Volume 5, Number 2

Print ISSN 1944-656X
Online ISSN 1944-6578

BUSINESS STUDIES JOURNAL

Gary Schneider
Quinnipiac University

The official journal of the
Academy for Business Studies,
an Affiliate of the Allied Academies

The *Business Studies Journal* is owned and published by Jordan Whitney Enterprises, Inc. Editorial content is under the control of the Allied Academies, Inc., a non-profit association of scholars, whose purpose is to support and encourage research and the sharing and exchange of ideas and insights throughout the world.

The *Business Studies Journal* is owned and published by Jordan Whitney Enterprises, Inc. 51 Blake Drive, Arden, NC 28704, USA. Those interested in communicating with the *Journal,* should contact the Executive Director of the Allied Academies at info@.alliedacademies.org.

EDITORIAL BOARD MEMBERS

TABLE OF CONTENTS

LETTER FROM THE EDITOR

The *Business Studies Journal* is the official journal of the Academy for Business Studies, an affiliate of the Allied Academies, Inc., a non profit association of scholars whose purpose is to encourage and support the advancement and exchange of knowledge, understanding and teaching throughout the world. The *BSJ* is a principal vehicle for achieving the objectives of the organization.

The *BSJ* is a journal which allows for traditional as well as non-traditional and qualitative issues to be explored. The journal follows the established policy of accepting no more than 25% of the manuscripts submitted for publication. All articles contained in this volume have been double blind refereed.

It is our mission to foster a supportive, mentoring effort on the part of the referees which will result in encouraging and supporting writers. We welcome different viewpoints because in those differences we improve knowledge and understanding.

Information about the Allied Academies, the *BSJ*, and the other journals handled by the Academy, as well as calls for conferences, are published on our web site, www.alliedacademies.org, which is updated regularly. Please visit our site and know that we welcome hearing from you at any time.

Gary Schneider, Editor
Quinnipiac University

USING CASE STUDIES TO PREPARE BUSINESS STUDENTS TO PERFORM: A PRACTICAL APPLICATION

Robert Matthews, Sam Houston State University
James Bexley, Sam Houston State University
Laura Sullivan, Sam Houston State University

ABSTRACT

Case studies are a useful tool in teaching many business concepts. This paper examines the development of a case study to teach basic concepts in choice of business entity, with applicability to courses in accounting, finance, management, law, and entrepreneurship, and possibly others. The discussion includes student feedback, steps taken to address issues, and impact on assessment of learning outcomes.

INTRODUCTION

Case studies have long been used successfully as a teaching technique by educators in many fields. Bruner, et al (2010) noted that case studies provide an excellent tool in learning to apply business principles. Kerzner (2009) found that project management was best taught through case studies. In another work Bruner (2007) emphasized how cases are beneficial in focusing on value. Stretcher and Michael (2005) offered cases along with a discussion on experiential learning. Porter (2001) noted that case quality was paramount to successful application. Sulock and Dunkelberg (1977) noted the value of cases for skill development. We believe that cases have added much value to the field, and our hope is to more specifically relate application to theory in business-related fields.

The authors came to the academic world after spending time in the private sector. Based upon that experience, and upon conversations with others in private industry, the primary difficulties that businesses see in recent university business graduates would appear to be:

- Working as a group member
- Making oral presentations
- Preparing written communications
- Thinking outside the box
- Dealing with ethical issues

Accordingly, we have included elements in various courses to address each of those efforts. Case studies are an integral part of those efforts. We hope to share with the readers the techniques that we have used in applying this teaching style. We believe that the time needed to prepare the educational case studies produces students that are much better prepared to put theory into practice when they reach the workplace.

The teaching progression used in these classes has included the following elements:

- Students read the textbook and other written materials
- Instructor covers the material read in lectures
- Students are given short quizzes in each class period reviewing materials from the prior lecture
- Students are tested periodically with three to five examinations per semester
- Students apply the lessons learned to case studies

Although case application is not limited to one discipline, the example described in this paper addresses the selection of the proper business entity. This example can be used in accounting, finance, business law, entrepreneurship, or management classes, and possibly others. Feedback from employers hiring students trained using this approach has been overwhelmingly positive.

