

A QUANTITATIVE ALGORITHM MODEL FOR BONUS ALLOCATION

Yue Xi, East Stroudsburg University of Pennsylvania, PA, U.S.A.
 Weichu Xu, East Stroudsburg University of Pennsylvania, PA, U.S.A.
 Robert J. Thomas, East Stroudsburg University of Pennsylvania, PA, U.S.A.

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ABSTRACT

A bonus allocation is very meaningful to the company's survival and long-term development: If top management receives a larger proportion of the total bonus and employees receive less, employees will lose motivation in daily operations. In business, it is the board of directors who discusses determining top management's annual bonus. Discussion, belonging to the qualitative approach, may involve questions and bias. Since there is lack of quantitative models for bonus allocation in literature, we propose a quantitative algorithm model to share bonus between employees and top management. At the end of this paper, an example is given to illustrate how to allocate bonuses between these two parties.

Keywords: Quantitative algorithm model, Righteous, Bonus allocation

1. INTRODUCTION

When you read the newspaper, are you shocked by the news below?

1. "Alphabet CEO Sundar Pichai got an early Christmas present Friday (2019) According to an SEC filing, Pichai will receive a \$240 million pay package as well as a \$2 million salary - up from \$1.9 in 2018".
2. "As President and CEO at HERSHEY CO, Michele G. Buck made \$8,729,898 in total compensation. Of this total, \$1,137,357 was received salary, \$1,747,950 was received as a bonus, \$1,416,300 was received in stock options, \$4,112,889 was awarded as stock and \$315,402 came from other types of compensation."
3. "According to the SEC filing, McDonald's new president and CEO Chris Kempczinski will make an annual base salary of \$1,250,000 and his target annual bonus opportunity was set at 170% of his annual base salary."

Maybe these reports do not surprise you. Now, consider the following, what do you feel when you read the news below?

1. "The average crew member salary at McDonald's is \$9 per hour, with a range of \$7 to \$13; McDonald's cashiers, on the other hand, take home an average \$8 per hour, with a range of \$7 to \$15". No bonus!
2. "Google pays an average of \$15,597 in annual employee bonuses. Bonus pay at Google, Inc. ranges from \$7,000 to \$48,000 annually among employees who report receiving a bonus. Employees with the title Senior Account Manager earn the highest bonuses with an average annual bonus of \$48,000."
3. "The reported average bonus of the Hershey Company salary is about \$4,000 per year."