not be less favourable than the regime provided from international treaties of the Republic of Uzbekistan.

It should be noted the one of the main guaranties protecting investors from change of national legislation towards unfavorable conditions for investors. The legislation has no retroactive effect in the event if enforcement of such legislation damages foreign investors or foreign investments. In the event the further change in legislation deteriorates investment framework in Uzbekistan, the foreign investors for ten years starting from the date of investment shall apply legislation that was in effect on the date investment.

Before investing to Uzbekistan, a foreign investor must make sure that: firstly, there is stability in the society, including in the political sense. At the same time, sustainability of tax and other legislations strengthens investors' confidence. Secondly, investor must feel confident in guarantee of inviolability of his /her property, in guaranties of protection from nationalization in freedom of movement of goods and money. Thirdly, the availability of an independent judicial system and efficient mechanism of legal regulation in the country are important. In other words, it matters whether the law is perfect as a regulator of social relations, whether the law is being enforced strictly, whether efficient and independent judicial protection from illegal actions exists, including from administrative arbitrariness and corruption of the government officials. Fourthly, economic factor plays an important role. In other words, how profitable investment is, what customer capacities are on the market access to markets, how much monopolized they are, convertibility of national currency and many other economic factors.

Besides, the government resolutions provide for a number of conditions on encouragements of foreign investors. So, with a view of financial improvement of enterprises state-owned property on competitive basis is transferred to confiding governance with the right for purchase within 5 years installments. For this purpose, investors should submit plans of financial improvement of enterprises and investment commitments.

The Government Resolution entitles restructuring of large unprofitable and unpromising enterprises from the view-point of their production specialization for domestic market. Properties of such enterprises are sold in parts. It provides an opportunity to establish new modern production capacities with participation of foreign capital. Foreign investors founder of enterprises with foreign investments are entitled to utilize obtained dividends in hard currency for full acquisition of stakes of shares of enterprises and entities. It allows attracting joint ventures in to privatization process thus expanding their production, economic and investment potential in Uzbekistan, which allows yielding additional revenues.

At the same time, the Government is undertaking additional measures on increasing investment attractiveness of the privatized enterprises, which would help increase of investment inflow. Among such measures is primarily the implementation of post-privatization support programs, where measures on financial improvement in restructuring enterprises play the key role. One of the important factors in increase of attractiveness of privatized enterprises is the introduction of principles and norms of corporate governments. In this view, targeted works are being implemented in the republic with important aspects

being improvement and development of legal framework of functioning of joint-stock companies, principles of management and the stock market of the republic.

Uzbekistan is a Country with huge investment opportunities, possessing reach natural and labor resources; it tackles targeted police oriented to establishment of business contacts with entrepreneurs of other countries.

Strategically important objective in pursuing investment police is diversification of sectors of the economy of Uzbekistan, development of production and scientific potential, organization of manufacturing competitive and export-oriented products.

Authoritative international finance institutions (the World Bank, EBRD, and ADB) and finance institutions of industrially developed countries are taking part in implementation of large investment projects. Banks of the United States, Japan, Germany, France and UK opened credit lines for financing the projects.

However, in spite of positive achievements during independence of Uzbekistan issues related to attraction of foreign investment into provinces of Uzbekistan are still acute. At the same time, the important thing is preliminary study of investment potential of the province based on availability of mineral an human resources, transportation networks and communications, as well as other appropriate infrastructure enabling to implement any investment project.

Solution of the set objectives, in the nearest future, will allow realizing export potential of Uzbekistan, which will help to increase and diversify the export.

Putting into practice the aforesaid and other measures will considerable increase investment attractiveness of enterprises under privatization and minimize investment risks, which are key factors for foreign investors.

## **CONCLUSION**

Summarising, we would like to note that the legislation of support of foreign investments is being permanently improved since facilitation of business activity of foreign investors in different areas of the economy leads to new economic relations which require and adequate legal regulation.

For achieving these goals, it is important to build the work on the following key directions:

- economic and structural reforms with aim at creation of openness, efficiency, competition and use of innovations which would be supplemented by measures on adaptation on labor markets, development of human resources and ensuring social consent;
- rational management of macroeconomics facilitating more precise planning by business communities and consumers, as well as use of advantages of foreign investments;
- creation stable normative basis for favorable investment climate;
- development of data networks providing quick, reliable, secure and economical access to network technologies, service and operation with the help of competitive market conditions and appropriate innovations.

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## MARKETING BY LEVERAGING A CULT FOLLOWING

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### ABSTRACT

*A cult is defined as “a great devotion to a person, idea, object, movement, or work,” or “a usually small group of people characterized by such devotion (Merriam-Webster, 2005).” The key idea of a cult following is devotion and loyalty. If a brand can successfully acquire a following of customers, even a small group who displays such devotion, it will be doing much to increase its chances of future success and longevity.*

**Keywords:** Marketing, Marketing by Leveraging, Cult Branding

### 1. INTRODUCTION

This paper describes how a cult following contributes to a brand's success, and basic strategies a firm can use to create and maintain a cult following. Also addressed is the potential problem of a brand becoming so iconic that it becomes intimidating to new customers. Heavy reliance here is placed on examples from Harley-Davidson due to the fact that few other brands have achieved the legendary cult following that it enjoys.

### 2. CONTRIBUTIONS TO A FIRM'S SUCCESS

Firms with a cult following are more likely to be successful because their loyal customers will return to purchase the product again and again. Most cult brands attribute their success to repeat business. The acquisition of new customers does not cease to become important to brands employing a cult strategy; however there remains a large focus on customer retention. This loyal following can also provide tremendous growth potential for the firm through product line expansion and the licensing of goods. Customers who are loyal to the brand's original product might expand their loyalty to other product offerings under the same brand.

For example, Harley-Davidson encountered a problem in which their logo began appearing on poor quality goods. The need to defend their brand name against these bootleggers also presented a huge opportunity. Harley-Davidson began licensing goods carrying their logo, a move that has proved very profitable for the firm (Hartley, 2004). Licensing not only allowed Harley-Davidson to monitor the quality of the products bearing their emblem, but it also expanded the reach and appeal of their brand.

### 3. NO GUARANTEES OF CULT SUCCESS

In order for a brand to acquire the core group of loyal customers that defines a cult following, it must have something special. It must stand out from the competition and evoke an emotional response from the customer. The brand must possess a charisma or mystique that sets it apart from competing brands. For some brands that something special that attracts customers and inspires brand devotion can be a certain quirkiness, a buzz or mystery surrounding the brand, or the embodiment of a quality or lifestyle that reaches out and speaks to the customer (Carr, 1996).

A brand's mystique or charisma is hard to define and there are no guarantees that a firm's target market will perceive the brand the same way it does. The process of acquiring and maintaining a cult following is a gamble. Few brands ever achieve the mystique that draws true customer devotion and some firms which try to leverage a cult following will fail despite their best efforts (Hartley, 2004).

Gateway Computer is one such example. Gateway tried to reach consumers through a wholesome yet quirky image. The firm opened a chain of country themed retail outlets, packaged their goods in Holstein

cow spotted boxes, and launched an ad campaign with a cow serving as a spokesperson (Hartley, 2004). It would seem as though this down home image should have had the potential to reach customers on an emotional level. With personal computers only recently becoming a household staple, it seems as though the country image would be a comfort to those more unfamiliar with technology. However, this proved not to be the case and ultimately Gateway began the process of “de-prairie-fication” by thinking outside of their cow-speckled box (Hartley, 2004).

It seems as though in the personal computer market, the key to creating a cult following lies in product differentiation. Perhaps this is why Apple enjoys the cult following that Gateway tried to cultivate (Hartley, 2004). The only thing that set Gateway apart from competitors was its marketing strategy. Inside the cow box lays basically the same computer that could be purchased from almost any other brand.

Just as there are no guarantees that a brand will acquire the core group of loyal customers that define a cult following, there are also no guarantees that the brand will be able to retain its cult status indefinitely (Hartley, 2004). An example is Apple Computers. Apple was one of the very first companies to join the home computer market. During the early days of home computing Apple was widely popular with many customers refusing to purchase any other brand. However, a few years later, many Apple devotees converted to widely available Windows operating system. The introduction of Windows took a large portion of Apple's market share, forcing the brand to expand their product offerings in order to survive. Apple is now experiencing resurgence in their popularity with the introduction of new products such as the iMac and the iPod.

#### **4. CULT BRANDING AND BUZZ MARKETING**

A strategy that has proven successful in the creation of a cult following is to build a “buzz” surrounding your product. A buzz is created when a third party, ideally the customers as a group, exert effort and influence through word-of-mouth communications which furthers the marketing attempts of the firm (Ragas and Bueno, 2002; Thomas, 2004). A buzz cannot be overtly sold. A firm may plant the seed, but in order for the buzz to be true and creditable it must come from the influence of others. If the firm is trying too hard to create their own buzz, there is a chance that customers will catch on and not hold the brand in high regards because of it (Thomas, 2004).

One successful example of the development of a cult following through the creation of a buzz comes from Fox Searchlight and the marketing of their movie, Napoleon Dynamite. Fox Searchlight marketed Napoleon Dynamite with very little advertising through traditional media. They began by offering free screenings with the hope that people would return for repeat viewings and bring others along with them. To further encourage repeated trips to the theatre a “frequent viewer card” was issued to entitle the bearer to free promotional items. The buzz surrounding Napoleon Dynamite was further reinforced through the movie's website. The website enabled Fox Searchlight to quickly capitalize on the movie's buzz by releasing an epilogue for the movie and hosting mixers for fans to meet (Ebenkamp, 2004).

#### **5. THE ROLE OF ADVERTISING**

Once a firm has successfully acquired a cult following, focus must then be placed on its maintenance. Since the customer devotion of a cult following is tied so closely to the brand's image, it is vitally important to preserve the brand image at all costs. A firm must ascertain what aspect of the brand the loyal customer base has latched on to, and be extremely careful not to disturb it.

Usually the primary tool in the creation and maintenance of brand image is advertising. However, it is all too possible to tarnish the brand's image with the wrong advertising; and it is uncertain if the brand's loyal following will withstand even a small change in the brand's image (Carr, 1996). Perhaps a valid strategy would be to forgo traditional advertising in favor of strategic product placement.

For example, Blue Cult is an up and coming designer denim brand that is targeted towards women, but the brand has not yet been advertised in the traditional sense. Its image is created and maintained by

select product placement. Its jeans are sold in upscale stores and seen on celebrities such as Gwyneth Paltrow, Cameron Diaz, and Halle Berry (O'Loughlin, 2003).

The aura of sexiness and sophistication conveyed by the select retail locations and the celebrities who wear the jeans would not be easy to achieve through a traditional advertising campaign. Many clothing firms who target their marketing efforts at women also strive for an image of sexiness and sophistication. A Blue Cult Advertisement would be lost among a sea of ads of the same type.

The same theory applies to Harley-Davidson's advertising. While Harley-Davidson relies mostly on the draw generated from the brand's mystique and on favorable review from their current customers, they do participate in traditional advertising. Harley-Davidson's advertising is unique in the sense that its ads never include any one pictured on their bikes. According to Ken Schmidt, director of communications for Harley-Davidson, "the idea is that with a Harley-Davidson, you can be anyone you want to be (Ebenkamp, 2004)."

## **6. ASSOCIATE THE BRAND WITH AN EXPERIENCE**

Another way to protect and reaffirm a cult following is to reinforce the brand not as a cult brand, but as a cultural one, in which the brand ties customers together with a common experience (Hartman, 2005). One of the best means to accomplish this task is through the sponsorship of gatherings and events. Harley-Davidson put this theory into practice through their support of the Harley Owner's Group (HOG). Local chapters of HOG sponsor group rides and social events on a regular basis, including the pinnacle of motorcycle gatherings occurring every year at Sturgis, South Dakota. The rallies and social events create a brotherhood among Harley-Davidson owners that links their social lives with ownership and provides a tie between customer and company.

Another example of using an experience to reinforce a cult following comes from Red Bull. Red Bull is an energy drink. Its first loyal following came from European dance clubs, which resulted in the creation of the Red Bull Music Academy for aspiring deejays (Todd, 2003). The brand has since found another niche amongst extreme sports athletes. This has led to the sponsorship of extreme sports events competitions around the globe. Red Bull has even managed to create an event around their own "Red Bull gives you wings" tag line with the Flugtag events (Todd, 2003).

Regarding the role of experience in reinforcing a cult following, Ragas and Bueno (2002) highlighted seven vital points related to cult branding, of which two were "cult brands sell lifestyles," and, "cult brands promoted personal freedom." Certainly, Harley-Davidson is selling a life-style that includes a strong self-empowerment and the potential to fulfill a dream or passion, in addition to temporary feelings of escapism. Also, Harley-Davidson riders receive an overwhelming sense of freedom when on "an open road with the wind in one's face" (Pride and Ferrell, 2006).

## **7. EXTREME BRAND DEVOTION MAY FRIGHTEN NEW CUSTOMERS**

It is possible that customers can exhibit behaviors that are truly cult-like to the point that such behavior can be discouraging to potential customers. Harley-Davidson is in the unique position of facing this rare problem. Harley-Davidson enthusiasts have become the epitome of all cult brand followings--they are truly a cult. Their brand devotion permeates every facet of their lives and culminates into such defined characteristics that they have become iconic to the point of becoming a cliché.

Many other brands would most likely consider themselves fortunate to be plagued with such a problem. The rough and tumble Harley image is attractive to many, and has served Harley-Davidson well. However the company fears that the same clearly defined image that has sustained them for so long can potentially be very intimidating to newer motorcyclists, and cause potential customers to turn to brands that do not have such a stigma (Warner, 2002). For example, BMW began producing the Montana R1200, a motorcycle much larger than most of their models. The Montana R1200 appeals to those who prefer a "cruiser" style bike without the image conveyed by owning a Harley (May, 2003).

In order to make the Harley experience less intimidating for newcomers, Harley-Davidson has begun a program called Rider's Edge. Rider's Edge is an intensive class in which new customers are taught how to safely ride motorcycles. This program not only provides valuable practical information for new riders, but also a way for Harley-Davidson to cultivate new brand loyalists without violating the image embodied by the current loyalists (Warner, 2002). Another solution Harley-Davidson has found to this problem is the acquisition of Buell. Harley-Davidson uses the Buell brand to produce smaller bikes that appeal to a younger consumer market that might otherwise turn to another brand waiting in the wings (Warner, 2002).

## 8. CONCLUSION

In conclusion, a brand that can leverage the loyalty and dedication of a small core of customers will have an increased probability of achieving long-term success. However, it is not a strategy to be pursued by every brand. Only a few brands can reach out to customers on the emotional level required to obtain cult status. Those few lucky brands that are able will find themselves in a fortunate position with the opportunity to expand product offerings even to unrelated products. However even if a brand does have the differentiation and the charisma to stir the emotions of its customers, the firm should not count on either the development or the maintenance of a cult following as their lone marketing strategy. As customer needs and tastes change, even the largest and strongest of cults may fade away.

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# FIRM SIZE AND INTERNATIONALIZATION: AN EMPIRICAL TEST

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## ABSTRACT

*Firm size has often been associated with firm internationalization. Recent evidence suggests that changes in the global marketplace increasingly allow smaller firms to reap the benefits of internationalization. This study examines the internationalization of small firms founded between the years 1989 and 1996. For this sample, the findings indicate that over 20% of the firms internationalized within 10 years of their founding, and that over 30% of the firms that internationalized reported an average growth in international sales exceeding 10%. Almost 15% reported an average growth in international sales exceeding 25%. However, almost 50% reported sales average growth in international sales of less than 5%.*

**KEYWORDS** *Internationalization, young ventures, firm size, Eclectic paradigm*

## 1. INTRODUCTION

Firm size has long been considered an important strategic variable. Evidence has suggested that firm size may have important practical and theoretical consequences for firm strategies and performance, and in particular, on whether or not they internationalize, and do so successfully. New research suggests that in today's global environment that firm size may be a less critical significant factor in internationalization, and that small firms are increasingly able to compete internationally. The purpose of this study is to examine the firm size and internationalization.

This research has important theoretical and practical implications. First, this research reexamines the important variable of size and its relationship to internationalization and profitability. Internationalization can be an important path to growth for young firms (Shrader, 2001). Second, this study has important practical implications for practicing managers in that this study directly examines whether firm size remains an important variable that influences whether or not their firms can be successful overseas.

## 2. THEORETICAL FOUNDATIONS

### 2.1 Firm Size

The standard literature has long emphasized the importance of firm size in explaining internationalization. Firm size has been considered an established variable explaining foreign direct investment (FDI) (Blomstrom & Lipsey; 1991). Larger firms tend to have greater resources and may be more likely to adequately support internationalization efforts and the research efforts in order to compete successfully overseas. Extensive research, for instance, has found that greater R&D spending is likely to be associated with increasing size (Link, Seaks, & Woodberry, 1988). Similarly, larger firms may be more likely to obtain firm-specific advantages due to economies of scope and size (Blomstrom & Lipsey; 1991; Dunning, 1989), a proposal supported by many early studies of multinationals (e.g. Horst, 1972).

In contrast, smaller firms have been considered less likely to be able to achieve such economies and to lack the resources and firm-specific advantages necessary to compete successfully internationally. Internationalization has been considered a less serious strategic option for smaller firms. In fact, past studies have found that many small firms that have internationalized have done so more or less 'by accident'. For example, Christensen (1991) found that up to 80% of small and medium size companies start to export on the basis of unsolicited orders. They didn't internationalize due to a comprehensive strategy.

Emerging evidence, however, hints that this may be changing rapidly. As large firms have experienced net losses of jobs, small, often new ventures, have fostered both job creation and innovation domestically (Audretsch, 1995; Botkin, 1991; Drucker, 1986). Internationally, such small firms have been experiencing growth rates four times the growth rate of the gross domestic product (GDP) in developed countries



(OECD, 1997). Contemporary studies find high percentages of international small (Brush, 1995) and new ventures (Shrader, 1996). In particular, in contrast to Christiansen's (1991) finding up to 80% of small and medium size companies start to export on the basis of unsolicited orders, Brush (1995) found that only 30% of small ventures internationalize on the basis of unsolicited orders. More recently, Friedman (2005) goes further. He claims the world has been rapidly 'flattening' since 1989, and that this flattening has empowered "*individuals* to collaborate and compete globally" (Friedman, 2005:10). In other words, firm size may no longer seriously hamper internationalization, or the ability to compete globally.

## **2.2 Global Business Environment.**

Without a doubt, the global business environment has been transforming itself. Technological changes and the resulting rise in the use of E-mail, the Internet, etc., continues to dramatically ease doing business internationally. Furthermore, trade barriers are also greatly diminishing. Until recently trade barriers were very restrictive, especially for service firms. In many countries, services have been subject to greater entry and ownership restrictions than manufacturing (Strange, 1997). In the U. K., for example, professional practices were once required to be partnerships (Baden-Fuller, 1993). Although a convergence between national laws will take much more time (Ascher, 1993; Nicolaidis, 1993), many services now are covered the General Agreement on Trade in Services (GATS) (Mabile, 1995), and face fewer regulatory barriers to internationalization, opening up markets for this rapidly growing sector.

## **2.2 Firm Size and Internationalization**

According to the Eclectic paradigm, firms can rely on ownership, internalization, and location advantages to achieve profitability overseas. Ownership advantages are advantages possessed by international firms vis-à-vis those of local firms (Dunning, 1989). Internalization advantages are advantages that stem from the ability of firms to add additional value by maintaining control internally (Dunning, 1989). Lastly, location advantages are advantages that result from the ability of a firm to combine ownership and internalization advantages with immobile factor endowments to create additional value (Dunning, 1989).

Traditionally, small firm size was thought to hinder internationalization by making it more difficult for firms create OLI advantages. For example, smaller firms would not be considered able to support the greater communication or adaptations required to deliver goods and services overseas. Thus, smaller firms were usually expected to remain domestic.