A PRACTICAL EXAMPLE

To provide a simple example, we have used the following problem. It can be adapted for use in a finance, accounting, business law, or entrepreneurship course in which forms of business organization are addressed. The class is divided into five groups. The problem sequence is initiated by giving each of the groups certain information and having them determine the appropriate form of business organization to use. Because Sam Houston State University is located in Texas, where the oil and gas industry figures prominently, the cases are developed around a fact scenario involving oil and gas exploration. The basic concepts may easily be adapted to any specific industry.

Group A

> You and your teammates operate Armadillo Oil Corporation, an independent oil and gas exploration company. You have just made a major oil and gas discovery in a prospect area in West Texas. You have leased the mineral rights from most of the applicable landowners, and now need to raise money to finance your drilling and development program. You have a considerable mass of data regarding the size and potential of this field, and you want to keep this information confidential at least until you can complete leasing up the mineral rights from remaining landowners in the prospect area. You have determined to form a new entity, into which your company will contribute the mineral leases, and investors will contribute cash to fund the drilling and development program. You will want to insulate your investors from personal liability for actions of the new entity. You want your parent company to exercise 100% of the management authority over the new entity, with your investors having no involvement in management.

Group B

You are a family who recently inherited a ranch from your late uncle. Oil and gas has been found on outlying parts of the property, and you are currently receiving several hundred thousand dollars a month in royalties. The property includes multiple tracts, of which the largest is located in the center and has not been leased to any outside company. You want to form a company which will drill and develop that tract, so that you will then receive 100% of the revenues from those wells instead of the 12.5% royalty that you are currently receiving. Because the income potential is huge, and because you all have experience in the oil and gas industry, you are confident that you can run such a company. You all want to limit your individual liability for the actions of the company. You all want to participate actively in the management of the company. You all want to be able to pass the tax advantages of oil and gas exploration through to yourselves individually, rather than having the company pay taxes at its level and distribute after-tax earnings as dividends. Several of you are interested in living in other states, and the company may want to conduct oil and gas operations in those areas at some point. You will need a form of organization that is recognized and treated similarly in all those jurisdictions. Your existing royalties should be sufficient to fund initial drilling and development activities, and you believe that the ultimate production will generate sufficient cash to finance future operations, so attracting outside investors is not a consideration.

Group C

You and your teammates have just developed a new process for computerized interpretation of seismic data for use in oil and gas exploration. You utilize personal computers with software that you have developed to perform limited interpretation of seismic survey data on a real-time basis, and to transmit the data via satellite communications connection to large computers owned by client oil companies, which will perform more sophisticated analysis instantaneously. As a result the time required to process seismic survey data can be reduced from several months to instantaneously. This invention has the potential to revolutionize the whole oil and gas exploration process. You need to raise significant cash to get your operation going, and will want to do a public stock offering as soon as the market is right. Your primary concern is your ability to go to the stock market to raise capital as soon as possible. You and your teammates are not particularly concerned about individual tax consequences of this transaction, but you do want to limit your individual liability for acts of your business entity. You are also concerned about protecting the intellectual property rights that you have in the process.

Group D

You and your teammates have been sent to the US as representatives of the Shangri-La National Oil Company (SLANOCO). Your objective is to establish a US company that will enter into agreements with other US companies to:

- Conduct exploration in Shangri-La, a country on the Indian Ocean coast of Asia with what are believed to be significant undeveloped oil and gas reserves, both inland and offshore,
- Acquire the rights to use new technology developed by US companies, in order to develop the Shangri-La oil and gas production more quickly and efficiently, and
- Export oil and gas produced in Shangri-La to the US, and market it in the US.

SLANOCO will own 100% of the US company as a wholly-owned subsidiary. Taxes are not a significant consideration.

Group E

You and your teammates are a group of oil and gas marketers. You wish to from an independent marketing company which will buy oil and gas from producers and sell it to users directly and/or through the applicable commodity exchanges. Each of you wants to be actively involved in the management of the business. Each of you wants to limit your individual liability for company actions. You want to avoid double taxation. The need to raise capital from investors is not a major factor in your choice of entity, but you would like to retain the maximum flexibility to admit future owners as your business grows. You do not anticipate doing business, or having owners, in any jurisdiction which does not recognize the LLC form of organization similarly to Texas.

The problem scenarios are set up to point Group A toward forming a limited partnership with a corporate general partner, Group B toward forming an S corporation, Group C toward forming a publicly-held corporation, Group D toward forming a C corporation, and Group E toward forming an limited liability company. Obviously, in some cases more than one form may be acceptable. We have the students go through the effort of locating the forms that must be required to form the particular form of organization, and preparing hypothetical documents to establish their organization of choice. Once the groups have formed their companies, the problem set continues by giving them one or more further scenarios to resolve. These are tailored to emphasize various financial, accounting, and legal (intellectual property, employment and agency, tort, contract, and real property) issues.