The increasing internationalization of small firms in recent years appears to contradict this view. First, as globalization has eliminated many previously protected niches (Oviatt & McDougall, 1995), firms may feel compelled to internationalize to seek additional markets. Internationalization per se also minimizes the chance that idle resources will be wasted so internationalization may result in higher capacity utilization (Arvidsson, 1997). Smaller manufacturing firms may find traditional advantages based on economies of scale. Manufacturing firms are likely to find it advantageous to arbitrage operations and to diversify, exchange, political, and other risks (Dunning, 1993). Service firms may also need to internationalize in order to avoid theft of appropriation of a service concept (OECD, 1997; U.N. 1993b). For instance, internationalization may allow firms to leverage knowledge-based outputs to earn relatively higher revenues from overseas (Cloninger, 2004). Such knowledge-based assets or skills are often relatively easy to transfer from one market to another (Markusen, 1989; Sharma & Johanson, 1987). The findings that knowledge based professional services such as consulting, for example, are playing a leading role in the internationalization of services (Ascher, 1993; Daniels, Thrift & Leyshon, 1989; Noyelle, 1989). Internalization may help to protect such key assets (Kotabe, Murray & Javalgi, 1998; Enderwick, 1989). Therefore, in contrast to the traditional view, recent evidence suggests that a) that firm size may not be associated with whether or not a firm is domestic or international, and b) that firm size may not be associated with the ability of small firms, both in services and in manufacturing, to create advantages, and hence profits, internationally. Therefore,

*Hypothesis 1.* Firm size will not be associated with internationalization

*Hypothesis 2.* Firm size will not be associated with greater foreign revenues

### 3. RESEARCH METHODS

#### 3.1 Sample and Research Design

Sample data were gathered from U.S. based firms founded between 1989 and 1996 in the environmental control industry. Both manufacturing and services firms were included. The decision was made to focus on firms that were ten years old or younger when the data were gathered was due to the potential influence of organizational inertia on internationalization. Organizational inertia can inhibit the internationalization of established firms (McDougall, Shane, & Oviatt 1994).

The sample has several advantages for this study. First, focusing on U.S. based firms in the environmental control industry controls the variance of many extraneous variables such as different domestic legal environments. Second, the sample reduces the likelihood of random errors without decreasing the variance in the variables of interest. Third, the environmental industry was expected to yield a sufficient number of international firms for study because the U.S. is also prominent internationally in the environmental control industry (Engineer, 1996; U.S. Industry and Trade Outlook, 1998), and the U.S. is the largest exporter of environmental goods and services (U.S. Industry and Trade Outlook, 1998).

A comprehensive sampling frame consisting of 5710 firms was developed by using fourteen national and state listings were used, including the Gale Research Company's 17th edition of Consultants and Consulting Organizations Directory (1997), the U.S. Department of Commerce, The Green Pages (1997), Dun and Bradstreet's Directory of Service Companies (1998), and an on-line national directory, Enviro-net. Two national directories are used to check additional secondary data which, when available, further minimize bias. These directories are Standard and Poor's Register of Corporations (1998), and Dun and Bradstreet's Million Dollar Directory (1998).

Of the firms in the sampling frame, 1933 were sampled. Every fifth firm was sampled unless the directory provided additional information such as a firm's founding date, in which case all firms seeming to meet the criteria of the study were sampled. Of the 1933 sampled, just over 20% were undeliverable. This is common for young firms. Following the survey method recommended by Dillman (1978), 426 of the 1540 delivered questionnaires were returned for a response rate of 28%, that while lower than Dillman's claims, is a higher response rate than is typically reported for studies of new or small ventures. For example, McDougall (1987) reported an 11% response rate in her study of new ventures, and Brush (1995) reported a 13% response rate in her comprehensive study of small firms. Of the 426 questionnaires returned, 190 firms sampled met the criteria of the study, that is, were mostly complete questionnaires from firms founded between 1989 and 1996. The final usable sample consisted of firms located in each of the eight geographic regions designated by the U.S. Census, and founded each year between 1989 and 1996 as shown in Table 1. International firms in the sample have entered countries in all regions in the world, with Canada and Mexico being the most popular destination, closely followed by Europe and the Caribbean, Central and South America region.

**TABLE 1. GEOGRAPHIC LOCATION OF SAMPLE FIRMS**

| Region      | Number<br>of Firms | %<br>of Sample | Region     | Number<br>of Firms | %<br>of Sample |
|-------------|--------------------|----------------|------------|--------------------|----------------|
| New England | 5                  | 2.6            | South East | 45                 | 23.7           |
| Mideast     | 38                 | 20.0           | Southwest  | 40                 | 21.1           |
| Great Lakes | 7                  | 3.7            | Rocky Mtn. | 4                  | 2.1            |
| Plains      | 5                  | 2.6            | Far West   | 46                 | 24.2           |

#### 3.2 Data

The primary data source was a self-administered, survey questionnaire of the firms in the sample. Young ventures tend to be private firms for which little public information is available. Such cross-sectional data is suitable for research of this type (Babbie, 1992; Cooper & Emory, 1995).

#### 3.3 Validity and Reliability

To ensure validity, multiple efforts were made to develop a valid questionnaire instrument for measuring the firm size and profitability. Consistent with the recommendations in the literature (Babbie, 1992), the understandability of the items and the questionnaire to the business public was also iteratively tested and improved, first via verbal feedback from several business owners who were administered the questionnaire by telephone, and then by students in several evening business courses, many of whom were also experienced and worked at full time jobs.

### 3.4 Non-response bias

To minimize common method bias, firms were asked for copies of any brochures or available information about their services and their company. When available, firm's home pages on the internet were also used to try to verify information. To the extent possible, these data were compared with data available in the various directories, such as staff size, product description, geographic areas served and revenues, of responding and non-responding firms. In addition, over 30% of the firms were called to complete, clarify, and verify information. The consistency of individual items was assessed using Cronbach's Alpha. Stability was assessed by asking a small number of respondents to re-supply their answers at a later time via telephone.

### 3.5 Measures

In this research, all measures were obtained using primary data obtained with the questionnaire. Firm size was defined as the total number of employees and including managers, and was operationalized as the number reported by the firm in 1998.

Consistent with the literature (Brush, 1995; Shrader, 1996; U.N., 1993a), in this research, an international firm was defined as a firm that receives revenues from foreign markets. Young firms, especially service firms which tend to be less capital intensive, are less likely to have large resource commitments. Thus, sales revenues are likely to be a better measure of the value added (Dunning, 1993). Firms that had an international project or projects in the past, but no current foreign revenues were considered domestic. Foreign revenues were operationalized as foreign sales growth where foreign sales growth is defined as the *mean* growth of the firm's foreign sales since the firm began to receive revenues from foreign markets. This allows greater comparability of firms, and for new young firms, foreign sales growth is a more representative of the relative success internationally than the actual dollar converted earnings which may be small in the first few years of operations.

## 4. ANALYSIS AND RESULTS

First, the sample was examined for regional characteristics. The firms in the sample are located in each of the eight geographic regions designated by the U.S. Census. As expected, more firms are located in more populous regions in the East and West. Thus the sample does not appear to exhibit regional biases.

Next, firm size was examined. As shown in Table 2, of the 190 firms in the sample, only one firm had over 1000 employees in 1998. Somewhat more surprisingly, almost all firms would be considered 'small' by the 'standard' definition of 500 or fewer employees being a small firm. Thus, statistical comparison of 'small' firms and large firms was not possible with this sample. Furthermore, almost 40% of firms in the sample of had five or fewer employees, and over 95% had 50 or fewer. Thus, *all* firms in the sample very 'small' firms. Although the questionnaire targeted young ventures, this was another surprising finding, since by ten years old, the literature begins to consider these 'established' firms, yet only 7 firms out of 190 firms had more than 50 employees.

**TABLE 2. FIRM SIZE AS NUMBER OF EMPLOYEES.**

| No. Employees | 1-5  | 6-10 | 11-25 | 25-50 | 51-100 | 101-500 | 501-999 | Over 1000 |
|---------------|------|------|-------|-------|--------|---------|---------|-----------|
| No. of Firms  | 73   | 43   | 49    | 18    | 4      | 2       | 0       | 1         |
| % of Firms    | 38.4 | 22.6 | 25.8  | 9.5   | 2.1    | 1.1     | 0       | 0.5       |

Next the average growth in international sales was examined. As shown in Table 3, 41 firms, over 20% of the firms had internationalized within 10 years of their founding. Over 30% of the firms that

internationalized reported an average growth in international sales exceeding 10%. Almost 15% reported an average growth in international sales exceeding 25%. However, almost 50% reported sales average growth in international sales of less than 5%.

**TABLE 3. AVERAGE GROWTH IN INTERNATIONAL SALES.**

| <b>GROWTH</b>       | 0%   | 1-5% | 6-10% | 11-15% | 16-20% | 21-25% | Over 25% |
|---------------------|------|------|-------|--------|--------|--------|----------|
| <b>No. of Firms</b> | 5    | 15   | 7     | 2      | 2      | 4      | 6        |
| <b>% of Firms</b>   | 12.2 | 36.6 | 17.1  | 4.9    | 4.9    | 9.8    | 14.6     |

## 5. DISCUSSION AND CONCLUSIONS

Somewhat surprisingly, almost all of the firms in the sample were 'small' firms when using the standard definition fewer than 500 employees, making statistical tests of large versus small firms impossible. However, the results are still quite interesting. First, over 20% of these small firms had internationalized with 10 years of their founding, and over 30% of the firms that internationalized reported an average growth in international sales exceeding 10%, while almost 15% reported an average growth in international sales exceeding 25%. These data certainly appear to imply that small firm size is neither a hindrance to internationalization, nor international revenues. On the other hand, almost 50% of international firms reported sales average growth in international sales of less than 5%. These firms appear to be struggling, especially when compared to the average growth in *total* sales of all 190 firms in the sample, which found that over 70% of firms had *total* sales growth of greater than 10% and almost 30% of firms had average *total* sales growth of over 25%. Clearly many of the firms in the sample are earning more domestically than internationally.

These are interesting finds for scholars and for practicing managers. First, firm size is clearly not a hindrance to internationalization since *all* firms in the sample except one can be considered small. Furthermore, a number of these small firms are experiencing admirable growth in international sales. On the other hand, comparatively fewer firms are creating as much value internationally as firms in the sample are able to create domestically.

Future research is needed to further understand firm size and internationalization. First, for scholars, future studies should examine other sectors and see if the finding of young, small firms is replicated, or if this finding was an artifact of this sample. Second, in this sample, most international firms conduct most of their work "at home", and only a few firms had employees living abroad or traveling frequently. Future studies should examine the living and travel habits of the managers and workers. Perhaps a 'closeness' or 'lack of closeness' is a variable that helps to explain the international success of small firms. Yet another possibility is that many firms in this sample lacked internationally experienced managers or enough business to maintain personnel or facilities overseas.

For managers, there are also important implications. First, managers in large international firms should recognize the extent to which small firms may now be competition overseas in many markets where they may have previously only concerned themselves with local country firms. Conversely, managers at new and small firms should heighten their awareness of the potential profitability of internationalization in increasingly may be within their reach. However, although internationalization presents many opportunities for growth, it is not a panacea. They must create value to succeed.

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## EXPOSURE EFFECTS AND AFFECT FOR LOGO DESIGNS

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### ABSTRACT

*Various models of exposure effects were examined through literature review. A two-factor model of exposure effects (Berlyne, 1970; Stang, 1973, 1974) was deemed superior to other existing models as it explains more of the empirical findings in exposure effect research. The two factors of the model are stimulus habituation (a stimulus that is initially threatening becomes more familiar and better liked with repeated exposures) and boredom (after too many exposures, preference for the stimulus decreases). Also important in this study was Hoffman's (1986) model of sources of affect, which includes three sources of affect: (1) affective responses that come directly from the physical features of the stimulus, (2) affect that results from the stimulus matching (or failing to match) a stored representation, and (3) affective response to the meaning of the stimulus. This model of affect sources was combined with the two-factor model and applied to empirical studies that have been published regarding exposure effects for different types of visual images. The conclusions were applied to different types of logo designs that have the same features as the visual image stimuli that were used in the experiments.*

**Keywords:** Visual Information Processing, Perception, Meaning, Low Involvement, Picture Effects, Affect, Advertising

### 1. INTRODUCTION

The study of the effects of repeated exposures of visual stimuli has a long history. Zajonc published landmark research in 1968 regarding exposure effects, but they had been a subject of study for more than ninety years (Fechner 1876; James 1890; Maslow, 1937). The concept has created a great deal of interest among scholars and practitioners alike. Twenty years following publication of Zajonc's (1968) article, Bornstein (1989) was able to find 134 published articles regarding exposure effects on which he based a meta-analysis. Since that time, there have been many additional studies that add to the understanding amassed previously. Also since the time of Bornstein's meta-analysis, the Internet has become a major medium employing visual images and has created additional applications for exposure effects.

Marketing practitioners seek for repeated exposures of their products and promotions. Corporate and brand logos seem to be particularly ubiquitous, appearing in advertisements and on Web sites, banner ads, product packaging, letterhead, business cards, point of purchase displays, racing cars, stadium scoreboards, T-shirts, baseball caps, and various other specialty items. According to some references (Berryman, 1984) a logo is a corporate identity design that consists only of words. In this study, the common, more general definition will apply, that the term "logo" refers to all sorts of corporate identity designs including pictorial symbols, lettermarks, wordmarks, and combination marks. Of the various aspects of promotional communication, logos lend themselves particularly well to repeated exposure. Some companies (such as Nike during the mid-1990s) are aided in this effort by consumers who seek to purchase and display the logo on clothing and other articles. Most companies, however, must bear more of the expense of creating repeated exposures to their logos. They do so to create awareness, to serve as reminders, and hopefully, through exposure effects, to build preference for the associated branded products. Logos have become particularly visible on the Internet. Typically, a company's Web site will include the logo at least once on each page. Also, logos are generally a significant part of banner ads. The intent of banner ads is to have the individual click on the ad which serves as a hyperlink to the sponsor's site. Click-through rates have been diminishing over the years, reaching a rate of less than 0.34% (Nielsen Netratings, Chandon et al. 2003). The vast majority of banner ad viewings are incidental and the best that advertisers can expect is positive exposure effects. In this light, it is worthwhile to consider how exposure effects apply to corporate and brand logos.

The purpose of this paper is to review the literature regarding exposure effects for visual image stimuli and to determine implications for logo designs. Initially, a brief summary of the general findings regarding

exposure effects will be presented. Exposure effect models will be described and briefly evaluated in respect to the findings. The advantages of a modified two-factor model will be identified. A framework for sources of affect that helps to explain exposure effects will also be presented. Findings of exposure effect studies that deal specifically with various types of visual stimuli will be reviewed in the context of the two-factor model and the affect framework.

## **2. EXPOSURE EFFECT FINDINGS**

The general finding is that repeated exposures of a stimulus affect attitudes toward the stimulus. Most often these effects appear as increasingly positive attitudes with increased exposures. These positive attitude effects are what is generally termed “exposure effects” or in some cases “mere exposure effects.” Some studies show, however, that after too many exposures, the attitude ceases to become more positive and begins to become less so, ultimately becoming negatively valenced.

Bornstein (1989) conducted a meta-analysis of twenty years of exposure effects research beginning with Zajonc's, 1968 study. He identified the factors that have shown effects. The effects are most robust when the following conditions are met:

- Exposure durations are brief.
- Subliminal rather than supraliminal presentation of stimuli (subliminal presentations are exposures so brief that recognition effects for the stimuli are not found).
- Heterogeneous rather than homogeneous exposure sequence of stimuli (the various stimuli are mixed together in the sequence rather than doing all the exposures of the first stimulus before moving to the next).
- Fewer than ten exposures.
- There is a delay between the exposures and ratings of the stimuli.
- Adults rather than young children are used as subjects (there are developmental changes that affect susceptibility to exposure effects).
- Stimuli are complex rather than simple.

## **3. MODELS OF EXPOSURE EFFECTS**

Bornstein (1989) evaluated three basic models of exposure effects in relation to the findings of his meta-analysis: the opponent-process model (Harrison, 1977), arousal models (Berlyne, 1966, 1971; Crandall, 1970; Harrison, 1977; Hill, 1978), and the two-factor model (Berlyne, 1970; Stang, 1973, 1974).

### **3.1 Opponent-Process Model**

According to this model, a stimulus produces an emotional response. Removal of that stimulus results in a rebound effect with the opponent (opposite) emotional response (Solomon and Corbit, 1974, Harrison, 1977). An unfamiliar stimulus will initially elicit negative affect. When that stimulus is removed, an opposite, positive emotional response occurs. With repeated exposures, the initial, unpleasant affect decreases and the opponent positive affect increases, thus creating exposure effects of increased positive affect or preference for the stimulus with repeated exposures.

The opponent-process model offers an explanation of increased positive affect with repeated exposures, but it is not consistent with many of the findings of the research covered in the, 1989 meta-analysis (Bornstein). For example, this model does not predict the strength of exposures that are short in duration or subliminal. It also does not support the finding that heterogeneous exposure sequences create stronger exposure effects than homogeneous sequences.

### 3.2 Arousal Models

Arousal models (Berlyne, 1966, 1971; Crandall, 1970; Harrison, 1977; Hill, 1978) are based on the idea that individuals will seek a preferred level of arousal. If a stimulus causes a level of arousal that is too high or too low, it will result in negative affect toward the stimulus. Repeated exposure moderates the arousal levels evoked by the stimulus. This model is consistent with more of the findings than the opponent-process model, but it also has weaknesses. It supports the finding that complex stimuli produce stronger exposure effects than simple stimuli, but it does not predict the findings regarding exposure duration, delays between exposures and rating, subliminal exposure, or developmental effects.

### 3.3 Two-Factor Model

Bornstein (1989) favored the two-factor model (Berlyne, 1970; Stang, 1973, 1974) over the two preceding models as it explains more of the findings. The two factors of the model are stimulus habituation and boredom. They describe an inverted-U-shaped function.

Stimulus habituation is the process whereby a stimulus that is initially threatening becomes more familiar (and better liked) with repeated exposures. According to Harrison (1977), this familiarity includes recognition, and is supraliminal. Stimulus habituation accounts for the ascending portion of the inverted-U. The descending portion of the curve comes as liking for the stimulus decreases due to boredom from overexposure.

The applicability of this model increases if we do not require that both of the factors operate in every case. Zajonc (1968) posited that there was an instinctive reaction of fear to stimuli presented for the first time. If, as Zajonc (1968) proposed, all stimuli are threatening when initially presented, then it might be expected that stimulus habituation would occur in every case. Support for Zajonc's (1968) position came from studies of infants and animals (Bühler, Hetzer, and Mabel, 1928; Lorenz, 1956), despite the finding that exposure effects are more pronounced for adults. Research involving children conducted by Cantor (1972) seems to indicate that perhaps some initial presentations of specific stimuli are not threatening and may not show stimulus habituation effects. In such cases, repeated exposures do not make attitudes more positive toward the stimulus.

Cantor (1972) exposed fifth-grade subjects to pictures of children of their same race and of another race. Preference ratings for pictures of different-race children improved with repeated exposures. Preference ratings for pictures of same-race children, however, became less favorable with repeated exposures from the start. It would appear that stimulus habituation occurred in regard to the pictures of children of a different race as the subjects became more familiar with them. Pictures of children of their own race, even though they had not been seen before, appeared to be sufficiently non-threatening to skip stimulus habituation and go directly to the boredom effect. If we accept the pictures of same-race children as being new stimuli the first time they were shown, this study gives evidence that stimulus habituation does not necessarily occur in every case. It is difficult, however, to make a general conclusion that stimulus habituation does not occur when stimuli are sufficiently non-threatening. We do not have empirical evidence to show that Cantor's (1972) faces of same-race children are any less threatening than geometric shapes, nonsense words, or other faces that achieved habituation effects in other experiments. An important aspect of exposure effects, that will be addressed later, is that the effects are small and can easily be moderated by other variables. For example, Cantor's experiment was done on a within-subjects basis. Each subject saw both the same-race and other-race faces. Reactions to each may have been moderated by contrasts between the two sets of faces. Another possible concern is the young age of the subjects as Bornstein's (1989) meta-analysis found evidence that exposure effects were more significant for adults.

If, however, we were to accept as a conclusion from Cantor's (1972) research that stimulus habituation does not occur when stimuli are sufficiently non-threatening, that would mean that logos that are non-threatening may not benefit (in terms of preference for the image) from repeated exposures—preference for the image may be at the maximum at the initial exposure. In such cases, boredom effects will be the only exposure effects. It may seem to follow from this argument that logos should be designed to be

initially threatening so that they can benefit from exposure effects. Clearly, however, the point is to have a logo design that is well-liked. It is obvious that if a logo can be designed such that it is accepted well, that is better than creating one that is initially threatening but eventually improves to a level of acceptance. (See Henderson and Cote, 1998 for guidelines regarding logo design). According to Zajonc's (1968) reasoning, if the image appears sufficiently "new" or unfamiliar, it will be threatening. "Newness" of logos may be threatening for consumers in two ways. First, a new logo implies a new or altered product. As will be explained in a later section, affect toward the stimulus may involve meaning attached to the stimulus. So the consumer's uncertainty regarding the new product may be reflected in the level of preference for the logo. Second, according to symbolic interactionism (Solomon, 1983), the attitudes of the consumer will depend on perceptions of the responses of others. The consumer will be hesitant to establish a level of preference for a new image while uncertain about the potential response of others to that level of preference. If newness or unfamiliarity makes a new logo threatening, it follows that a non-threatening new logo would be one that is very similar to existing logos. This idea is supported by research regarding structural mere exposure effects (Newell and Bright 2001, 2003; Zizak 2002). According to this research, new stimuli are better liked if they are structurally similar to previously encountered stimuli. In the case of a new brand, the logo will be new, and repeated exposure may increase liking for it, but structural mere exposure effects may also be obtained by following stylistic conventions currently in use.

While it appears that there are cases in which repeated exposures may result in boredom effects without being preceded by stimulus habituation effects, several studies have also shown increased liking for a stimulus with repeated exposures without a later downturn. This is not necessarily an indication that the boredom effect is not a factor in these cases. In many experiments the number of exposures may simply not have been sufficient to reach the downturn portion of the curve. For example, Zajonc (1968) exposed stimuli a maximum of only ten times to each subject. The results of Bornstein's (1989) meta-analysis indicate that this many exposures may be too few to result in boredom effects. It is in the best interests of marketing practitioners to attempt to determine ways to delay the boredom effect far beyond ten exposures if possible.

Although Bornstein (1989) favored the two-factor model, he needed to modify it in order to account for all his findings. In its original form, the two-factor model fails to predict the strong exposure effects of subliminal stimuli. Stimuli are termed "subliminal" when they are exposed in an impoverished condition sufficient to reduce recognition of the stimuli to chance levels. This typically involves a very rapid exposure of the stimulus (Seamon et al., 1995, exposed stimuli at 2 ms), or placement of the stimulus in the peripheral vision of the subject (Janiszewski, 1993; Shapiro, MacInnis, and Heckler, 1997).

The findings of the meta-analysis (Bornstein, 1989) indicate that not only is it unnecessary that stimulus recognition exist for exposure effects to occur, but that there are greater effects for subliminal stimuli than for stimuli that are exposed briefly but are recognizable. Bornstein himself tested and supported this assertion with later research (Bornstein and D'Agostino, 1992). Chambres (2001) obtained mere exposure effects from subliminal exposures in experimental conditions where exposure effects did not occur for supra-liminally exposed stimuli. This result is contrary to the two-factor model which predicts that affect will vary positively as a function of supraliminal familiarity.

To account for the effects of subliminal stimuli, Bornstein (1989) modified the two-factor model to incorporate unconscious learning and attitude change. When the stimulus is subliminal, affective responses are not attenuated by defensive strategies, attributional biases, and "conscious counter-control" (Kihlstrom, 1987) as they may be for stimuli that are readily recognized. This explanation assumes, however, considerable cognitive effort on the part of subjects for recognized stimuli. Exploratory research regarding preference for visual stimuli indicates that heuristic processes dominate such preference determinations (Pimentel, 2003). The defensive strategies that Bornstein (1989) assumes imply a more involved, compensatory process.

The heuristic processes may offer an alternate explanation for the strength of exposure effects for subliminal exposures. When subjects are confronted with a decision regarding preference for a visual image, they are likely to use whatever criteria are most salient in order to make the determination. If the mere exposure effect is the only criterion (the stimulus is presented such that there is no previous

information for the stimulus other than the presence or absence of subliminal exposures), it may be the deciding criterion. If any other criteria are available, they may be more salient than the exposure effects and more influential for the evaluation of the stimulus. If the stimulus had been previously exposed at a supraliminal level, there is a greater chance that associations may have developed for the stimulus, providing additional evaluative criteria. This view is supported by Sawyer (1981) who applied exposure effects to advertising messages and determined that intervening cognitive processing is key to the attitudinal effects from a repeated message. Baker (1999) explained that mere exposure effects can act as a “tie breaker” in the absence of other evaluative criteria. Indeed, while exposure effects have been shown to be robust, the magnitudes of the effects are limited. When comparing previously exposed stimuli to novel stimuli, typical results have been preference for the previously exposed stimuli in 60% (ranging from 56.5% to 66%) of cases as compared to a chance level of 50% (indicating no exposure effects) (Bornstein, Leone, and Galley, 1987; Kunst-Wilson and Zajonc, 1980; Mandler, Nakamura, and Van Zandt, 1987; Seamon, Brody, and Kauff, 1983a, 1983b; Seamon, Marsh, and Brody, 1984).

Janiszewski (1993) illustrates how subliminal exposures of images may occur as incidental exposures in a marketing context, but it has not been tested whether there are a significant number of logos that are exposed repeatedly at subliminal levels without any supraliminal exposures. There is a possibility for more such exposures with banner ads on the Internet. Consequently, additional study may be warranted.

The original form of the two-factor model also fails to account for developmental differences in the exposure effect—younger subjects have greater preference for novel stimuli than do older subjects (Bornstein, 1989). Bornstein (1989) incorporates principles from evolutionary theory to explain these differences. A preference for the familiar resulted from adapting in order to survive a hostile environment. However, in an infant-mother relationship, the mother figure takes responsibility for survival. The infant is free to seek the novel, which facilitates learning. Eventually the child reaches a stage of responsibility, which requires preference for the familiar.

Evolutionary processes can also account for the delay effect—that exposure effects are stronger when there is a delay between the exposure of the stimulus and the rating of it. This is because the delay allows for the stimulus to become encoded in long-term memory. It is suggested that, adapting to a hostile environment, “representation of the stimulus in short-term memory actually provides little information regarding whether this stimulus is safe to approach. Only after repeated exposures coupled with consistent absence of negative reinforcement associated with the stimulus can one reliably conclude that the object is non-threatening. A long-term memory of a stimulus with an absence of negative associations is a much more reliable index of (lack of) dangerousness than is a short-term memory trace (Bornstein, 1989).”

This addition of evolutionary processes to the two-factor model is a heroic effort by Bornstein (1989) to reconcile some model to all of the findings of his meta-analysis. The appropriateness of this combination remains to be shown. While an attempt has been made in this paper to justify the consideration of unfamiliar stimuli as “threatening,” Harmon-Jones (1996) points out that it has never been directly tested whether unfamiliar stimuli are liked less than familiar stimuli due to an association of “danger” with unfamiliar stimuli. Certainly it is difficult to associate unfamiliarity of commercial logos with danger.

Bornstein’s (1989) modified version of the two-factor model maintains the notion that the initial response to repeated exposures of an unfamiliar stimulus is an improvement in liking for the stimulus. While this effect is considered robust through much of the exposure effect literature, there are studies that question the generalizability of this idea. These include the Mandler, Nakamura, and Van Zandt (1987) study regarding nonspecific activation and the Mizerski (1995) study, which presents evidence for attitude polarization. Each of these will be considered briefly.

### **3.4 Nonspecific Activation Hypothesis/Perceptual Fluency Misattributed as Preference**

Mandler, Nakamura, and Van Zandt (1987) conducted research that gives evidence for a nonspecific activation hypothesis. According to this hypothesis, information processing of a stimulus may include activation without elaboration. When there is no elaboration, the stored information is not valenced and is



without context. This perceptual trace remains available, however, for matching with tested stimuli. In other words, perceptual fluency is increased for the stimulus that has been activated but not elaborated. Mandler, Nakamura, and Van Zandt (1987) posit that this stored stimulus is chosen over a stimulus that has not been stored regardless of the question. They were able to show that subjects picked the previously exposed stimulus regardless of whether they were asked to determine which stimulus is darker or brighter. While Mandler, Nakamura, and Van Zandt (1987) were able to show the effect in a cognitive judgment, they were less successful when trying to show the same effect in an affective judgment. Contrary to their predictions, they were unable to show that subjects would select the same stored stimulus when asked for the stimulus they *dislike* more.

Additional research regarding this hypothesis has produced conflicting results. Bornstein and D'Agostino (1994) produced evidence that the mere exposure increases perceptual fluency which is misattributed as liking for the stimulus. Compton (2002) took it a step further and tested pictures versus words, projected to different visual fields of the brain. She found that liking for the stimuli was greater if the pictures and the words had been previously presented to the hemisphere of the brain that had the greater proficiency for processing that particular type of stimulus. In other words, preference was greater where the ability to produce perceptual fluency was greater. The argument could be made, however, that by projecting the images to the hemispheres of the brain that were better suited to process the stimulus, the habituation process was enhanced, making the stimulus more familiar through more effective processing, thus allowing for a two-factor model interpretation of the results.

Lee (2001) conducted experiments that tested separately for cognitive versus affective responses to the stimuli. The affective judgment task was to select the preferred geometric pattern from a paired forced choice. The cognitive judgment was to identify which pattern had the most triangles or squares. Lee's results supported those of Mandler, Nakamura, and Van Zandt (1987) more than those of Bornstein and D'Agostino (1994) in that she found different results for the cognitive and affective responses. A particularly insightful difference came when she tested the effects of increasing the number of repetitions. For the cognitive judgment task, previously exposed stimuli tended to be selected over novel stimuli, but when the number of exposures was increased, this effect did not increase; instead the judgments became more accurate. This can be explained as a misattribution of perceptual fluency that is later corrected with additional access to information. In contrast, preference for the stimuli increased in a linear fashion with increased exposures—supporting an uncertainty reduction, or habituation, explanation of exposure effects. These results support a nonspecific activation/perceptual fluency explanation for mere exposure effects on cognitive responses, but a habituation explanation (from the two-factor model) for mere exposure effects on preference. This conclusion is reinforced by Reber, Winkielman, and Schwartz (1998) who examined perceptual fluency by manipulating it in ways other than repetition (e.g. levels of figure/ground contrast, and exposure duration). They concluded that, rather than there being a misattribution of perceptual fluency to liking, that perceptual fluency actually increases liking and that the experience of fluency is affectively positive.

This concept is further illuminated by research by Harmon-Jones and Allen (2001). An important contribution of their work is that they dealt with self-report concerns. If subjects self-report their responses to stimuli, the task becomes more cognitive and less affective in nature. Also, there is the possibility of demand effects (possibly appearing as misattributions). To eliminate these effects, Harmon-Jones and Allen did not ask for responses from their subjects, but rather, monitored facial electromyographic (EMG) responses. Their results indicate that exposure effects are positively affective in nature and are not misattribution of cognitive effects. So either the stimulus gains more positive affect through exposure (per the two-factor model) or positive affect results from ease of processing (per Reber, Winkielman, and Schwartz, 1998).

### **3.5 Attitude Polarization**

Mizerski (1995) conducted research regarding exposure effects of cartoon trade characters on product recognition and attitude. High levels of recognition of characters and associated products were found. Recognition and favorable attitudes toward the product were positively associated with objects for most products tested. The association was negative, however, for cigarettes and matches.



Mizerski (1995) cites other research (Goldberg, Gorn, and Gibson, 1978; Gordon and Holyoak, 1983) that has shown that exposure effects for a stimulus tend to generalize to other, associated stimuli—in this case, the exposure effect for the cartoon character is considered to generalize to the product associated with it.

Mizerski (1995) shows that as child subjects become older, their recognition for the cartoon character, Joe Camel (associated with Camel cigarettes) increases, but attitudes toward smoking become more negative. Based on this evidence, Mizerski asserts that repeated exposures to positive images increase positive affect for the image and repeated exposures to negative images increase negative affect. Accordingly, mere exposure effects are polarization effects. Thinking about attitudes (positive or negative) intensifies them.

Mizerski (1995) acknowledges the possibility of demand effects with this research. There are also other possible explanations for the results. Children receive many messages regarding the harmfulness of cigarette smoking independent of exposures to Joe Camel such as various anti-smoking campaigns. These are likely to confound the results.

Despite possible methodological questions that may be raised regarding this study, Mizerski's (1995) proposition cannot be dismissed entirely. Support for attitude polarization comes from Tesser and Conlee (1975) who show that when individuals think about visual stimuli (news photos), attitudes toward the stimuli tend to polarize. Positive attitudes toward the images become more positive and negative attitudes become more negative. Evidence from other studies cited previously (Harmon-Jones and Allen 2001 and Reber, Winkielman, and Schwartz, 1998), however, indicate that exposure effects are specifically positive, at least during the stimulus habituation stage of the two-factor model.

Having acknowledged the challenges presented by nonspecific activation and attitude polarization, and the challenges to Bornstein's (1989) modifications, the two-factor model, nevertheless appears to remain the most comprehensive and useful model for the analyses that will follow. Understanding of changes in affect due to repeated exposures is enhanced with a consideration of the forms the affect can take.

#### **4. SOURCES OF AFFECTIVE RESPONSES**

Studies of exposure effects present various types of stimuli under various conditions. They consider affective responses to repeated exposures. A consideration of sources of affect help to explain the different manifestations of exposure effects in different studies. While the two-factor model gives general insight to exposure effects for visual images in general, an understanding of sources of affect may help to identify differences between types of visual stimuli.

Hoffman (1986) developed a scheme for how affect and cognition interact. He identified three classifications of response to a stimulus event:

##### **4.1 Direct affective response to physical features of a stimulus:**

This is the least complex of the three responses. It can take the form of an unconditioned response, a conditioned response, or mimicry. These responses result from inherent aesthetic appeals of unconditioned stimuli. They also result as responses to conditioned stimuli that have become associated with positive or negative affect directly, without specific semantic meaning being attached to them.

This first source of affect is important because of the effects it can have on preference for stimuli that are being tested for exposure effects. There is a problem in an experiment for exposure effects if the various stimuli in a study elicit different unconditioned or conditioned responses—they will moderate or confound the results.

##### **4.2 Affective response to the match between stimulus and representation:**

This sort of response occurs when a stimulus matches, or fails to match a stored representation or schema. The response in each case depends on whether the schema is affectively charged. This can be represented in the following four-cell classification:

|                | Match | Mismatch |
|----------------|-------|----------|
| Charged schema | 1     | 2        |
| Neutral schema | 3     | 4        |

In Cell 1, the stimulus is matched with an affectively charged schema and the same affect is evoked for the stimulus. This would be an example of polarization of affect as proposed by Mizerski (1995).

The situation represented by Cell 2 is when the stimulus resembles an affectively charged schema but turns out not to match. This inability to assimilate a stimulus is inherently upsetting. This reaction coincides with Zajonc's (1968) idea that stimuli are perceived as threatening when presented for the first time.

In Cell 3, a certain amount of pleasure comes from being able to match or assimilate a stimulus, but once the stimulus is assimilated, interest is lost because the stimulus is not affectively charged. This is the case that is referred to as "mere" exposure in the sense that the positive affect comes from familiarity (through exposure) alone. Since there is no other basis for the affect the boredom effect follows.

An example of Cell 3 is found in a study by Janiszewski (1993). In this study, subjects viewed specially created newspapers. The stimuli under study were presented as advertisements in the newspapers and were observed as incidental exposures while reading adjacent articles. In an actual marketing context, with so many stimuli competing for attention, exposures to an advertisement may be no more than incidental. The experience of visiting a Web page and viewing the sought-after content while having incidental exposure to the banner ads and the logos displayed within them is very similar to the experience created in Janiszewski's (1993) study. Processing of the incidentally exposed ads and logos may be insufficient for the development of positive associations with them. There may be, however, a subconsciously formed representation of the stimulus. Mandler, Nakamura, and Van Zandt (1987) might consider this to be nonspecific activation. According to the Janiszewski (1993), however, the affect is specifically positive. The feeling of familiarity that comes from the ability to match the stimulus to a schema is positive affect. That positive feeling is then associated with the stimulus.

Hoffman (1986) indicates that the preference for novelty effect is illustrative of Cell 4. In Cell 4 the stimulus fails to match a schema that is affectively neutral. Hoffman (1986) posits that the stimulus will appeal to the individual because it is novel. According to the conclusions of Bornstein's (1989) meta-analysis of exposure effects, however, this positive response to novelty is most likely to occur in cases of individuals who have low anxiety levels, are very prone to boredom, and are very tolerant of ambiguity. These are the individuals least expected to be susceptible to exposure effects. The response that is more generally expected according to the two-factor model of exposure effects (Berlyne, 1970; Stang, 1973, 1974) is the perception of threat from the new stimulus (Zajonc, 1968).

Hoffman (1986) refers to the degree of match between a stimulus and a schema. Clearly, a binary, "match" or "no match" evaluation is an oversimplification. Perhaps because he acknowledges a continuity, Hoffman (1968) does not deal with the case where the new stimulus doesn't resemble any specific schema and is purely novel. From his description of the four cells, this case would most reasonably fit in the fourth cell. The assumption is that the response to a stimulus that fails match or resemble any schema is essentially the same as a stimulus that resembles but fails to match a stimulus that carries no affect.

#### 4.3 Affective response to the meaning of a stimulus:

The first two of Hoffman's (1986) modes of affective response involve the person responding to the physical features of the stimulus. This third mode involves the meaning of the stimulus—the semantic meaning or perhaps some deeper meaning. This involves "higher order cognitive processing, in which the affective response is based on the meaning of a stimulus beyond its physical features. The processes

involved, often interrelated and overlapping, are categorization and appraisal of the stimulus (Hoffman, 1986)."

In the categorization process, categories and prototypes may be formed and associated with affect. Stimuli that fit in the category assume the affect. As an example, fans of heavy metal music become familiar with the logos of the various heavy metal bands. These tend to be rendered in a distinctive style, featuring a spiked appearance. Fans of this style of music often wear (black) T-shirts exhibiting the logo of a favorite band. They have positive affect for the logo as well as the band. They may form a category of heavy metal images with an associated affect. They are able to recognize prototypical aspects of the design style. If, when presented with a new image in the same distinctive style, they consider it to fit within the category, the affect associated with the category becomes associated with the new stimulus as well.

The appraisal process is a determination of the importance of the stimulus to the individual's self. Hoffman (1968) presents this process in terms of events and situations as stimuli rather than visual images as stimuli. The process is also very important, though, for affect regarding visual images. Consumers often communicate their self-image, or aspired self-image, through the brands they purchase and the trademarks they display (Grubb and Hupp, 1968; Holman, 1980, 1981).

Intentionally or not, marketing practitioners occasionally tap this third source—ffective response to the meaning of the stimulus. As an example, the Harley Davidson brand and its trademark are rich with meaning. An entire subculture has developed around that brand, members of which display the trademark on their clothing and even as tattoos (Schouten and McAlexander, 1995). It is not likely that these consumers will soon experience boredom effects in regard to that particular trademark design.

This third source of affective response is particularly important because it may represent an opportunity for practitioners to delay or avoid the boredom effect of the two-factor model. There is support from the literature for this notion. In some situations, consumer products or other objects attain a transcendent importance for individuals. Belk, Wallendorf, and Sherry (1989) indicate that "consumption involves more than the means by which people meet their everyday needs. Consumption can become a vehicle of transcendent experience; that is, consumer behavior exhibits certain aspects of the sacred." Sacredness is associated with permanence as is indicated by sacralization processes including collecting and inheritance. Similarly a logo that becomes imbued with deep meaning is not expected to be subject to boredom effects. Additional ideas about transcendence support this assertion.

Puto and Wells (1984) explain how transformational advertisements "'transform' the experience of using the brand by endowing this use with a particular experience that is different from that of using any similar brand." Transformational advertising endows the brand with meaning beyond the meaning assigned by the intrinsic features of and normal consumption of the brand. If a brand achieves a transcendent or sacred status, it follows that the trademark that represents the brand will also achieve elevated status, and with such status, is not likely to become boring.

Solomon (1983) uses a symbolic interactionist approach to explain how an individual's self-image can develop based on products consumed. The trademark of such a product will therefore be symbolic of the self-image of the individual. If a trademark achieves such a level of social and personal meaning, it is unlikely that the individual will become bored with it. Instead, the individual may be resistant to changes in the trademark that may indicate possible changes to the self-image. In other words, strong meaning associated with a visual image can delay or eliminate boredom effects for the image.