For each group problem, students are graded based upon three component activities:

- A group written report (3-5 pages) briefly discussing the situation, the alternatives, the decisions made and the supporting rationale.
- A verbal presentation in class
- A one page individual after-action report highlighting lessons learned

RESULTS

Results can be analyzed in three ways: student evaluations, the results of the assessment of learning (AoL) process, and feedback from employers who hire graduates.

Approximately 100 students have been surveyed regarding the use of case studies. Students were asked to evaluate three criteria—enjoyment, assistance in learning, and usefulness of materials—on a scale of 1 (worst) to 5 (best). The average of the student evaluations has been as follows:

Enjoyment	3.64
Assistance in learning	4.04
Usefulness	4.15

The primary reason reported by students for evaluating the group problems relatively lower on enjoyment than the other factors was the difficulty of getting recalcitrant group members to participate. Three approaches have been used to address this issue:

- Creating a reporting grid to be turned in with each group project, where groups are allowed to take points away from individual members and transfer them to others who did more of the work, with the proviso that the net change must equal zero (exactly as many points taken away from certain students as were given to other students).
- Creating work space in the online learning management system where students can exchange ideas and which can be monitored by faculty to identify which students are participating and which are not.
- Requiring group members to submit, in addition to the group reports, an individual one-page after-action report summarizing the issues addressed by their group, the decisions reached and the rationale for those decisions, and a summary of lessons learned.

Use of these tools facilitates the awarding of individual grades on group projects, which students do find more satisfactory.

The value of this case set may also be seen in internal AoL results for this class. These results for 2009 indicated that one area where student achievement was weaker was the understanding of the various forms of business organization and the implications thereof, and efforts were focused on improving that area. The AoL scores for all students in in all sections of the class for the business organizations area averaged 71% in 2009 and 78% in 2010. For students in sections where this problem set was used, the AoL scores for the business organizations section were 83.7% in 2009 and 87.6% in 2010. These results suggest very strongly that the opportunity to apply the lessons learned in this area contributes significantly to the attainment of learning objectives.

Additionally, informal feedback from employers has indicated that this additional experience places the students anywhere from three to six months ahead of students without this focus. Such an increase in performance capability saves the employer a lot of training dollars, a fact that makes the students much more valuable in today's economic environment.

CONCLUSION

Applying the time-proven case study applications in the classroom addresses many issues. Students are required to:

- Have specific subject matter knowledge and expertise,
- Demonstrate that they are able to apply these facts in solving a situation presented to them in a manner similar to what will actually be encountered in the business world.
- Solve problems using logical thinking skills,
- Hone interpersonal relationship skills and communications skills that will better prepare them to perform at a higher level when employed after graduation.

The usefulness of case studies assigned to groups of students has been evaluated through student evaluations, assessment of learning results, and informal comments from employers. These data indicate that group case studies are a useful and helpful component of the teaching process.

REFERENCES

Bruner, Robert F. (2007). *Case Studies in Finance, Fifth Edition*. New York, NY: McGraw-Hill/Irwin.

Bruner, Robert F., K. Eades, and M. Schill (2010). *Case Studies in Finance: Managing for Corporate Value Creation, Sixth Edition,* New York, NY: McGraw-Hill/Irwin.

Chacko, George, et al. (2006). *Financial Instruments and Markets: A Casebook*. Hoboken, NJ: John Wiley & Sons.

DeMello, Jim (2006). *Cases in Finance, Second Edition.* New York, NY: McGraw-Hill/Irwin.

Kester, Carl, R. Rubeck and P. Tufano (2005). *Case Problems in Finance, Twelfth Edition.* New York, NY: McGraw-Hill/Irwin.

Porter, David (2001). What is Finance Case Research? *Journal of Finance Case Research,* Vol.3, No. 2, pp. 73-76.

Stretcher, Robert, and T. Michael (2005). *Cases in Financial Management,* Upper Saddle River, NJ: Pearson Prentice Hall.