Bornstein's (1989) meta-analysis determined that while exposure effects are robust, effect sizes are small. Meaning associated with the stimuli may have a greater effect on preference ratings for the stimuli than do exposure effects. This notion is supported by exploratory research which involved respondents looking at a set of eleven color photographs, stating liking or disliking, and the associated reasons (Pimentel 2003). Favorite images and other highly favored images generally had some special meaning for the respondent. For example, one respondent liked a picture of quilts because it reminded him of growing up in Indiana. Others rejected certain images because "that doesn't relate to me."

In examining the studies of exposure effects, it may be important to determine whether some of the affect toward the stimuli comes from direct affective responses to the stimuli, or affective responses to meaning as well. The following sections of this report will identify various types of corporate image designs, then categorize and examine visual stimuli exposure effect studies that relate. These studies will be considered in terms of both the modified two-factor model of exposure effects (Berlyne, 1970; Stang, 1973, 1974) and the Hoffman (1986) framework of sources of affective response.

## 5. LOGOS AND EXPERIMENTAL STIMULI

Corporate image symbols can take various forms. Some are wordmarks where the design incorporates the name of the brand. An example is the familiar Kellogg's trademark (Figure 1), which is merely the Kellogg's name in red stylized script. Others are icon-type trademarks composed of visual images, but no text. The visual images vary in levels of abstraction from the representational "Good Hands" of Allstate Insurance to the abstract Nike swoosh (Figure 1). Finally there are trademarks that combine an icon and the brand name, such as the old Pepsi trademark with the brand name at the center of the red and blue circle (Figure 1). Currently, generalizable information about preferences between these different types of trademarks does not exist, but the stimuli used in exposure effects research are in similar forms to these categories of images.

FIGURE 1



Bornstein's (1989) meta-analysis of twenty years of exposure effect research presents data regarding effect sizes for different types of stimuli. With the exception of one type, all the stimuli show positive exposure effects and impressive *p* and Fail-safe *N* scores. The effect sizes were calculated from studies combined within the meta-analysis. Bornstein goes a step too far with the analysis, however, when he compares the size of the effect between the different types of stimuli to each other because many of the data that were used for the comparisons did not come from studies that compared these different types of stimuli against each other. The few studies that did make these comparisons do not show differences in exposure effects for different types of visual stimuli (Berryman, 1984; Colman, Walley, and Sluckin, 1975; Stang and O'Connell, 1974; Zajonc, 1968).

A number of different types of visual stimuli have been used to test various aspects of exposure effects. The following is a review of some of those studies. Visual stimuli have been categorized to coincide with the various forms that trademarks or other corporate identity designs may take: real words (e.g. the word "Ivory" in the Ivory soap trademark), acronyms and contrived words (e.g. "IBM" and "Xerox"), representational pictures (e.g. Prudential's Rock of Gibraltar), and abstract pictures (e.g. the Nike swoosh).

## 6. REAL WORDS

Research regarding exposure effects for real words is somewhat problematic as the number of exposures cannot be controlled. Instead, most studies regarding real words use some form of word count to determine the general frequency of usage of different words (Busse and Seraydarian, 1978; Johnson, Thomson, and Frinke, 1960; Thorndike and Lorge, 1944; Zajonc, 1968). The assumption is made that subjects will have had more exposures to those words that are used more frequently.

The general finding of these studies supports the stimulus habituation aspect of the two-factor model. A positive correlation is found between the frequency of usage of a word and the rated favorableness of the word. Such studies only measure correlation, however, and do not indicate directional causality. It

remains unclear which effect is stronger—words becoming more favorable due to greater usage, or greater usage of words that are considered more favorable.

Research by Colman, Walley, and Sluckin (1975) helps to illustrate the applicability of the two-factor model of exposure effects to real word stimuli, including the boredom effects (Berlyne, 1970; Stang, 1973, 1974). Paired comparisons were used to determine preferences for very common two-syllable words versus relatively uncommon two-syllable words.

The findings of the experiment were that the older subjects (ages 18-21) were more likely to prefer uncommon words than were younger subjects (ages 7, 9, and 10). The authors interpret the results to indicate that favorability increases with familiarity, but that excessive familiarity diminishes liking. “[W]e may infer that when a word is totally unfamiliar it is little liked, when it is known but is still rather strange then it is liked maximally, and when a word is highly familiar then it is not much liked—a clear inverted-U relationship between familiarity and liking (Colman, Walley, and Sluckin, 1975).” This illustrates the stimulus habituation, followed by boredom of the two-factor model (Berlyne, 1970; Stang, 1973, 1974).

While the Colman, Walley, and Sluckin (1975) study illustrates the model well; some cautions are necessary regarding the results. To believe the results, it is necessary to accept some significant assumptions. In this case it is necessary to assume that age of subjects and commonness of words are reasonable measures of how many exposures of a word a subject has received. One must also assume that exposure effects accumulate in a relatively linear fashion over many years. We must also assume that there were no significant confounds such as the literacy of the subjects or variations in the popularity of words over time or among different groups, despite relatively small sample sizes (20 subjects per age group).

Affective responses for real words may come from all three sources of the Hoffman framework (Hoffman, 1986). The portion of Zajonc's (1968) study that pertains to real words draws mostly from the first and the third sources of affective response.

The first source is the direct (conditioned) affective response. In this context, the affective response is not based on the semantic meaning of the words, but rather on the aesthetic appeal of the words themselves, the graphic design of their presentation, or conditioned associations with the words (independent of the actual semantic meaning of the words). Words such as “war” and “hate” could gain associated affect based on the association of these words with emotional experiences. These are two of the words that were used in Zajonc's (1968) study.

The second source of affective responses from the Hoffman (1986) framework, would apply if the meanings of the words were unknown to the subjects and the words had not been conditioned in any way. The portion of Zajonc's (1968) study that regards real words involved the correlational evidence from the word count rather than an experiment of controlled exposures. It is impossible to know the relative amount of subliminal versus supraliminal exposure. So the second source of affective response is not applicable in this case.

These first two sources of affect involve responses to the physical features of the stimulus. The third source of Hoffman's (1986) framework involves responses to the meaning of the stimulus. The words “war” and “hate” which were discussed in relation to the first source of affect may also result in affect because of their valenced semantic meaning. Some words, such as “liberty,” and “atonement” may result in an especially thoughtful affective response.

These findings indicate that a marketer who is considering the inclusion of a real word in a corporate image design must realize that while very common words benefit from familiarity, they may suffer later from boredom effects. Less common words, that maintain an aspect of strangeness after repeated exposures, may be preferred for a longer time period. Even so, marketers must be aware of the possibility of eventual boredom effects.



Anecdotal evidence suggests, as has been proposed, that boredom effects in regard to real words are not inevitable. Procter and Gamble uses real words as brand names and includes these names in the brand identity designs. For example, Tide detergent is strong after more than fifty years, and Ivory soap is strong after more than a century. Trademarks and packaging designs for these brands have been gradually transformed over the years (which is one possible response to the threat of boredom effects), but the brand name has remained the same. I suggest that Procter and Gamble has been able to avoid the boredom effects for these brand names by developing meaning for them involving the image of the brand and its place in the life of the consumer. As a consequence, affective response for these names often comes from Hoffman's (1986) third source—*affective response to the meaning of the stimulus*. It is a proposition of this study that such meaning delays boredom effects.

## **7. ACRONYMS AND CONTRIVED WORDS**

This category of stimuli is more meaningful in the laboratory than in the marketplace. This is because contrived words and acronyms introduced in a marketing context often attain sufficient meaning to be perceived more as real words. "Cellophane" began as a contrived word, but ultimately became part of the public domain. The acronyms "IBM" and "AT&T" are at least as recognizable as the full names: "International Business Machines" and "American Telephone and Telegraph." These, and many other acronyms, are used as if they were real words.

Despite the tendency for contrived words to become as real words, there is some value to reviewing research regarding contrived words. The greatest expected value for marketing would be implications for the introduction of new contrived words or acronyms.

Empirical studies regarding exposure effects for acronyms and contrived words have utilized seven-letter nonsense words (Berryman, 1984; Stang and O'Connell, 1974; Zajonc, 1968) and CVC (consonant-vowel-consonant) trigrams (Colman, Walley, and Sluckin, 1975; Zajonc et al., 1972). The studies consistently show the stimulus habituation aspect of the two-factor model for exposure effects; with higher preference ratings associated with more exposures plus boredom effects from too many exposures. The effect sizes, however, were small and unmeasured factors other than the number of exposures had greater impact on the perceived positive affect associated with the stimuli. In the Zajonc (1968) experiment, differences in ratings between words, were greater than the differences between low and high frequency of exposures. Apparently there are additional dynamics besides mere exposure at work, since some stimuli are rated higher than other stimuli with more exposures. Subjects made evaluative comments about the stimuli such as "*cug* was ugly: I didn't like it at all (Colman, Walley, and Sluckin, 1975)."

The implications for marketing are that attitudes toward a new contrived word or acronym are likely to improve with repeated exposure, but both Zajonc (1968) and Colman, Walley, and Sluckin (1975) showed that some contrived words are inherently more appealing than others. As with real words, it is expected that boredom effects can be delayed by developing significant meaning associated with the stimulus.

## **8. REPRESENTATIONAL PICTURES**

Research regarding exposure effects for representational pictures has included pictures of faces (Bornstein, Leone, and Galley, 1987; Cantor, 1972; Zajonc, 1968), animals (Berlyne, 1971), and cartoon characters (Mizerski, 1995) as stimuli. Zajonc (1968) tested for a positive relationship between the number of exposures and the mean liking rating for the stimulus and found such, illustrating the stimulus habituation aspect of the two-factor model (Berlyne, 1970; Stang, 1973, 1974). Berlyne (1971) showed the boredom effects aspect of the model. His subjects rated novel stimuli as more "pleasing" and more "interesting" than stimuli that had been viewed repeatedly. In his experiment, which was described previously, Cantor (1972) showed both stimulus habituation effects (for pictures of children of a different race than the subjects) and boredom effects (for pictures of same-race children). Mizerski's (1995) study of cartoon characters, also described previously, showed somewhat divergent findings as he concluded that repeated exposures result in polarizing effects.



Bornstein et al. (1987) conducted an experiment with faces as stimuli. This study is particularly important because it is designed to show the size of the exposure effect for this type of stimulus. In this well-controlled experiment, Bornstein et al. (1987) used neutrally valenced stimuli and subliminal exposures to effectively eliminate the likelihood that the stimuli could become conditioned or acquire meaningful associations. So, according to the Hoffman (1986) framework, the only expected affect would come from the second source of affective response—affect resulting from the ability to match the stimulus with a (subliminally) stored schema.

The Bornstein (1989) meta-analysis concluded that subliminal exposures are favorable for exposure effects. Accordingly the effects were found to be statistically significant in this case, showing an increase in positive affect ratings. However, Bornstein's (1989) meta-analysis also concluded that while exposure effects are robust, the effect size is small. This study (Bornstein, Leone, and Galley, 1987), which preceded the meta-analysis, was designed to measure the effects specifically from mere exposure and found that subjects preferred previously exposed stimuli to new stimuli only 58% of the time.

Many representational pictures are used as part of the visual representation of branded products. Marketers implicitly acknowledge the two-factor model of exposure effects (Berlyne, 1970; Stang, 1973, 1974) in relation to these images. The importance of exposure to create acceptance for the image is well known. The danger of boredom effects is also a concern. Marketers deal with this danger in two ways. As has been proposed, one method is to create as much meaning for the image as possible. Accordingly, McDonald's builds meaning for Ronald McDonald through advertising, promotional appearances, and through association with a meaningful charitable program of Ronald McDonald Houses. Another possible method to delay or avoid boredom effects is to make periodic updates in the design of the image. Tony the Tiger, Betty Crocker, and Snap, Crackle, and Pop have all evolved over the years. This possibility was tested by research that included progressive changes in familiar logo designs (Pimentel and Heckler 2003). The results of this study were that subjects consistently preferred existing versions of the logo designs over any degree of change—boredom effects were not evident for these well-known logos despite years of repeated exposures.

## **9. ABSTRACT PICTURES**

Some trademark designs appear to be purely abstract. Examples include Chrysler's former pentagon design and the Nike swoosh (Figure 1). Even though these may be purely abstract in design, they often have some symbolic meaning and are at least representational of the associated company, or product. The following studies regarding abstract pictures include stimuli that are completely non-representational. The findings of these are relevant to the marketing practitioner who is interested in determining preference for alternate designs for a trademark for the same brand.

Research regarding abstract pictures include such stimuli as "Chinese" ideographs (Saegert and Jellison, 1970; Zajonc, 1968), irregular polygons (Bornstein, Leone, and Galley, 1987; Kunst-Wilson and Zajonc, 1980; Mandler, Nakamura, and Van Zandt, 1987), Welsh figures (Bornstein, Kale, and Cornell, 1990; Cantor, 1968), optical illusions such as the Poggendorf illusion and the Zöllner illusion (Bornstein, Kale, and Cornell, 1990), and possible and impossible three-dimensional geometric figures (Seamon et al., 1995).

The findings of most of these studies are consistent with findings from studies using other types of stimuli. The stimulus habituation aspect of the two-factor model (Berlyne, 1970; Stang, 1973, 1974) is illustrated by findings of positive relationships between the number of exposures and average goodness ratings of stimuli. These results were found by Zajonc (1968) and Saegert and Jellison (1970). The latter study, however, included conditions of higher numbers of exposures and a distinct downturn in positive affect toward the stimuli is seen at the 25-exposure level.

One study of abstract images has findings that run counter to these other studies. Cantor (1968) used Welsh figures as stimuli and found unfamiliar images to be preferred over images that had been presented previously. There are no glaring methodological problems with the study and no ready

explanation for the contrary findings. It may be interesting to see if which of the conflicting studies' results can be duplicated.

## 10. COMPARISONS BETWEEN TYPES OF STIMULI

This study has criticized Bornstein (1989) for ranking various types of stimuli in terms of exposure effects. The criticism was based on the concern that the data was not, for the most part, collected as comparisons between types of stimuli. There were a few studies that made such comparisons, but they did not show much difference in exposure effects for different types of stimuli and do not give meaningful direction for practitioners. Consequently, they will not be presented here.

## 11. CONCLUSION

Zajonc (1968) observed: "The foremost proponent of this hypothesis, the advertising industry, has always attributed to exposure formidable advertising potential. But—apparently, in respect for the law of enhancement by association—it seldom dared to utilize *mere* exposure. The product, its name, or its hallmark is always presented to the public in contiguity with other and always attractive stimuli, commonly females, exposed more boldly than the product itself."

It appears to be advisable for marketers not to rely entirely on pure *mere* exposure, especially if we were to accept the nonspecific activation hypothesis (Mandler, Nakamura, and Van Zandt, 1987), and even if we do not. *Mere* exposure would limit affective response to the second of Hoffman's (1986) sources, which results only in the positive affect that results from being able to match the stimulus to a schema. It is much wiser for marketers to create positive associations for the stimulus. This can allow for conditioning and the first of Hoffman's (1986) affect sources. It may also create sufficient meaning for affective response from Hoffman's (1986) third source. In some situations, however, marketers' opportunities to create associations are limited. For example, when consumers surf the Internet, their exposure to the brand may be no more than incidental exposure to banner ads that are placed on Web pages of interest to the consumer. In this case, mere exposure effects may be the most significant benefit of the exposure to the ad.

Certainly, marketing practitioners seek to accomplish other objectives with repeated exposure in addition to increased preference for the logo. They also seek to build awareness for the brand and provide reminders to maintain the brand in the evoked sets of the consumers. It is not the intent of this paper to dissuade marketers from the use of repeated exposures, but merely to point out that such exposures are more effective for building preference when positive associations are included, because, as has been shown, while exposure effects are robust, effect sizes tend to be small.

Due to the small effect sizes of exposure effects, their value may be most significant as a tie-breaker. In low-involvement choice situations, consumers look to peripheral cues and heuristic processes to make decisions. In some cases, the improved affect toward the object from mere exposure effects may be enough to tip the scales. This notion is supported by research by Shapiro, MacInnis, and Heckler (1997). In their experiments, subjects were exposed incidentally to advertisements on the periphery of a computer screen while concentrating on other content on the screen. This is very similar to the experience of looking at content on a Web page that also has banner ads. They showed that such incidental exposure can improve a brand's chances of being included in a consumer's consideration set.

It is also important for marketers to consider the two-factor model of exposure effects (Berlyne, 1970; Stang, 1973, 1974). When introducing a new acronym, contrived word, or abstract picture as part of a corporate image design, it is important to provide for sufficient exposure to achieve stimulus habituation. It is also important to plan to delay or avoid the boredom effects, as has been proposed, by creating strong associated meaning for the image.

## 12. FUTURE RESEARCH

This study has drawn on laboratory experiments to make inferences about dynamics involving real-world logo designs. The study of actual logo designs is difficult because so many uncontrollable variables are introduced by the marketplace. Nevertheless, it is important to validate the generalizability of laboratory research to the marketplace. A longitudinal study may be able to show changes in affect toward logo designs over time, and consequently over more repeated exposures.

It may be instructive to examine exposure effects in the context of the elaboration likelihood model (Petty, Cacioppo, and Schumann, 1983). Intuitively, it seems that low-involvement processing would involve mostly the first two sources of affective response, while higher-involvement processing would focus on the associated meaning per the third source of affect.

Additional research could look specifically at banner ads and test for incidental exposure effects. It may be instructive to also examine the more obtrusive pop-up ads and determine whether there is conditioning that takes place for logos when they are included in an unpopular form of advertising.

It has been recommended that marketers improve affect toward logos by developing positive associated meaning for them. Future research could investigate how such meaning can be associated specifically with the logo design. Ideally, the logo should be well enough associated with the brand that its appearance will bring the positive equity of the brand to the mind of the consumer.

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## ENVIRONMENTAL MARKETING: A THEORETICAL MODEL

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### ABSTRACT

This paper develops a theoretical model of environmental marketing. Central to this model is the interaction over time and culture of the marketing environment, environmental marketing and marketing the environment. The model suggests that researchers are better served by viewing environmental marketing from an ontological point of view than from an ethical point of view. Environmental marketers can utilize this model to gain insight into future trends in the environmental movement.

*Keywords:* Environmental Marketing, Environmental Stewardship, Biophilia, Marketing Environment, De-marketing.

### 1. INTRODUCTION

Environmental Marketing, also referred to as Ecological Marketing (Henion, 1976), Eco-marketing (Fuller and Butler, 1994), Green Marketing (Wasik, 1996; Ottman, 1998; Smith, 1998), and Sustainable Marketing (Fuller, 1999), offers a new perspective to marketing planning and the larger domain of business decision making (Coddington, 1993, p.x). The multiplicity of names for the field reflects the multiplicity of theoretical viewpoints taken by researchers in the field. The lack of a central definition is common to fields of research in the pre-paradigmatic stage (Kuhn, 1962, pp. 15-19). Without a rigid central definition, research becomes a nearly random activity characterized by divergence of fact gathering and analysis.

Theoretical models provide a powerful tool for formal conceptualization (Nash, 1963, pp.227-230). Scholars such as Kaplan (Kaplan, 1964) and Merton (Merton, 1949) assert that theory provides answers to the question of "why". Sutton and Staw are more specific in saying that theory develops connections amongst phenomenon, identifying the structure and timing of causal events (Sutton and Staw, 1995, p.378). Bacharach defines theory as "a statement of relationships between units observed or approximated in the empirical world" (Bacharach, 1989, p.496).

Weick has described the process of theorizing as "disciplined imagination" (Weick 1989, p.516). Thus, theorizing can take a variety of forms, ranging from attempts to disassemble a gestalt to the prescriptive models taught in medical schools (Weick, 1995). Freese has outlined two different strategies for theory building: inductive reasoning to build theories which explain and generalize about phenomenon and idealized reasoning to build theories which have engineering applications (Freese, 1980, p.191). Christensen et al. argue that theory building is an iterative process that requires both kinds of reasoning (Christensen, Carlile et al., 2002, p2). While the process of theorizing is complex and difficult to enunciate, the results of good theory building appear to be relatively easy to discern. Davis postulates that the success of any theory-building effort is based on the interest that the theory creates (Davis, 1971, p.309).

This paper develops a theoretical model of environmental marketing. This model shows an iterative process whereby the marketing environment creates an opportunity for environmental marketing. This results in corporations marketing a vision of the environment as embedded in their product marketing. This new vision of the environment leads to a new marketing environment setting the stage for another iteration of this cycle. These cycles are driven in an expansive manner by the force of consumerism and in a contractive manner by the force of consumer's altruistic behavior.

The paper proceeds as follows: The literature surrounding environmental marketing is reviewed, setting the stage for the development of a comprehensive theory. A conceptual model of environmental marketing is introduced and each of its component parts is described. The underlying forces driving the

environmental marketing cycle are discussed. The paper concludes with a discussion of the implications of this model.

## 2. LITERATURE REVIEW

Environmental marketing is generally posed as an ethically-based stance (Tokar, 1987, etc; Coddington, 1993). Firms adhering to an ethically based marketing stance and acting in a socially and environmentally responsible manner develop a reputation that has been shown to provide a source of competitive advantage (Frause and Colehour, 1994; Miles and Covin, 2000).

Conflicting definitions used by researchers has hampered the development of Environmental Marketing as a field of study. Table 1 reviews a number of these definitions.

**TABLE 1**  
**THE DIVERSITY OF DEFINITIONS OF ENVIRONMENTAL MARKETING**

| Author and Citation                         | Definition  |
|---|---|
| Walter Coddington (Coddington, 1993, p.1)   | Marketing activities that recognize environmental stewardship as a business development responsibility and business growth opportunity.   |
| Donald A. Fuller (Fuller, 1999, p.4)        | The process of planning, implementing and controlling the development, pricing, promotion and distribution of products in a manner that satisfies the following three criteria: (1) customer needs are met (2) organizational goals are attained and (3) the process is compatible with ecosystems. |
| Polonsky (Polonsky, 1995, p.3)              | Green or Environmental Marketing consists of all activities designed to generate and facilitate any exchanges intended to satisfy human needs or wants, such that the satisfaction of these needs and wants occurs with minimal detrimental impact on the natural environment.                      |
| Guber (Guber, 2003)                         | Identifying and targeting the "ecologically concerned consumer"   |
| Polonsky (Polonsky and Mintu-Wimsatt, 1995) | The application of marketing concepts and tools to facilitate exchanges that satisfy organizational and individual goals in such a way that they preserve, protect and conserve the physical environment  |

Central to each of these definitions is an ethically based stance. This stance is based on an ethical dilemma: how can consumption, which leads to degradation of the natural environment, be modified to mitigate this impact (Coddington, 1993, p.2; Tokar, 1997, pp33-35)? Embedded in this dilemma is a number of conflicting positions that differing cultures hold about the nature of the environment (Moisander and Pesonen, 2002). Brian Tokar has described the range of these conflicting positions by comparing the Chipko environmental movement of the indigenous women of the Himalayan highlands of northern India, which is based in a belief in the predominance of the role of forests to act as vital to the replenishment of the earth, to the Western environmental movement, which is a fundamentally anthropocentric argument over whether forests are public or private property (Tokar, 1997, p.161).

The poles of these conflicting positions can be described as a human-centered (environmental stewardship) position (Homer-Dixon, 2000) and nature-centered (biophilia) position (Wilson, 1984). These conflicting positions of environmentalism are embedded in the founding of the American environmental movement (Shabecoff, 2000, p31). Transcendentalist writers, such as Emerson (Emerson, 1979) and Thoreau (Thoreau, 1957), sowed the seeds for American environmental awareness in the 19<sup>th</sup> century. This nature-centered vision grew into human-centered public policy with the formation of the National Forest System under the guidance of Theodore Roosevelt and Gifford Pinchot (Frome, 2002, pp.121-122).

The 1945 firebombing of Dresden (McKee, 1982) and atomic bombing of Hiroshima (Hersey, 1986) created an awareness of the environmental devastation made possible by new technology. When, in 1948, an atmospheric inversion in Donora, Pennsylvania trapped gas from a zinc works leading to the death of twenty people, Americans experienced the immediate effects of misused technology. This tragedy led to the Air Pollution Control Act of 1955; an important piece of environmental stewardship legislation. In 1962, Rachael Carson published Silent Spring (Carson, 1962), which challenged the practices of agricultural scientists for Americans to adopt a more biophilic view of the natural world. Throughout the 1960's, economists debated the sustainability of the increasing human population (Røpke, 2004, p.297).

The founding of Earth Day on April 22, 1970 by Gaylord Nelson (Nelson, Campbell et al., 2002) is generally credited with coalescing concern over environmental problems into a mainstream movement in America. The impact of 20 million Americans demonstrating their support for environmental reform in public policy led marketers to see socially conscious consumers as an important new segment (Anderson, 1972).

A number of studies have explored the characteristics of the environmental movement in an attempt to profile the environmentally conscious consumer (Cornwell and Charles, 1995; Pickett, Kangun et al., 1995, to name a few; Guber, 2003). These studies have developed a number of typologies of environmental consumers (Roberts, 1996 for a summary). These typologies range from four archetypes based on moral suasion (deep ecologists, self reliance soft technologists, environmental managers and cornucopians) (Rothenberg, 1989) to five archetypes based upon environmental activism (true blue greens, greenback greens, sprouts, grouzers, basic browns) (ASW, 2002). Common to all of these typologies are polar positions, which can be summarized as the environmental stewardship position and the biophilic position.

The environmental stewardship position has been described by Huber as a position which claims that market efficiencies will overcome potential scarcities of resources (Huber, 1999, p.195). This argument claims that human intervention transforms nature into wealth. Embedded in this position is an acceptance of consumption as essential to the construction of social capital (Holt, 1998). Environmental stewardship evokes the promise of sustainable development (Weinberg, 2000). Sustainable development is conceptually acceptable to a diversity of constituents, but has proven to be difficult to enact due to the inevitable conflict between the priorities of the economy and the environment (McKenzie-Mohr and Smith, 1999; Giddings, Hopwood et al., 2002, p.188). Damage to the environment caused by production systems is difficult to measure and thus tends not to be internalized into the cost of production (Hawken 1994, p.82). Thus the environmental stewardship position tends to be reduced to responsibility for reducing waste and maximizing the use of resources (Makower, 1993).

The biophilic position claims that humans must learn to exist within the more powerful context of nature. Wilson coined the term *biophilic management* to denote the responsibility of humans have to preserve biodiversity in order to ensure their own survival (Wilson, 1984). The biophilic position is induced from mankind's aversion of the apocalyptic consequences of overpopulation, pollution, resource depletion and global warming (Oates, 2003, p.63). Mankind's existence within the context of the natural world requires transcendence of immediate self-interest. The identification with other life offers the promise of profound new insights into the human condition (Bateson, 1972; NicholSEN, 2002). However, Smith points out that the biophilic disavowal of individuals immediate self-interest results for more noble purposes does not represent a compelling argument to many people (Smith, 1998, p.49).

Inherent in both the environmental stewardship position and the biophilic position is the conceptualization of environmentalism as an ethical issue. Naess has offered an alternative perspective to viewing environmental issues as an ethical issue. He suggests that environmental issues can be framed as inherently ontological rather than ethical in nature (Næss and Rothenberg, 1989, p.17). Naess has suggested that the ethical dilemma of environmental issues will disappear when an ecological perspective is taken. Naess described this position as *ecosophy* which he defined as "a position or point of view concentrating on relations to nature" (Næss and Rothenberg, 1989, p.37).

When environmental issues are framed in an ontological context, their nature can be studied with temporal and cultural flexibility. Isaac suggests that environmental entrepreneurs such as Ben Cohen, Jerry Greenfield and Anita Roddick utilize the temporal flexibility of environmental issues opportunistically (Isaac 2002, pp.82-83). Companies such as Ben and Jerry's and the Body Shop were formed by counter-culture entrepreneurs as statements of social responsibility and grew as their customers adopted these companies' pro-environment tenets. Management researchers suggest that global companies utilize the cultural flexibility of environmental issues opportunistically to build market value (Dowell et. al., 2000). The theory developed in the next section of this article explores the temporal and cultural flexibility of environmental marketing.

### 3. THEORY DEVELOPMENT

This paper sets out a theoretical model of environmental marketing, which consolidates the extreme positions of both the deep ecologists and the supporters of biophilic management. Central to this model is the interaction over time and cultures of the marketing environment, environmental marketing and marketing the environment. The opposing motivators of consumerism and altruism drive recursive cycles of this model. This model is shown in graphic form in Figure 1. The balance of this section describes each of the components and their interaction.

**FIGURE 1  
CONCEPTUAL MODEL**



#### 3.1. Marketing Environment

Essential to competitive marketing strategy is the notion of fit between the firm's product and the marketing environment (Hunt, 2000, pp.11-12). Corporations, which desire industry leadership, must develop foresight to enable them to provide benefits to their future customers (Hamel, Prahalad et al., 1994, p.73). Studying both the market currently served and future trends evolving in both un-served markets and unarticulated needs can help marketers to develop foresight (Hamel, Prahalad et al., 1994, p.103).

In a 1995 ethnographic study, anthropologists Kempton, Boster and Hartley found that American environmental values derive from three sources: religious values (God), anthropocentric values (humanity) and biocentric values (nature) (Kempton, Boster et al. 1995, p.87). They concluded: "most Americans share a common set of environmental beliefs and values" (Kempton, Boster et al., 1995,

p.211). However, Guber has found, through analysis of survey research, that “public resolve on the environment seems weakened by ambivalence, conflict and contradiction” (Guber, 2003, p.54).

It would appear that a common set of environmental attitudes are claimed by more than two thirds of Americans (Purdy, 2000). This constituency includes a wide variety of psychographic groups: educated professionals and the lower middle class, affluent suburbanites and inhabitants of small towns in the heartland (Sagoff, 1992). Survey respondents report concern over pollution of air, rivers, lakes, oceans, beaches and drinking water; contamination of soil and water by toxic waste; the loss of natural habitat for wildlife; the loss of open space and the loss of tropical rain forests (Gallup Organization, 2001).

However, while the majority of Americans support the protection of the environment, it would appear that the strength of this commitment is relatively shallow and transient (Guber, 2003, p.55). Research centered on consumer’s action rather than their opinion shows that respondents tend to engage only infrequently in simple and easy-to perform acts of environmental conservation (Pickett, Kangun et al., 1995, p.93; Guber, 2003, p.50).

Corporations have, in general, reacted to the paradox of strong American public opinion towards the protection of the environment coupled with a weak willingness to act by relegating initial environmental policies towards market practices. Corporate environmental policies have generally centered on reducing pollution caused by packaging, assessing the environmental impact associated with the life cycle of the product and planning for clean technology (Hart and 1997). Thus, environmental marketing has risen to the forefront of corporate environmental implementation (Polonsky and Mintu-Wimsatt, 1995, pp.6-8).

### **3.2 Environmental Marketing**

While scholars promote the development of ecologically sustainable organizations (Jennings and Zandbergen, 1995, p.1016), it would appear that corporations utilize their marketing efforts as the major form of ecological change in practice (Sheth and Parvatiyar, 1995, p3). Kleiner has claimed that corporate environmentalism hinges on three key issues (Kleiner, 1991, p3). The first involves what products are brought to market and how they are packaged; the second involves disclosure of pollution and health information; the third involves the implementation of corporate-wide pollution prevention. The first two of these issues tend to fall within the domain of environmental marketing.

Marketers can choose amongst three approaches to minimizing the impact their products have on the environment. The green marketing approach is based upon maximizing the environmental appeal of products or services to customers. Green marketers position their products so that they balance the consumers’ needs with a compelling argument of environmental compatibility (Ottman, 1998, p.45). The societal issue approach is based upon changing attitudes and behavior in an environmentally friendly direction. While this approach is often useful for government or philanthropic purposes, it can present challenges to marketers of products or services since people tend to gravitate to actions that have high benefits and low barriers (McKenzie-Mohr and Smith, 1999, p.3). The de-marketing approach is based on reducing the consumption of the product by reducing demand for the product. This position is generally not compatible with corporate strategic goals which are usually based upon expansionist economics (Smith, 1998, p.71).

An increasing number of marketers are offering products positioned on the basis of their environmental appeal to customers (Karna, Juslin et al., 2001, p.60). In a study of advertising done by the Finnish forest industry, Karna et al. found that consumer benefits of companies’ environmental efforts tended to be stressed in marketing communications (Karna, Juslin et al., 2001). This finding is in keeping with the paradox of strong American public opinion towards the protection of the environment coupled with a weak willingness to act.

Maniates claims that individualization of responsibility is a side effect of green marketing (Maniates, 2002). As consumers absorb the environmental appeal associated with products, they develop a sense of individual responsibility for the state of the environment. In order to create this individual response, each consumer develops a unique vision of the environment: a vision directed by his or her acceptance of environmental marketing claims.



### 3.3 Marketing the Environment

Princen has described *distancing* or the separation of production and consumption decisions as an important driver of environmental degradation (Princen, 2002, p.104). Modern consumers are distanced from the production of goods along geographic, cultural, bargaining power and agency dimensions (Princen, 2002, pp.116-127). Environmental marketing efforts create a dialogue with the consumer, which attempts to reconnect the distance between the consumer and the producer. However, this dialogue is 'shaded': the marketers' narratives are crafted rather than factual (Princen, 2002, pp.106-107).

As a by-product of environmental marketers' efforts, consumers have developed a new conception of the environment. Luke has described this process in this way: "The wild autogenic otherness or settled theogenic certainty of 'Nature' is being replaced by the denatured anthropogenic systems of 'the environment'" (Luke, 1997, p.9). Luke argues that much of today's environmental movement is a form of consumerism. Conca describes an appeal from the Sierra Club asking for involvement in solving the problem of logging in America's national forests. This appeal offered a free gift, a backpack with the Club logo, as an enticement for joining (Conca, 2002, p.134).

Purdy describes the oldest and most familiar of these constructed environmental visions: "romantic environmentalism" (Purdy, 2000). Romantic environmentalism arises from the scenic landscapes of America and has been institutionalized by groups such as the Sierra Club and parallels the green marketing approach to environmental marketing. Romantic environmentalists anthropomorphize wild animal groups such as dolphins, whales and wolves. Astute environmental marketing such as the "Develop Your Swing with the Power of the Pacific" campaign staged by Pacific Life & Annuity Company in 2004 reinforces this anthropomorphical vision of whales.

Purdy also describes a new and increasingly familiar constructed environmental vision: "environmental justice" (Purdy, 2000). Environmental justice attempts to address the relationships amongst race, poverty and environmental harm and parallels the societal issue approach to environmental marketing. Environmental justice arises from the environmental dangers found in inner city and poor neighborhoods. Environmental justice advocates draw on the tradition of social equity and distrust for big business and government.

The voluntary simplicity movement parallels the de-marketing approach to environmental marketing. Researchers have reported a group of affluent, highly successful middle-aged people who have chosen to live less work-oriented lives (Etozioni, 1998). Elgin credits a 1936 article by Richard Gregg (Gregg 1936) as the inspiration for his book: Voluntary Simplicity: Toward a Way of Life that Is Outwardly Simple, Inwardly Rich (Elgin, 1981) which is credited as the manifesto of the voluntary simplicity movement. Etozioni has identified three variations within the voluntary simplicity movement: "downshifters", who give up consumer goods they could readily afford; "strong simplifiers", who have given up high paying jobs to retire early or to live on less; and "simple living movement followers", who adjust their life patterns to an ethos of simplicity (Etozioni, 1998). Zavestoski suggests that this group's anti-consumptive attitude is a response to a search for an authentic inner self (Zavestoski, 2002, pp.162-163).

## 4. DISCUSSION

This paper has developed a theoretical model of environmental marketing. Central to this model is the interaction over time and culture of the marketing environment, environmental marketing and marketing the environment. The cycle begins with marketers recognizing a psychographic segment of environmentally conscious individuals in the marketing environment. Marketers develop specific environmental marketing campaigns targeted at these consumers. Embedded in environmental marketing campaigns is a subtle campaign to market the environment in a new and contrived way. Over time, the combined forces of environmental marketing campaigns lead to a modification of the consumers' perception of the environment and the cycle begins again.

The opposing motivators of consumerism and altruism drive recursive cycles of this model. We have seen that different segments of the public chose positions of environmentally concerned consumption



(green marketing) and abstention from consumption (de-marketing). Thus this theoretical model has been able to reconcile the poles of the environmental movement: environmental stewardship and biophilic management.

The theoretical model developed in this paper has important implications for research. The model suggests that researchers are better served by viewing environmental marketing from an ontological point of view than from an ethical point of view. The model points out the weakness inherent in previous models built on an ethical foundation. These models break down as the societal values underlying their ethical stance change over time. The model developed in this paper points future research towards iterative or longitudinal studies of environmental marketing.

The theoretical model developed in this paper has important implications for the practitioner. Environmental marketers can utilize this model to gain insight into future trends in the environmental movement. The study of current depictions of the environment which are being presented to consumers in environmental marketing messages are likely to develop new consumer worldviews of the environment.

This paper has developed a unique theoretical model which affords researchers and practitioners new insight into the process of environmental marketing. The model reconciles disparate positions on the part of environmentalists and explains how environmental marketing affects these disparate positions.

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## THE ASSESSMENT OF USER SATISFACTION FOR A COLLEGE LAPTOP INITIATIVE USING A QUASI-DELPHI METHOD

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### ABSTRACT

*The purpose of this paper is to provide the argument for using an iterative process in the development of an instrument designed to evaluate the user satisfaction for a college wide laptop initiative. The paper provides a unique adaptation to the Delphi Method by generating input from experts or students on their experience with the extensive use of laptops in college of business courses. An iterative process to questionnaire construction is described using many of the characteristics of the Delphi Method. Additionally, the literature relevant to user satisfaction and student satisfaction is reviewed. The instrument developed will be used to provide an attribute versus aggregate measure of user satisfaction. Recommendations and insights for future research into user and student satisfaction with particular reference to instrument design are also provided.*

**Keywords:** User Satisfaction; Student Satisfaction; Quasi-Delphi Technique; Instrument Development Process

### 1. INTRODUCTION

The increased usage of laptops and computers in education has resulted in a plethora of studies reflecting the impact of this intervention on learning. Unfortunately, the always pressing issue of whether measures provide us with the appropriate information to develop meaningful insight into the effects of these interventions persists. The college of business is AACSB accredited and consequently mission driven with a need to provide support for whether the college is on track to achieve broadly stated purposes. One of the most recent publicly stated purposes was to provide a “focus on educating undergraduate students in a technologically-advanced active learning environment.” (Schumann *et al.*, 2001). To operationalize a technologically advanced active learning environment the college *executed* a laptop initiative to include substantial renovations and investment in the infrastructure (i.e. Smartboards, student seating pods, wireless technology, centrally located printer access, support services for leased/purchased laptops etc.). Naturally, much was written and discussed regarding how to assess the impact of this intervention with references to Campbell and Stanley (1963) and an appropriate evaluation design. Not surprisingly, planned efforts to use more rigorous design methods were supplanted by a posttest-only group design using an instrument placed on the internet. The development of this instrument was the result of efforts by a technology committee (composed of faculty) and input from key administrative personnel and appeared to have reasonable face (and content) validity. While efforts to gather feedback regarding customer satisfaction, user satisfaction or student satisfaction are to be applauded, it is our opinion that efforts to determine what should be measured from the users perspective is the most important element in this process. Accordingly, we provide a process using modifications to the Delphi Method for gathering inputs from experts on what to measure. We suggest students are the experts on how they experience a laptop initiative. We have also chosen to simply refer to these modifications as a Quasi-Delphi method for instrument development.

The Management Information Systems (MIS) literature has developed a strong stream of research on the satisfaction of end users and the development of an end user computing construct (EUC) (Rainer & Harrison, 1994; Mahmood, Burn, Gemoets, & Jacquez, 2000; Chen, Soliman, En Mao, Frolich, 2000; Doll & Torkzadeh, 1988; Somers, Nelson, & Karimi, 2003; Abdinnour-Helm, Chaparro, & Farmer, 2005). Our purpose is to highlight key areas from this literature in the development of an end user instrument for students in an academic setting. Additionally, student satisfaction has a long history in higher education. Focusing on student satisfaction allows universities to adapt to student needs based on a clear

understanding of student expectations (Elliott & Shin, 2002). Certainly, the user satisfaction and student satisfaction literatures provide important direction for development of satisfaction instruments in the academic setting where technology initiatives are prevalent. In typical user satisfaction surveys, survey instruments are often designed from the organization's perspective. In such surveys, administrative and technical staffs are so focused on technology, economic, and administration issues that they frequently fail to address major concerns of users critical to improving user satisfaction. Also, these surveys may not be linked to internal metrics that drive service changes, and may not be able to generate information that produce the desired effects on the improvement of service. In order to better understand the true needs of students, who are the end-users of the Laptop University, we carefully focus on the instrument development process from a student's perspective rather than from the faculty or administrative staff perspective. We first provide an overview of the Delphi Method for input from a group of experts and develop the logic for extending this method to students. Next we provide insight from both the user satisfaction and student satisfaction literatures. Finally, we outline the process used to develop our instrument and conclude with recommendations for future instrument development (Instruments can be obtained from authors).