Sulock, Joseph M. and J. S. Dunkelberg (1997). *Cases in Financial Management, Second Edition,* Hoboken, NJ: John Wiley & So

CORPORATE SOCIAL RESPONSIBILITY AND THE DEVELOPING WORLD: COMMITMENT OR DUPLICITY?

Ahmed Maamoun, University of Minnesota Duluth

ABSTRACT

Corporate social responsibility (CSR) is a current hot topic, due in theory to consumers tending to boycott companies that engage in questionable practices. Multinational companies (MNCs) that do not express commitment to CSR are almost nonexistent. Nevertheless, on the ground, many examples of corporate irresponsibility exist. This paper examines the practices over the past decade of twenty global MNCs. A comprehensive assessment of news articles related to these twenty companies was undertaken. All pertinent CSR news articles available in the LexisNexis database on each of these companies have been retrieved and analyzed. The vast majority of problematic incidents take place in the developing world. Developing countries usually score low on the corruption perceptions index (CPI); these low scores indicate the presence of practices that provide openings for corruption, bribery, and law breaking. Extrapolating from evidence in case studies, it is apparent that some MNCs do not conduct business the same way in developing countries as they do in Western industrialized countries.

INTRODUCTION

Multinational corporations (MNCs) commonly express a commitment to corporate social responsibility (CSR). Such commitment is often expressed in terms of “a desire to payback,” “to invest in communities,” “to be a global citizen,” “to be socially responsible,” “to engage in fair trade,” or “to save the planet.” Implementation may vary from company to company, but the basic theme remains the same: we may be a giant company, but we stand for more than just making money. The focus of this paper is to look at the other side of CSR: the socially irresponsible behavior of some corporations. The hypothesis is that MNCs are more likely to engage in irresponsible behavior in countries where the general level of corruption is high. Such highly corrupted countries are typically less developed and lack legal enforcement or infrastructure. The paper strives to draw a link between MNCs’ infractions and the corruption level of host countries.

A commitment to CSR is not a cost-free option. For example, if a company decides to donate 2% of its profits to an environmental cause, the shareholders of that company are effectively making that donation. Similarly, an opportunity exists in the developing world to engage in irresponsible behavior in order to gain monetarily.

Thus, engaging in irresponsible behavior can be viewed as a cost-saving or moneymaking alternative. While engaging in such actions can attract serious legal repercussions in Western industrialized countries, the outcomes may be dramatically different in countries with high corruption rates, where enforcement officials may be convinced to look the other way. Economic logic suggests that in the absence of regulations or effective enforcement of regulations, some companies will endeavor to maximize profits by engaging in irresponsible conduct.

CORPORATE SOCIAL RESPONSIBILITY (CSR)

CSR of business includes economic and legal responsibilities, corporate philanthropy, environmental policy, corporate social performance, and corporate citizenship. Dahlsurd (2008) compiles and analyzes 37 different definitions originating from 27 authors and covering a time span from 1980 to 2003. The World Business Council for Sustainable Development (WBCSD) defines corporate social responsibility as "the continuing commitment by business to contribute to economic development, while improving the quality of life of the workforce and their families, as well as of the community and society at large." A definition that Hopkins (2007) has used for years is "CSR is concerned with treating the stakeholders of the firm ethically or in a responsible manner."

Dahlsurd (2008) identifies a common theme that runs across different definitions—the positive impact of CSR on the society at large. McWilliam, Siegel, and Wright (2006) note that CSR involves instances "where the firm goes beyond compliance and engages in actions that appear to further some social good, beyond the interests of the firm and that which is required by law." If going beyond the minimum legal requirements is CSR, then one can argue that ignoring laws and regulations and engaging in unsound business practices should constitute corporate social *irresponsibility*. One can view socially responsible or irresponsible behavior on a continuum where the center point is what is legally mandated and generally accepted as sound business practice. A corporation that goes over and above the legal minimum to make a positive impact on its "community" is engaging in socially responsible conduct. If a corporation fails to meet even the legal requirements or is otherwise involved in questionable practices, the corporation may be viewed as engaging in socially irresponsible conduct.

The positive side of the continuum (CSR) has been the subject of much debate. CSR's critics argue that the key job of a business is to maximize profits for its shareholders. Such critics depend on the legal system to shape the relationship between businesses and society. They also contend that corporations are already fulfilling a significant public service by providing jobs, products, and services that society needs; and they question the feasibility of a business that attempts to "do well by doing good." Approximately 40 years ago, Milton Friedman debated that the only responsibility of corporations was to maximize profits, thereby generating jobs and prosperity in the process. Traditional economic arguments suggest that managers should make decisions that make the most of the wealth of their firm's shareholders. Almost 30 years ago, Mintzberg (1983) stated that managers have no right to carry out social objectives or to force their own view of the public good on society.