## **2. THE DELPHI TECHNIQUE**

The objective of item creation in a measure is to ensure content validity. Content validity is the representativeness or sampling adequacy of the construct domain (Campbell, 1976; Carmines & Zeller, 1979; Kerlinger, 1973). In determining the content of items for the satisfaction of the laptop initiative we used a quasi-Delphi process in conjunction with contributions developed through research on user and student satisfaction. The Delphi method of inquiry is based on a structured process of collecting and distilling information or knowledge from a group of experts by means of a series of questionnaires interspersed with controlled opinion feedback (Ziglio, 1996). Wilhelm (2001) has provided a review of the history and use of the Delphi technique in numerous applications to the social and physical sciences. For example, in the area of education theory the Delphi process was used to determine important workplace skills and competencies that businesses desire in employees (Dean & West, 1999; Harris, 1996; Wilhelm, 1999). While the Delphi technique has been used in a variety of other situations (i.e. forecasting, policy development, assessment of critical thinking skills) an important ingredient has been its use for the gathering of objective and subjective data. However, the Delphi process is primarily characterized by its particular structure for gathering and processing information rather than any particular analytical process, evaluative model, or epistemological foundation. The process typically includes provisions for controlled feedback of individual contributions of information and expert knowledge, assessment of these conditions by the group, some opportunity for individuals to revise their views, and some degree of anonymity for the individual responses. Wilhelm (2001) suggests the following general procedural process for the Delphi Technique. First, he suggests that the subject of the study be circulated to the participants in either an unstructured manner that enables them to comment on the issues in question or in a structured manner that enables them to provide evaluative feedback on defined topics. Second, he suggests that a questionnaire be developed to ascertain the opinions of experts and to try to begin to elicit points of convergence or divergence. The final step is to distribute the questionnaires again after the monitors synthesize the responses from the previous round to obtain feedback. The aim is to repeat the process until finally a certain level of consensus or stability is reached (Lang, 2000).

In the use of the Delphi method the selection of the appropriate experts should not be a matter of personal preference or ease. Expertise is the key requirement and according to Scheele (1975) a successful mix of respondents includes "stakeholders, those who are or will be directly affected; experts, those who have an applicable specialty or relevant experience; and facilitators, those who have skills in clarifying, organizing, and other social skills" (pg. 68). Based on these characteristics students certainly are directly affected by the laptop initiative and have relevant experience as evaluators of a laptop learning environment. We appeal to the user/student satisfaction literature to further supplement information identified from students as important to their satisfaction and specifically outline that process later in this paper.

The purpose of the first round of a Delphi process is to determine initial positions on the subject or issues of interest. The process typically involves a series of questionnaires or iterations which we have applied



here. As is suggested for the Delphi process, we asked students to respond to broad questions constrained by the literature (Jones *et al.*, 2001; Aladwani, 2002; Mahmood *et al.*, 2000; Igbaria, Guimaraes, & Davis, 1995; Devarnj, Fan, & Kohli, 2002). While this first step in a Delphi is frequently followed by feedback to participants on characteristics such as overall movement, countervailing forces, and in general what is happening between and with individual items, we did not provide formal feedback to students on their initial responses. Accordingly, we see this modification to the process as supporting our use of the term quasi-Delphi. It was important with first round data to not eliminate or unreasonably reduce emotive detail of student observations or elaborations. A second round of questionnaires is also recommended in the Delphi process. We administered a second questionnaire based on the responses derived from the broad initial phase. The second round of questionnaires included the assessment of both the importance of satisfaction items as well as their experienced satisfaction with a laptop initiative.

In conclusion, we are suggesting that the use of a modified Delphi process has value in the identification of items that should be included in the measurement of user and student satisfaction for a laptop initiative. The combination of input from those that are experts or customers in the evaluation of the use of technology in their educational experience would seem critical to the validity of a user/student satisfaction measure. The Delphi process provides the individual with the greatest degree of freedom from restrictions on his or her expressions of items critical to user/student satisfaction. The process also provides anonymity which should facilitate this advantage. Another strength of the Delphi method includes the preservation of the heterogeneity of participants which helps assure validity and avoid the domination of quantity or strength of personality (bandwagon effect). This method also has advantages over other methods for input in the area of time and expenses which can increase rapidly. Finally, the Delphi method allows the respondent to provide an expression in detail and emotional content if the initial inquiry provides freedom of response as was the case in our first questionnaire. We next turn to the development of the broad questions asked in the Delphi inquiry. To provide support for the content of these questions we considered contributions from the user satisfaction literature.

### **3. USER SATISFACTION**

User satisfaction has been suggested to be one of the key factors leading to the success of information systems ((Schiffman, Meile & Igbaria, 1992; Szajina & Scamell, 1993; Ditsa & MacGregor, 1995; Gelderman, 1998; Al-Khaldi & Wallace, 1999). However, results from end-user satisfaction studies tend to show highly variable results with some studies giving support to the influence of one factor such as user attitudes while others find little or no support for the same variable (Mahmood, Burn, Gemoets, & Jacquez, 2000). Consequently, (Mahmood *et al.*, 2000) performed a meta analysis (1986-1998 period) on the support of key indicators (factors) for three major categories previously identified in the literature as affecting information technology (IT) user satisfaction. These categories included user perceived benefits, user related individual characteristics, and organizational support or readiness to use IT. Most relevant to this research, was the conclusion that the key variables (factors) related to user satisfaction included user involvement in system development, perceived usefulness of the IT system, user experience, organizational support, and user attitude toward the information system. Specifically, these results are important to our study not only due to the focus on student satisfaction of an IT initiative within a college of business but also because of the implication for the items in a measure that give timely information and insight into how we need to adapt to student satisfaction feedback. Based on the effect sizes resulting in the above identified key factors it was clear that a major determinant for user satisfaction is greater user involvement in system development which "in turn is likely to lead to the design of systems which are perceived to be useful and hence viewed more positively by users with enhanced experience. This will influence expectations and skills and should lead to the development of systems which are easier to use" (pg. 767, Mahmmod *et al.*, 2000).

Notably, the effect size of user expectations was not found to be as important as the other variables mentioned above. We note this result due to the heavy theoretical emphasis (expectation continuance theory, ECT) placed on the importance of expectations in the consumer behavior literature (consumer satisfaction) and its relevance for user satisfaction in the IT setting (Bhattacharjee, 2001)(Oliver, 1980). We also note other literature contributions to the user satisfaction construct which include job satisfaction (Locke, 1976), quality management (Parasuraman, Zeithaml, & Berry, 1988), as well as library



information sciences (LIS)(Rowena, 2001), and student satisfaction in academic settings (Browne, Kaldenberg, Browne, & Brown, 1998)(Elliott & Shin, 2002). Many of these literatures have included notions from psychology and social psychology on the relationship between expectations, confirmed expectations, intentions, behavior, and satisfaction (Ajzen & Fishbein, 1977; Bem, 1972; Locke, 1976; Oliver, 1993; Vroom, 1964). Our purpose is not to isolate or review all the contributions to the notion of user satisfaction, but to acknowledge the research history and point out a critical observation from recent investigations of satisfaction in general. That is, whether one is looking at job satisfaction, user satisfaction, consumer satisfaction, student satisfaction, or library user satisfaction, each situation will have different determinants of satisfaction which provides clear evidence for varying and conflicting conceptualizations of the satisfaction concept (Yi, 1990). For example, in the library and information science field, Applegate (1993) has concluded that more research is needed to determine the factors or service that contribute to user satisfaction at both the micro (individual) and macro (organizational) levels. This observation was made because most generic user satisfaction questionnaires such as SERVQUAL (Parasuraman, Zeithaml, and Berry, 1988) do not provide sufficient information for libraries to make the necessary changes in their service delivery. The relevance of this conclusion lends credence to the necessity of developing measures of satisfaction based on perceptions of what users deem to be key criteria for their specific situation. Consequently, we develop our user satisfaction measure based on input from student users of an IT initiative in a college of business. We also will draw upon the conclusions from prior research to assist us in the organization of student input on satisfaction criteria as well as initial queuing questions for initial input. The next part of this paper will describe the iterative process used to gather student input on their satisfaction of the IT initiative.

#### **4. THE PROCESS OF INSTRUMENT DEVELOPMENT**

The development of the instrument essentially involved three phases. These phases included the development and administration of an initial open ended instrument to gather student input on criteria they thought critical to the satisfaction of users in the college of business laptop initiative. These open ended questions were prompted by prior research on IT systems where certain broad categories have been identified as critical to IT user satisfaction. Phase two involved collating and recording this initial input so it could be organized into meaningful categories. Phase three involved the development of the instrument in order to gather each students input on the importance of a particular item as well as their perception of how well that particular item was perceived to have been satisfied. Phase three also included the administration of the instrument to a cross-sectional sample of 237 students participating in the laptop initiative.

As stated, phase one included the administration of an open ended instrument where very broad questions were used as an initial stimulus to gather student input. Students were asked to identify three to five criteria in the areas of support, individual needs, and attributes of the technology. This is consistent with the broad categories of individual perceptions of benefits and convenience as well as various organizational types of support identified in previous research. We also gathered data in the final instrument on user characteristics, another key broad category related to user satisfaction. The broad category of technology was simply used to generate criteria associated with any elements of concern to students with the technology initiative. In retrospect, after looking at student responses to these open ended questions, we found items that overlapped across all three areas. Students appeared to state their most important concerns regardless of the area or category with which they were prompted. This resulted in phase two taking on new meaning with respect to placing items within meaningful categories for the development of the final instrument in phase three. The open ended questionnaire can be obtained from the authors. This initial instrument was administered to 56 students.

Phase two of the process involved the recording and collating of initial student input. This process entailed an evaluation of each response and the placement of items into groups that appeared to address similar concerns. Based on this process, we were able to identify seven broad categories which included training, orientation, helpdesk/tutors/tutorials/helpline, technical support, technology issues (software, printers, wireless access, upgradeability etc.), computer purchase/lease/economic issues, and use of laptop in class/enhancement of learning. After further review of items within these broad categories we developed the following final categories for questions: Training and Orientation Support Provided to

Adopters, End User Support, Technology, Economic Issues, and Enhancement of Learning/Use of Laptops in Classrooms. It is clear from the final categories that there will be certain issues that cannot be evaluated from simple modification of standard satisfaction instruments. For example, it was clear that students were concerned about the cost of laptops and whether they had sufficient input into whether they had the option to lease or buy laptops. This clearly supports our position that items for evaluation of user satisfaction needs to come from the so-called experts/users as well as the use of prior empirical support for satisfaction determinants.

Phase three of the instrument development included adding a section to assess user characteristics or demographic information. We also included a response for the overall satisfaction with the laptop initiative. Finally, we structured each question's response format as a Likert Scale which allowed us to evaluate not only the importance of each item but the students overall level of satisfaction with each item.

## 5. CONCLUSION/SUMMARY

The purpose of this paper was to develop a rationale for the use of a quasi-Delphi approach to the development of an instrument used in the assessment of student satisfaction for a laptop initiative within an accredited college of business. We have reviewed the relevant literature on the Delphi method of inquiry and emphasized the controlled feedback of individual contributions of information and expert knowledge. As noted in our paper, expertise is the key requirement for the selection of respondents according to the Delphi process and the user/student satisfaction literature suggests that unique measures need to be developed for different users of various information systems. We accordingly implemented an iterative process in the development of our user satisfaction measure, and note that while there was overlap between broad categories previously identified in the literature, there also appeared to be unique areas important to student satisfaction that would not have been identified from previous standardized instruments. While the process we suggest is timely, we believe it will strongly contribute to the validity of our measure and most importantly, provide information that will allow us to make more relevant interventions to the information system. Future research should include the use of statistical methods to confirm important areas of student/user satisfaction identified through our iterative process. Future research should also carefully consider the use of gap measures of satisfaction based on expectations or the importance of satisfaction areas in comparison with actual or perceived levels of satisfaction.

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# THE CHANGING HEURISTIC OF AUDITOR GOING CONCERN OPINIONS

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## ABSTRACT

*The auditor decision to issue a going concern opinion is subject to the auditor's view of the relative costs of being wrong in his judgment. The auditor can make two types of errors in this decision. First, the auditor may fail to provide a going concern opinion to a firm that subsequently enters bankruptcy proceedings (Type 1 error). Second, the auditor may issue a going concern opinion to a firm that does not fail (Type 2 error). The relative weight the auditor puts on the type of error will influence the auditor's decision. Two recent events: the passage of the Private Securities Litigation Reform Act of 1995 (Reform Act), and the fallout from the failure of Enron in 2001, illustrate how such events may change auditor going concern opinion issuance behavior. Following passage of the Reform Act, the percentage of going concern opinions preceding bankruptcy fell from 51% to 44% as auditors evaluated the risk of substantial legal exposure to Type 1 errors as declining due to the protections of the Reform Act. Following the bankruptcy of Enron, this rate rose to 63% as auditors perceived the risk of a Type 1 error to have increased dramatically.*

## 1. INTRODUCTION

The decision of an auditor to provide a going concern opinion has often been viewed as consistent over time. Recent developments, however, suggest that how auditors perceive the costs of being “wrong” in granting this opinion has, and continues to, evolve. Two recent events have had opposing impacts upon auditor perceptions in this area.

First, the Private Securities Litigation Reform Act of 1995, (PSLRA) which provided auditors with the protection of proportionate liability. Prior to the PSLRA, auditors were often viewed as a “deep pocket” after the failure (bankruptcy) of a client firm. Under prior laws, which provided for joint and several liability, the auditor could be held responsible for the entire claim. The intent of the PSLRA was to limit class action cases and also provided auditors with proportionate liability. The impact of this act was to lessen auditor liability for failing to provide a failing firm with a going concern opinion. As a result, after the PSLRA, it would appear to be somewhat less likely that a financially distressed firm would receive a going concern opinion.

The second development constituted a series of events beginning with the failure of Enron (2001), including the demise of Arthur Andersen and the passage of the Sarbanes –Oxley Act, both in 2002. Included in this series of events were the bankruptcy filings WorldCom (2002) and Global Crossing (2002). None of these bankruptcies were preceded by auditor going concern opinions. The widespread criticism of the auditing profession as a result of these highly publicized cases made apparent the consequences of failing to provide a going concern opinion

The relationship between the relative costs of a “false positive,” providing a going concern opinion when the client does not fail; and failing to provide a going concern opinion when the client does fail, is a changing dynamic. The relative cost of being “wrong” in this context reflects the external environment of public accounting in recent years.

## 2. AUDITOR DECISION PROCESS

To understand the going concern opinion in context requires consideration of the relevant perceived costs to the auditor of an incorrect decision. The auditor may make two types of errors in judgment concerning a firm's going concern status. If we define the decision as a truth table, the auditor may predict that the firm will continue (no going concern) or he may predict it will fail (going concern). In so doing, if the auditor predicts the firm will continue (no going concern issue), he may be correct in this assessment – no error, or the firm may, in fact, fail (Type 1 error). If the auditor predicts the firm will fail and the firm does



fail, the auditor was correct, no error. However, if the auditor predicts the firm will fail and the firm does not fail, the auditor may be viewed as guilty of having provided a false positive or Type 2 error. It should be noted that the definition of Type 1 versus Type 2 error is subject to the manner in which the table is structured. The method used here to define Type 1 and Type 2 errors is consistent with that of Altman (1983). Some studies have defined these errors in the reverse.

Dun and Bradstreet's Business Failure Index has generally indicated a business failure rate of approximately 1% per year. The general consensus historically is that an auditor going concern opinion precedes such bankruptcy filings in only about 50% of bankruptcies in the year preceding the bankruptcy filing (Altman 1983). This is defined as a Type 1 error. Significantly, two studies (Altman 1982, Nogler 1995) find that approximately 75% of the firms receiving auditor going concern opinions do not go bankrupt ("false positive"), even when considering a time frame of several years after the receipt of the initial going concern opinion. Extrapolating from these findings, we can estimate marginal probabilities in the table below.

| Auditor action                           | Actual outcome firm:<br><b>Continues</b>   | Fails<br>Bankruptcy) (Files |        |
|--|--|-----------------------------|--------|
| No Going Concern<br>(Firm will continue) | <b>No error</b><br>97.5%                   | Type 1 Error<br>0.5%        | 98.0%  |
| Going Concern<br>(Firm might fail)       | Type 2 Error<br>("false positive")<br>1.5% | No Error<br>0.5%            | 2.0%   |
|  | 99.0%                                      | 1.0%                        | 100.0% |

To illustrate, since only one firm in a hundred (1%) will actually file bankruptcy in a given year (per Dun and Bradstreet), and auditors are only correct in one-half (50%) of these instances (per Altman 1983), consider a sample of 200 firms. Of these 200 firms drawn at random from the total population of firms, 195 will continue in business and receive a clean opinion (non-going concern). Of the remaining 5, one will receive a clean opinion and file bankruptcy (Type 1 error). One additional firm will receive a going concern opinion and, in fact, file bankruptcy. The remaining three firms will receive a going concern opinion but not file bankruptcy (Type 2 error).

In determining whether to give a client the auditor perceives as financially distressed a going concern opinion, the auditor necessarily weighs the perceived relative costs and benefits of Type 1 and Type 2 errors. Additionally, the auditor weighs the risks the client may face in receiving a going concern opinion. These risks include a greater cost of capital (higher interest rates) or possible inability to raise capital. This latter can result in the firm failing due to the auditor's going concern reservation rather than its own financial distress is defined as "self-fulfilling prophecy."

Kida's (1980) study demonstrated that auditor's judgment of financial distress was generally comparable to statistical model prediction accuracy. However, his study also showed that auditors' going concern issuance behavior was influenced by the perceived relative cost of these risks. Significantly, the threat of federal intervention in the activities of the auditing profession is singularly missing from the list of Type 1 risks defined by Kida.

### 3. HYPOTHESES

This study uses an events approach to investigate 1,237 bankruptcy filings from 1994 to 2005. As indicated above, Altman (1983) and others indicate that auditor going concern opinions precede bankruptcy filings in only about 50% of the cases. This paper looks year by year from 1994 to 2005 to test if :



- Altman's assumption of 50% error in auditor going concern opinions preceding bankruptcy is true over time, and
- the Private Securities Reform Act of 1995, which provided proportionate liability, lessened the likelihood of a firm receiving a going concern opinion (i.e. changed auditor perceptions of the cost of type 1 errors), and
- whether the Enron and other "accounting scandals" reversed this trend and caused auditors to be more likely to grant going concern opinions.

These hypotheses are tested by measuring the relative percentage of auditor going concern opinion preceding bankruptcy filing.

#### 4. DATABASE AND DESIGN

This study involves a full data set rather than a sample and also involves a longitudinal perspective. Bankruptcies of publicly traded firms were identified from multiple sources including, the Wall Street Journal Index (1994-2004), the website [www.bankruptcy.com](http://www.bankruptcy.com), and other sources. Auditor opinions for the last financial statements preceding bankruptcy were obtained from the Securities and Exchange Commission's EDGAR (Electronic Data Gathering And Retrieval) website. This process resulted in a final sample of 1,237 firms which had filed bankruptcy in the period November 1994 to June 2005.

The SEC required all firms to file electronically for all filings on or after May 6, 1996, unless the firm qualified for a hardship exemption. The majority of firms filing with the SEC have fiscal years ending on December 31, a substantial minority, primarily retail firms, have January year ends. SEC rules mandate filing annual reports (Form 10-K) within 90 days of year end. As a result, for practical purposes, as this rule relates to annual filings, it became effective for the calendar year 1997. This is evident in the database in the fact that the combined observations for the years 1994 through 1996 includes only 65 firms filing bankruptcy. In 1997 alone, there are 66 observations.

The PSLRA, which granted auditors proportionate liability protection, thereby reducing the threat of lawsuits, became effective for annual reports "for any period beginning on or after January 1, 1996." The effective date of this act also resulted in 1997 being the initial year in which filings were made under this act. Beginning with Enron, a number of accounting scandals hit the profession through the first half of 2002, including (with dates accounting irregularities became public): Homestar and Kmart (January 2002), Qwest Communications and Global Crossing (February 2002), WorldCom (March 2002), Adelphia Communications (April 2002), Tyco, Peregrine Systems, CMS Energy, Reliant Energy, Dynegy, El Paso (Energy) and Halliburton (May 2002), AOL Time Warner, Bristol-Myers Squibb, Merck, Mirant, and Duke Energy (July 2002). Of these firms, only Enron and Global Crossing filed bankruptcy petitions. Collectively, these are referred to here as the "Enron Effect," which is expected to have made auditors more cautious, therefore, more likely to issue a going concern opinion after these events. The difficulties surrounding Enron became public initially on October 16, 2001 when Enron announced a \$638 million loss in the third quarter. On December 2, 2001 Enron declared bankruptcy. On March 14, 2002, Enron's auditor, Arthur Andersen was indicted for obstruction of justice in destroying audit files related to the Enron audit. On June 17, 2002, Andersen was convicted of obstruction of justice and announced their intention to discontinue their audit practice as of August 31, 2002. On May 31, 2005, Arthur Andersen's conviction was unanimously overturned by the Supreme Court.

The anticipated results are that auditor going concern opinions preceding bankruptcy filing, as a percentage, will decrease after the passage of the Private Securities Litigation Reform Act of 1995. This result has been found by Geiger and Raghunandan (2001). This study expects to find further evidence supporting this hypothesis.

H<sub>0</sub>1 : The Private Securities Litigation Reform Act of 1995 resulted in a decrease in the rate of auditor going concern opinions preceding client bankruptcy filings.

It is also anticipated that this trend of decreasing rate of going concern opinions evidenced following passage of the Private Securities Litigation Reform Act of 1995 will reverse as a result of the "Enron

Effect,” the accounting scandals of 2001-2002, as auditors begin to view the consequences of failing to report going concern difficulties differently.

H<sub>0</sub>2 : The rate of auditor going concern opinions preceding client bankruptcy filing will increase after the accounting scandals of 2001-2002.

## 5. RESULTS

Table 1, presented below shows the year by year accuracy of auditor going concern opinions preceding client bankruptcy filing. GC-Bankrupt indicates the auditor issued a going concern opinion on the financial statements preceding bankruptcy filing. No GC – Bankrupt indicates the auditor issued an opinion which was not qualified as to going concern on the client financial statements preceding bankruptcy filing.

**TABLE 1**

|                                      |      | GC Bankrupt | No GC - Bankrupt | Percent "Correct" |        |
|--------------------------------------|------|-------------|------------------|-------------------|--------|
| <b>Pre-PSLRA of 1995</b>             | 1994 | 3           | 8                | 27.27%            | 50.77% |
|                                      | 1995 | 12          | 8                | 60.00%            |        |
|                                      | 1996 | 18          | 16               | 52.94%            |        |
| Pre-PSLRA Observations               |      | 33          | 32               |                   |        |
| <b>Post-PSLRA of 1995, Pre-Enron</b> | 1997 | 29          | 47               | 38.16%            | 44.38% |
|                                      | 1998 | 46          | 69               | 40.00%            |        |
|                                      | 1999 | 57          | 79               | 41.91%            |        |
|                                      | 2000 | 94          | 135              | 41.05%            |        |
|                                      | 2001 | 133         | 120              | 52.57%            |        |
| Post-PSLRA Observations              |      | 359         | 450              |                   |        |
| <b>Post-Enron</b>                    | 2002 | 124         | 68               | 64.58%            | 63.09% |
|                                      | 2003 | 63          | 47               | 57.27%            |        |
|                                      | 2004 | 34          | 19               | 64.15%            |        |
|                                      | 2005 | 8           | 0                | 100.00%           |        |
| Post-Enron Observations              |      | 229         | 134              |                   |        |
| All observations                     |      | 621         | 616              | 50.20%            |        |

In H<sub>0</sub>1, the rate of auditor going concern opinions prior to passage of the PSLRA of 1995 was 50.8%, based on 65 observations. The rate after passage drops to 44.3%, based on 805 observations. The direction of this change is consistent with the hypothesis, however, neither a parametric t-test of differences of means nor a non-parametric (Man Whitney U) test show significance for this difference.

In H<sub>0</sub>2, the rate of auditor going concern opinions after passage of the PSLRA of 1995 but prior to the Enron effect was 44.3%, based on 805 observations. The rate after Enron's bankruptcy rises to 62.9%, based on 367 observations. The direction of this change is consistent with the hypothesis, and both a parametric t-test of differences of means and a non-parametric (Man Whitney U) test show significance for this difference at the 1% level.

## 6. IMPLICATIONS

This study has shown some support for the possibility that auditor's reacted to passage of the PSLRA of 1995 by modifying their behavior in issuing going concern opinions. The PSLRA, which replaced the former concept of joint and several liability with a concept of proportionate liability, may have caused auditors to view the risk associated with not giving a failing firm a going concern opinion to be lessened in the post act environment. This study finds support for this conclusion based on the rate of going concern

opinions issued prior to bankruptcy filings declining in the period after the effective date of the act. This is consistent with Geiger and Raghunandan (2001). However, the level of change, although in the direction predicted by the hypothesis, is not found to be statistically significant.

Strong support is found for the hypothesis related to the impact of the "Enron effect." In the period following the bankruptcy of Enron, there is strong evidence that auditors became significantly more likely to issue a going concern opinion to a financially distressed client.

An implication of this research is that auditor going concern decision making should not be viewed as immutable and unchanging over time. Historically, most studies in this area have utilized specific time frames. This study has shown that auditor going concern pinion decision making is subject to changes over time based on specific events which have an impact upon auditor perceptions of the relative risks of error. Additionally, this study has shown that the aftermath of the Enron effect has been to make auditor's more likely to issue going concern opinions.

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# BANGLADESH-INDIA BILATERAL TRADE: CAUSES OF IMBALANCE AND MEASURES FOR IMPROVEMENT

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## ABSTRACT

*Currently India is the 2nd largest trading partner of Bangladesh, and India's position is at the top for Bangladesh's imports trade. So the study underscores the trend, structure and current picture of Bangladesh-India trade. Bangladesh's trade with India increased tremendously especially in the 1990s. The average annual growth rates of Bangladesh's trade with India, during 1980 to 1995, were much higher than those with the SAARC and the world. However, Bangladesh has always been trade deficit with India, and recently it has increased exponentially. Limited export base, backward industries, inadequate infrastructure, lower productivity in Bangladesh, appreciation of Bangladesh's Taka against Indian Rupee, earlier and faster trade liberalization program in Bangladesh compared to India, tariff and non-tariff barriers (NTBs) imposed by the Indian government, huge illegal trade, diversified exports and technologically advanced industrial base of India are identified as the main reasons for this huge trade imbalance. Structural and policy measures such as sound physical, social and economic infrastructure, superior product quality, export diversification, sufficient institutional facilities for banking, credit and insurance, improved law and order situation, labor unrest free environment, an honest and efficient administration, continuous political stability, huge domestic and foreign investments, joint ventures in Bangladesh with buy back arrangements, competitive devaluation of the Bangladesh currency against the Indian currency, removal of illegal trade, tariff and NTBs- free entry of Bangladesh's exports to Indian market are suggested to improve this trade deficit. Also cordial and productive cooperation between these two nations is crucial to materialize these measures.*

**Keywords:** Bangladesh-India, Bilateral Trade, Trade Imbalance.

## 1. INTRODUCTION

Both Bangladesh and India are two major countries of the SAARC (South Asian Association for Regional Cooperation) and have a long common historical past and similar cultural and social evolution. As far as trade relation is concerned, India is the 2nd largest trading partner of Bangladesh just after USA in 2003. India's position is at the top for Bangladesh's imports from the world (IMF: Direction of Trade Statistics, June 2004). Therefore, an analysis of current trade status between the two nations, obstacles and opportunities for mutual trade expansion is very critical for economic development of both countries, especially of Bangladesh, as Bangladesh has been suffering from historical trade deficit with India since its independence. The trade deficit has been increasing exponentially since the recent past. Official data show that compared to 1983, trade deficit in 2003 is more than 46 times higher (IMF: Direction of Trade Statistics, various years). This growing deficit is a cause of serious concern for Bangladesh and has important economic and political implications. Hence the importance of the study is realized, and it is expected that the study will help policy makers to understand the roots of the problems on the way of trade expansion, and to formulate and execute the appropriate policy measures to mitigate or remove these problems.

With this objective in mind, this paper makes an attempt to deal with the issues of bilateral trade relationship between Bangladesh and India. Therefore, the rest of the paper is organized as follows: Section 2 highlights the historical development of Bangladesh-India trade relations; Section 3 looks at the trend, structure and current picture of Bangladesh-India trade; Section 4 discusses some of the main problems that cause the trade imbalance between the two countries; Section 5 suggests some remedial measures and attempts to explore for new opportunities, and Section 6 concludes.

## 2. HISTORICAL DEVELOPMENT OF BANGLADESH-INDIA TRADE RELATIONS

Bangladesh and India signed the "Treaty of Friendship, Cooperation and Peace" on March 19, 1972 in Dhaka for 25 years. Owing to this treaty, both countries signed the first one-year trade agreement on March 28, 1972. The trade between the nations was limited to government level (Madaan, 1996). This

agreement also provided border trade between Bangladesh and Neighbouring Indian states; and within 16 kilometers of both countries' border, free trade was allowed for certain commodities (Hassan, 2002).

The expected level of trade was not achieved under the first trade agreement. Also free border trade between Bangladesh and India led to some illegal trade and hence was abolished in October 1972 by mutual consent of the both governments. However, to attain the desired level of trade, the first trade agreement was further extended up to September 27, 1973 (Madaan, 1996).

The first trade agreement of 1972 was replaced by another trade agreement for three years. This agreement was signed on 5 July 1973 and became effective from 28 September 1973. This agreement provided for a system of Balanced Trade and Payment Arrangement (BTPA) and 'most favored nations treatment' to each other (Madaan, 1996 and Hassan, 2002).

The desired level of trade between the two nations was not achieved by the agreement of 1973, and trade imbalance increased in the very first year. Rupee trade was found to be a barrier in the bilateral trade, and thus abolished rupee trade from 1 January 1975 by a Protocol signed on 17 December 1974. It was decided that trade would be conducted in free convertible currency.

India and Bangladesh signed another trade Protocol on 12 January 1976 for higher volume of trade and long-term arrangements for trade of coal and newsprint. BTPA between Bangladesh and India was extended for another three years till 27 September 1979 on 5 October 1976.

On 4 October 1980, the third trade agreement was signed between these two nations initially for three years. By mutual consent, this agreement was extendable for another 3 years.

On 8 November 1983, Bangladesh and India renewed a Protocol on trade of 1980 for further three years. In May 1986, the trade agreement of 1983 was extended for another three years till 3 October 1989. Subsequently this agreement was renewed a number of times. Based on available information, this agreement was valid up to 3 October 2001.

### **3. TREND, STRUCTURE AND CURRENT PICTURE OF BANGLADESH-INDIA TRADE**

One of the important features of Bangladesh- India bilateral trade is that a large volume of informal or unrecorded trade, both in commodities and services, occurs every year, and it is growing despite unilateral or regional or multilateral trade liberalization in these two countries (Pohit and Taneja, 2003, Eusufzai, 2000). The official data on trade in services between these nations are, in fact, not available at all. Under this situation of data paucity with regard to illegal trade and trade in services, our current analysis will depend on mostly on the official trade data in commodities.

In this section, data on trend, structure and current state of Bangladesh-India trade are presented. Attention is paid on overall trade relationship; special reference is to be made to examine the importance of Bangladesh - India trade in the context of SAARC as well as individual country. Bangladesh's historical trade deficit with India and the commodity composition of Bangladesh-India trade over time are also examined.

#### **3.1 Bangladesh-India Trade in SAARC Perspective**

The combined share of Bangladesh and India in the SAARC trade demonstrates their importance and high influence in the regional trade. The trade share of both countries was 56.23 percent of the intra-SAARC trade in 1990. This share increased to 64.5 percent in 2002. India's share is, more or less, double of Bangladesh's share in intra- SAARC trade with limited exceptions for some years. However, India's export share is much higher than import share in the regional trade. On the other hand, Bangladesh's position is opposite; its imports share is much higher than export share in the SAARC region (IMF, Various Years, Direction of Trade Statistics Yearbook and author's calculation).

### 3.2 Trade Intensity Indices

The trade intensity indices on both imports and exports demonstrate the bilateral trade orientation of a country with its trading partner. The import intensity index can be defined as (Venkatasubbulu, 1996 quoted from Kojima, 1964):

$$m_{ij} = [(M_{ij} / M_i) / \{X_j / (X_w - X_i)\}]$$

where,  $m_{ij}$  = import intensity index of trade of country i with country j,  $M_{ij}$  = Imports of a country i from trading partner j,  $M_i$  = Total imports of country i,  $X_j$  = Total exports of country j,  $X_w$  = Total world exports,  $X_i$  = Total exports of country i.

Export intensity index can also be defined in the same way; that is:

$$x_{ij} = [(X_{ij} / X_i) / \{M_j / (M_w - M_i)\}]$$

where,  $x_{ij}$  = Export intensity index of trade of country i with country j,  $X_{ij}$  = Exports of country i to trading partner j,  $X_i$  = Total exports of country i,  $M_j$  = Total imports of country j,  $M_w$  = Total world imports,  $M_i$  = Total imports of country i.

The value of index ranges from 0 to 100. If the value is zero, it implies no trade relationship between partner countries. On the other hand, if the value of import intensity index is more (or less) than 100, it indicates that country i is importing more (or less) from j'th country than might be expected from that country's share in total world trade. In the case of exports, the same argument also holds true.

Export and import intensity indices have been calculated for Bangladesh's trade with India for some selected years from 1980 to 2003. The results are noted in Table 1.

It is observed that Bangladesh's export intensities with India were far below than 100 for all those years under study. This indicates that Bangladesh was exporting extremely less to India all the time than what it ought to export. The highest index, 3.473031, was observed in the year 1985. After that the index was continuously declining and reached to 1.364797 in the year 2000. Though it increased slightly in 2001, it started to decline again and reached to the awful minimum of 0.79651 in the year 2003.

**Table 1: Bangladesh's Export and Import Intensity Indices with India**

| Year | $m_{ij}$ | $x_{ij}$ |
|------|----------|----------|
| 1980 | 4.885524 | 1.414912 |
| 1985 | 4.627149 | 3.473031 |
| 1990 | 8.746103 | 1.906983 |
| 1995 | 25.35823 | 1.67226  |
| 2000 | 17.00115 | 1.364797 |
| 2001 | 20.1086  | 1.608167 |
| 2002 | 18.81877 | 1.000879 |
| 2003 | 20.61386 | 0.79651  |

Note:

$m_{ij}$  = Bangladesh's import intensity index with India

$x_{ij}$  = Bangladesh's export intensity index with India

Sources: IMF (Various Years), Direction of Trade Statistics Yearbook and author's calculation.



Compared to export intensity indices, Bangladesh's import intensity indices with India are quite high. However, it is still far below than the desired level of 100. The index value almost doubled in 1990 compared to 1980 or 1985. The index value increased tremendously in 1995 reaching to 25.35823. During 2000 – 2003, the value is, more or less, around 20.

Therefore, it is revealed from the discussion that India imported much less from Bangladesh than its exported to Bangladesh. Secondly, very lower indices for exports and imports, which were far from desired level of 100, imply that Bangladesh - India trade were not as high as it should be. So there is a scope for mutual trade expansion.

### **3.3 The Importance of India in Bangladesh's Trade**

India plays an important role in Bangladesh's trade since the independence, and recently, especially in 1990s, Bangladesh's trade with India increased tremendously. The average annual growth rates of Bangladesh's trade with India, during 1980 to 1995, were much higher than those with the SAARC and the world. For example, during 1980- 85, while average annual growth rates of Bangladesh's trade with the World and SAARC countries, were 2.46 per cent and –0.11 per cent respectively, this figure was 9.72 per cent with India. During 1985-90 the growth rates with the world, SAARC countries and India were 7.94, 18.68 and 20.63 per cent respectively. The growth rate of trade with India increased very significantly during 1990-95. While the growth rates with the world and SAARC countries were 16.70 and 57.85 percent respectively, the growth rate with India was 87.29 per cent.

In the context of Bangladesh's global trade though India's share is not convincingly high, it may be mentioned that the influence of India on Bangladesh's trade has been increasing over the years. India's share in Bangladesh's global trade has increased to 10.7 percent in 1995 from 3.6 percent in 1990. Though this share has slightly decreased in recent years, it is still almost 10 percent.

The important feature is that though India's share in Bangladesh's global import has been increasing over the years, India's contribution in Bangladesh's global exports has been shrinking. For example, India's share in Bangladesh's global import increased to 15.5 percent in 2003 from 4.7 percent in 1990. On the other hand, with regard to exports, this share decreased to 0.7 percent from 1.3 percent during the same period.

As per as Bangladesh's trade with the SAARC countries is concerned, India certainly holds an important position, and over the years its dominance has been increasing. India provided with the 94.1 percent of Bangladesh's imports from the SAARC countries in 2003. India's contribution to Bangladesh's exports to SAARC countries increased to 53.5 percent in 2003 from 36.6 percent in 1990. India's share in Bangladesh's total trade with the SAARC countries increased from 60.6 percent to 91.7 percent during the same period of time.

India is important as the source for Bangladesh's imports as well. Based on official trade data only, India was the fourth largest importing source for Bangladesh in 1990 just after Japan, Singapore and the USA. If unofficial trade were taken into account, India's position would be higher. India topped the list for Bangladesh's imports in 1995, and since then India continued to maintain the largest importing source for Bangladesh (IMF, Various Years, Direction of Trade Statistics Yearbook and author's calculation).

### **3.4 The Importance of Bangladesh in India's Trade**

The importance of Bangladesh to India's trade can also be examined. Bangladesh's contribution to India's global trade was 0.74% in 1990. In 1995, this share rose to 1.59 percent. After that, though this figure decreased marginally, it was still 1.13 percent in 2003. This is the official record of trade; if unofficial trade is also considered, this ratio would be double or even more.

With regard to exports, Bangladesh's contribution to India's global exports is significant. In 1990, India's exports to Bangladesh was 297 million i.e. 1.67 percent of India's global exports. Within 5 years of time, i.e. in 1995, this ratio increased to 3.14 percent. In 2002 and 2003, Bangladesh's share in India's global exports was 2.11 and 2.42 percent respectively.

As per as import of India is concerned, India imported from Bangladesh only 0.06 percent of its global imports in 1990. This ratio was more or less the same over the years except in 1995 and 2001 when it rose to 0.23 percent and 0.13 percent respectively.

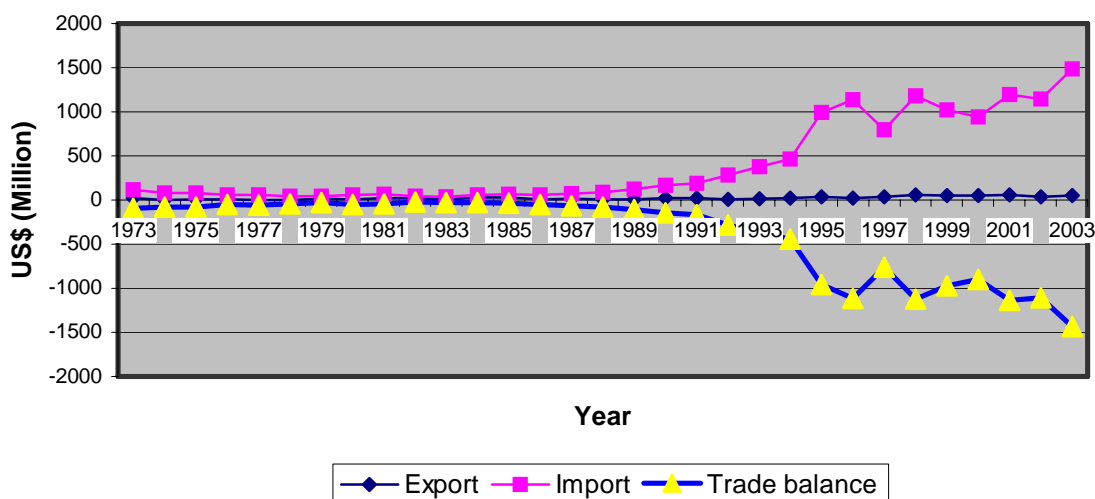
In the context of India's trade with the SAARC countries, Bangladesh's contribution is significant. Bangladesh constituted 40.91 percent of India's total trade with the SAARC countries in 2003. In 1990 and 1995, this ratio was 53.42 and 59.64 percent respectively.

Bangladesh's share of India's exports to SAARC countries was 49.64 per cent in 2003. In 2002, it was 52.57 percent. In 1990 and 1995, this ratio was even higher, 60.98 and 62.17 percent respectively. In fact, Bangladesh is the India's largest export market in the SAARC region at all the time. However, Bangladesh's share of India's imports from SAARC countries was not convincing; it was only 8.42 percent in 2003 (IMF, Various Years, Direction of Trade Statistics Yearbook and author's calculation).

### 3.5 The Balance of Trade of Bangladesh with India

As mentioned earlier, Bangladesh had always trade deficit with India since its independence, and recently it has increased significantly. Figure 1 provides the bilateral trade situation between Bangladesh and India for 31 years, 1973-2003. It clearly indicates the unfavorable trade balance of Bangladesh with India. In 1990s, especially in the 2<sup>nd</sup> half of the decade, trade deficit of Bangladesh increased very sharply. In 2003, the trade deficit reached to US\$ 1, 435.9 million, which is about 4 times higher, compared to 1993, and more than 46 times higher compared to 1983. The value of exports compared to that of imports is always quite low, and in 2002 and 2003, it was 3.4 and 3.6 percent respectively (IMF, Various Years, Direction of Trade Statistics Yearbook and author's calculation). This is really a disappointing picture for Bangladesh's bilateral trade financing as, according to economic theory, country's exports are to be used to pay for its imports. Though the export-import relationship should be looked at the world trade level rather than bilateral level, yet this trade imbalance still has some economic and political implications for Bangladesh.

**Fig. 1: Bangladesh's Trade Picture with India, 1973-2003**



### 3.6 Trade Structure of Bangladesh with India

Bangladesh's exports to India are highly concentrated to a few items. The country's major countable export items were only six in FY 1994-FY1996. In fact, in FY 1996 only 3 items- chemical fertilizer, raw jute and frozen fish- constituted about 90 percent of Bangladesh's exports to India. However, fertilizer and newsprint are sometimes export items and sometimes import items depending on domestic production (Eusufzai, 2000).

On the other hand, India's exports to Bangladesh are more diversified and export-base is significantly wide. Bangladesh classified a total number of 5985 items for imports in the First Import Schedule at 8-digit H.S. Code level. Out of 5985 items, in FY 1996, Bangladesh's imports from the world were 4601 items of which 2129 items were from India alone. In terms of number of commodities imported from India, India's contribution to Bangladesh's global imports was 47.8, 45.8 and 46.3 percent respectively in FY 94, FY 95 and FY 96.

#### **4. PROBLEMS CAUSING INDO-BANGLADESH TRADE IMBALANCE**

Although the trade deficit with a particular country is not bad if the over all trade balance is satisfactory, yet from the distribution aspect of trade policies (the distribution of benefits and costs among groups of producers and groups of consumers) the growing trade deficit with India is a great concern for Bangladesh. Bangladesh's fear is that if this deficit continues, Bangladesh will be dependent only on a few products for its exports, and imports from India displace domestic production to such an extent as to de-industrialize Bangladesh. As a result, it is argued, a severe polarization in Bangladesh and high levels of unemployment will occur. Therefore, increasing trade deficit with India is a problem, and attempts are made here to find out the causes of this problem.

##### **4.1 Bilateral Exchange Rate**

The nominal and real values of the Bangladesh's Taka vis-à-vis the Indian Rupee have been appreciating, with negligible exceptions, over the years. This appreciation of Taka has a significant positive effect on the increased trade deficit of Bangladesh with India.

The nominal exchange rate, Taka per Rupee, had been continuously declining right from 1986 to 1996. In 1997, though it increased slightly, it started to decline again from 1998. This declining trend of the exchange rate implies that Taka had been appreciating. In nominal term, the exchange rate decreased to 1.140 in 1999 from 2.411 in 1986 indicating a 52.71 percent appreciation of Bangladesh's Taka against Indian Rupee during 13 years of time.

The downward trend of real exchange rate was also observed. In real term, Taka appreciated 31.72 percent against Indian Rupee in 1999 compared to 1986. Thus the appreciation of Taka, both in nominal and real terms, might have contributed to the growing trade deficit of Bangladesh (World Bank, 2001 and author's calculation).

It is true that both Bangladesh and India depreciated their currencies over the years, but depreciation had been stronger in Indian than in Bangladesh. Hence Bangladesh's exchange rate policy is inappropriate compared to that of India resulting large trade deficit. India's products became more competitive than that of Bangladesh, both in terms of bilateral trade and with each country's trade with the rest of the world. Thus India has become successful to divert demand from imported goods to domestic goods and to take away jobs and income from its trading partners.

##### **4.2 Productivity Issues and Structural Factors**

The productivity differences can also best explain trade patterns between countries. India has productive advantages both in agriculture and industry compared to Bangladesh because of scale economies (Eusufzai, 2000). Structurally Indian economy is much larger, more diversified and technologically advanced. Indian products now have become globally competitive both in terms of price and quality. Also geographically India is very closed to Bangladesh, and Bangladesh's importers are very familiar with Indian products and production capacities. All these factors have made Indian products very competitive in Bangladesh's market (Hassan, 2002). As a result, India's exports to Bangladesh are more diversified and consists of high value added manufactured goods. On the other hand, India's imports from Bangladesh are limited to a few items, as Bangladesh does not have a large supply base to offer a wide variety of products to India. The obvious result is an increase of trade imbalance between the two nations.

##### **4.3 Tariff and Non-Tariff Barriers**

It is generally agreed that Bangladesh has initiated the program of tariff liberalization earlier than India- in the mid 1980s, and the speed of liberalization in Bangladesh is faster than that in India. Bangladesh has continued this higher speed of liberalization till recent years (Rahman, 1998, Eusufzai, 2000 and Dasgupta, 2000). Also recently Indian commodities, compared to the world's commodities, faces lower average tariff restrictions in Bangladesh. For example, import weighted tariffs were 12.05% on imports from India against 17.33% from the world by FY 1996 (Eusufzai, 2000).

There are many non-tariff barriers (NTBs) in India that Bangladeshi exporters are to face to enter into Indian markets. These NTBs are real cause of concern for Bangladesh's business community. Rahman (1998) notes that there are thousands of items under these NTBs, and Bangladeshi exporters are generally unhappy with these NTBs as there is lack of transparency and clarity with regard to application of these NTBs because customs authorities in India mainly apply these according to their own discretion. Though significant fiscal reforms took place in the 1990s in India, trade policy pursued by Indian government is considered as highly complex and restrictive.

## **5. REMEDIAL MEASURES AND OPPORTUNITIES**

Given the current trade scenario with India, the obvious question is now what can be done to reduce, if not remove, the huge trade deficit of Bangladesh. There is no simple and shortcut answer to this question. The search for effective solution must be looked at with due consideration of macroeconomic reality, different policy options and honest will of cooperation of both countries.

It is important to note that one cannot expect dramatic reduction of trade deficit of Bangladesh with India within a short span of time even though required policy options are designed and implemented. This is realized based on the current pattern and trend of bilateral trade and prevailing state of fundamentals of the Bangladesh economy. However, in the short run, detrimental impacts of bilateral trade deficit can be minimized if appropriate steps are taken. For effective and durable solution, medium and long-term measures must be undertaken too. Below are some remedial measures that could be considered to improve the trade imbalance between these two neighboring countries.

### **5.1 Productive Capacity and Economic Efficiency**

As mentioned earlier, the internal dimension of the trade deficit problem is related to the poor economic strength of Bangladesh compared to that of India. So the production capacity and economic efficiency of Bangladesh must increase in order to meet the country's growing demand for importable goods and maximize the export earnings. In the major economic sectors, efficient import-substituting activities must increase along with continuous improvement of economic efficiency and competitiveness within an open economic environment. Huge exportable surplus are to be generated and exports must be diversified taking Indian demand requirements into account. Bangladesh must earn relative efficiency in the production of exportable goods and services to reduce her trade deficit.

To gain from bilateral trade, there is no alternative but to increase the productivity in all sectors as a long run measure. For this purpose, Bangladesh's agriculture sector urgently needs a technological spurt. More research and development, transfer of technologies, market based effective price system and appropriate incentive mechanisms are very important to enhance the country's agricultural productivity. To increase the productivity in the industrial sector, development of the country's technical base and technological capacity building are crucial. To develop the technological capacity building, huge investment, creative intervention of the government, appropriate incentive mechanism to foster technical education must take place in the country. As regard the productivity increase in the service sector, quality of education must be increased; quality medical service within reasonable cost must be ensured. Huge private investment in health and education with creative government interventions would be very helpful for this purpose.

### **5.2 Competitive Devaluation of Bangladesh Currency**

As noted earlier, Bangladesh currency has been appreciated against Indian currency over the years both in nominal and real terms, and this may be one of the main reasons of huge trade deficit of Bangladesh. Therefore, a competitive devaluation of Bangladesh's currency is imperative in order to make Bangladesh

products price competitive both in Indian and world markets and thus to reduce trade imbalance. Also trade imbalance has deteriorated because of huge informal trade; this must be stopped, and reinforcement of border patrol can help in this regard.

### **5.3 Tariff and Non-Tariff Concessions**

Bangladesh's trade strategy with India must revolve around the SAPTA (South Asian Preferential Trading Arrangement) tariff negotiations. In this regard "zero export duty" strategy is getting importance. India should take necessary steps of unilaterally taking the decision of providing zero-tariff access of Bangladesh's exports to India. Tariff preference should be given on those items that have high import value, are actually traded and have high potential for entering into Indian market. India may exclude those irrelevant items from its concession list for Bangladesh, which Bangladesh does not produce, or hardly exports.

However, mere tariff concession will not reduce trade deficit of Bangladesh to any significant extent if NTBs, which are more serious impediments of export expansion of Bangladesh to India, are not phased out simultaneously. Appropriate measures must be taken by India in this regard. Such measures would certainly encourage local, Indian and regional investors to locate investment in Bangladesh targeted to the larger Indian market. These tariff and non-tariff concessions are, however, short term measures only.

### **5.4 Joint Ventures**

The trade imbalance can greatly and effectively be reduced by cordial and productive mutual cooperation. There are still many opportunities that could be exploited for the greater benefit of both countries and thus reducing the trade deficit of Bangladesh with India. For example, Bangladesh can obtain financial benefits by the greater economic integration with Indian North-Eastern States (NES), which are geographically situated in a disadvantageous location from the main land. A system of joint ventures (JVs) with buy back arrangements is to be developed. Such JVs will stimulate FDI to Bangladesh and thus productively exploit the opportunities of existing complementarities. To meet the demand of NES of India, JVs investments in cement, granite and lime stone, paper, food and fruit processing plants had already been identified. Other identified sectors, where JVs projects could be set up, are textile, fertilizer, newsprint, pharmaceuticals, small steel plants, chemicals, machine tools, fish processing and leather goods (Rahman, 1998). The JVs investments in backward linkage textile sector are very important for Bangladesh to enhance the local value addition of the country's major export item, ready-made garments. Both countries can also be benefited from the joint investment in information, communication and financial services. Also there is a tremendous scope for Indian private investment in Bangladesh's education and health sectors. Bangladesh can reduce its trade deficit by such investment, as trade in services now is mostly one way (Bangladesh imports service from India). These JVs investments should target regional as well as world markets. For successful JVs, private sectors in both countries should come forward and the governments must support by providing adequate incentives, infrastructures and appropriate policies.

## **6. CONCLUSION**

The trade relation between Bangladesh and India is not balanced. This unequal bilateral trade needs to be transformed into mutually beneficial, balanced and interdependent one. This has to be done for the great interests of both economies. If Bangladesh cannot improve the situation, the country would eventually become a market for Indian products, lose the existing industries, experience high level of unemployment and lose import capacity by losing income from its exports. On the other hand, for the sake of India's own interest India should promote Bangladesh's export to India. If Bangladesh's exports were increased, this would induce higher imports of raw materials and intermediate goods from India. The demand for the Indian consumer goods exports would also increase in Bangladesh due to higher income from increased exports.

Remedial measures suggested above reveal that potentials and opportunities to improve bilateral trade imbalance between Bangladesh and India are available. The necessary matters are proper initiatives, policy measures, mutual cooperation and above all political will of both countries. Maximum efforts are to be made by the people and the governments of these two countries in order to attain the highest possible mutual gains from the bilateral trade exploiting all potentials to mitigate this problem. The governments,



private investors and businessmen of both countries must work together to bring these measures into reality.

It is important to remember that bilateral relationship with India needs to be looked at in conjunction with regional and multilateral cooperation. Hence a cordial and productive cooperation between these two development partners must be ensured within appropriate regional and multilateral cooperation framework to reduce the trade imbalance. So it is crucial to make SAPTA more effective and operational.

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## LANGUAGE EFFECTS OF SUBCULTURE ON MESSAGE EVALUATION

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### ABSTRACT

*Subcultures are important assets to market segments; therefore, it is beneficial for marketers to learn their attitudes. This study investigates whether the accent in a language influences subjects during the evaluation of messages. This influence is positively associated with the message for members of both the dominant culture and the subculture; however, the influence will be stronger in the members of the subculture.*

**Keywords:** Marketing, Consumer Behavior, Information Processing, Culture/Subculture, Cross-culture

### INTRODUCTION

People of a country may not share the same beliefs, values, assumptions, or perceptions. They may believe in different religions or have different attitudes about various actions. One group of a population may find a certain action acceptable, while another group may not accept it in quite the same way. Although it can be said that every country has a dominant culture, this dominant culture may contain several subcultures.

Culture is defined as a set of values, beliefs, norms, or symbols that help members of a society to communicate and culture is shared by its members and passed from one generation to the other (Kobinah and Mizerski, 2003). Within one country there may be a number of major subcultures (Karahanna, Evaristo, and Srite, 2005). Those main subcultures can be based on race (e.g., Blacks, Asians, Hispanics, or American Indians), nationality (e.g., Mexican American, Puerto Rican, Italians, Japanese, Chinese), age (e.g., young, middle age, or senior citizens), or gender (e.g., male, female). Yet, what is a subculture?

A subculture is a segment of a culture that shares distinguishing patterns of behavior (Heslop, Papadopoulos, and Bourk, 1998). There are two important points in this definition. First, for a group to be accepted as a subculture, its members must share behaviors that differ from those of the dominant culture. Therefore, a group unique in religion, skin color or nationality will be a subculture only if they have distinctly different behavior patterns than those of the leading culture. The second important point is that members of a subculture are also members of the dominant culture. Members of a subculture share some common behaviors that are part of the dominant culture, however their actions and behavior may be different (e.g., speaking the dominant language with a different accent).

### CONCEPTUAL BACKGROUND

Many marketing practitioners and researchers have given attention to subcultures and also have attempted to understand the attitudinal differences that distinguish these subcultures from the dominant culture. Most of these studies were conducted in North America. In the United States studies have focused primarily on the Hispanic and African-American subcultures; and in Canada on the French-speaking Canadian subculture. The research done in Canada has shown that members of the French-speaking Canadian subculture tend to be lower in terms of education, occupation and yearly income than their English-speaking Canadian counterparts (Lefrancois and Chatel 1966, Mallen 1973, Tigert 1973). In addition, they have more children, stronger father roles, and extended kinship system (Mallen 1973).

In the United States, the members of the Hispanic subculture share most of these demographic profiles and family structures (Hoyer and Deshpande 1982); however, various aspects of these demographic profiles and family structures are different for the members of the African-American subculture. Unlike French-speaking Canadians and Hispanic-Americans, African-Americans tend not to have Roman Catholic backgrounds. The differences in attributes result in diverse consumption, entertainment, and shopping behaviors between the members of subcultures and dominant cultures.

A study conducted by Schaniger, Bourgenois, and Buss (1985) shows that the finding of consumption, shopping and media usage differences suggest that separate marketing mixes and programs should be targeted toward the subcultures in Canada. This same study shows that French-speaking families read the newspaper less and watch television more than English-speaking families. Marketers can use this result as a clue to facilitate selecting media for advertising. Some members of French-speaking families in Canada and many Spanish-speaking families in the United States also speak English; marketers have to decide which language to use for targeting these subcultures through advertising in each country.

A study done by Koslow, Shamdassani, and Touchstone (1994) used four print advertisements. One advertisement was completely in English and another completely in Spanish. The other two were bilingual advertisements in which English predominated in one and Spanish predominated in the other. The purpose of the study was to examine the responses of members of the Hispanic subculture to the use of the Spanish language in advertising. Many members of this subculture see themselves as both Hispanic and American and expect others to view them in the same way; as a product of both cultures. Messages completely in English or completely in Spanish may ignore this identity. The context of the messages was the same in both languages but the attitudes of the members of this subculture changed. This can be explained by the elaboration likelihood model (Petty and Cacioppo 1981). According to this model, the central route involves actively and carefully thinking about the true merits of the message arguments.

Although many studies have been done on subcultures, they used the languages of subcultures in those studies. In Canada for the French-speaking subculture, the French language was used; and in the United States, for the Hispanic subculture the Spanish language was used. The key question that must be addressed is whether accents used in an advertisement will change the dominant culture and subculture behavior. Consumers hear that broadcasting English (e.g., with a generally accepted English accent) in their daily lives and they accept it as usual. It does not matter whether they are members of dominant culture or subculture. Thus,

- P<sub>1</sub>: When subjects, members of dominant culture and subculture, hear a message with a broadcasting accent of the English language, their evaluation will be neutral toward the messages.

When people hear a message with an accent that differs from broadcast English, the subcultural group's broadcast reaction toward the message is expected to differ from other subcultural groups and that of the predominant culture. In their daily life they do not hear messages with different accents in broadcasting or advertising. It can be said that a favorable attitude using the subcultural group's accent influences subjects' attitudes by creating a favorable evaluation of the message. Therefore,

- P<sub>2a</sub>: When members of a subculture hear an advertising message in an accent to which they can relate, then this will generate positive attitudes toward the message.
- P<sub>2b</sub>: When the members of the dominant culture hear an advertising message in an accent to which a subculture can relate, then this will generate less positive attitudes toward the message.

## DISCUSSION

There is not any difference in message evaluation between the members of dominant culture or subculture when a message is delivered in generally accepted broadcast English. This is consistent with the results presented in the marketing literature. A study conducted by Brumbaugh (2002) shows that both members of a dominant culture and subculture respond similarly to ads that attribute dominant culture. However, subjects' responses differ when they listen to messages with a subculture's accent. The accent they hear is not customary in broadcasting. Therefore, they devote more resources to evaluate the messages. An unusual accent forces them to think about the message. The more they think about the message, the more they elaborate it. Subjects want to learn more about the message and try to

understand it. Here subcultural accent stimuli causes a cognitive effect which in turn causes different responses of subjects toward the issue. Members of a subculture may feel that the source of the message respects their culture and they positively associate the accent with their beliefs, values, perceptions, and assumptions. They devote more resources and they think more about each message. This leads to a strongly positive attitude.

In conclusion, marketers should be aware of subcultures, try to capture attention from members of these subcultures and use features of their values and beliefs in attempting to reach a nation's culture. If a subculture has unique characteristics and the majority of the population has favorable attitudes toward that subculture, the marketers should use those characteristics in the advertising mix and/or the marketing mix.

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**INDIAN CROSS-BORDER MERGERS & ACQUISITIONS SCENE: CURRENT TRENDS, SCOPE, REGULATORY AND LEGAL CLIMATE, ACCOUNTING AND TAX ISSUES, STRATEGIES AND INDUSTRY OPPORTUNITIES**

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**ABSTRACT**

In this research paper, we examine the Indian cross-border mergers & acquisitions during the last two decades plus. We review the trends, accounting and tax issues, human resources issues and other current developments in the Indian cross-border mergers field. We also examine and outline some of the successful strategies of cross-border mergers. We then review the scope and opportunities in cement, banking, beer, pharmaceuticals, E-business/E-commerce, Information Technology (IT), Information Technology Enabled Services (ITES) and Business Process Outsourcing (BPO) industries. The paper concludes with a section on summary and recommendations.



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