CORRUPTION AND CORRUPTION PERCEPTIONS INDEX

Prior to the era of globalization, the literature contained a relative paucity of research on corruption and its relationship to firms' activities. As MNCs ventured around the globe, managers and scholars became more sensitive of the need to understand and address the magnitude of corruption. While no distinct, inclusive, unanimously accepted definition of corruption exists, some consensus in the literature points to a case of corruption when the following occurs: "a public official (A), acting for personal gain, violates the norm for public office and harms the interests of the public (B) to benefit a third party (C), which rewards A for access to goods and services that C would not otherwise obtain." Corruption is the misuse of public power for private gain.

Given its *sub rosa* nature, corruption is an exceedingly complicated phenomenon to quantify. One of the most commonly used macro-measures of corruption is the corruption perceptions index (CPI, published annually by Transparency International). CPI ranks countries according to alleged levels of corruption among public bureaucrats and politicians on a scale from 0 (perceived to be highly corrupt) to 10 (perceived to have low levels of corruption). Highest scorers in the 2010 CPI are Denmark, New Zealand, and Singapore tied at 9.3. The goal of CPI is to provide some insights into corruption within countries around the globe. MNCs encounter some level of corruption wherever they go. However, corruption varies across countries, as much as labor costs, inflation, interest, and tax rates do. Developing countries seem particularly hard hit by the plague of corruption. The World Bank identifies corruption as "the single greatest obstacle to economic and social development."

While developing countries must take responsibility for fighting corruption, MNCs can do much to help. At the very least, corporations should not be complicit or assist in the perpetuation of the corrupt system. Today, international institutions, nonprofit organizations, media, and law and policy makers generally agree that corruption has both a demand and a supply side. In other words, every bribe-taker requires a bribe-giver. While MNCs can do little on the demand side of the corruption equation, they can influence the supply side.

MNCS AND CSR IN DEVELOPING COUNTRIES

Globalization tremendously amplifies corporate power. The largest MNCs have revenues that now dwarf the budgets of most of the world's nations. As the scope and scale of MNCs' activities have grown, governments in industrialized countries have attempted proactively to regulate them. For instance, environmental protection laws, worker's safety, consumer rights, anti-trust laws, accounting rules, and auditing policies have become part of a relatively strong legal system in developed countries. On the other hand, for developing countries, MNCs' operations present a tricky regulatory challenge. Many developing countries lack an effective regulatory environment. Today, the headquarters of an overwhelming majority of MNCs (some 60,000) are in developed nations (with a stronger regulatory environment), whereas the developing countries (with weaker regulatory environments) host approximately half a million corporate subsidiaries of these MNCs.

IRRESPONSIBLE CONDUCT: EVIDENCE FROM CASE STUDIES

The United Nations Global Compact was established "to assist the private sector in the management of increasingly complex risks and opportunities in the environmental, social and governance realms." It could be viewed as a cornerstone to managing a socially responsible business. However, only 5,500 MNCs (out of 67,000) have chosen to participate. The Compact asks companies to embrace, support, and enact, within their sphere of influence, ten core principles in the areas of human rights, labor standards, the environment, and anti-corruption:

1) Support and respect human rights
2) Not be complicit in human rights abuses
3) Uphold the freedom of association
4) Eliminate forced and compulsory labor
5) Abolish child labor
6) Eradicate discrimination in employment and occupation
7) Sustain a protective approach to environmental challenges
8) Develop programs to encourage greater ecological responsibility
9) Promote environmentally friendly technologies and know-how
10) Fight corruption in all its forms

The Compact calls for holding the parent company liable for the abuses of its subsidiaries. The author uses the standards established in the Global Compact to evaluate the questionable conduct of 20 MNCs.

METHODOLOGY

For the purposes of this study, a set of 20 companies that have been newsworthy over the past decade (2001–2010) is identified. These companies have been chosen because they are profitable multi-billion dollar corporations, represent different sectors and CSR issues, originate from various developed countries, operate worldwide, and have been involved in highly publicized investigations. A ten-year period was selected to detect any consistent behavior or conduct. Next, in order to apply a consistent search methodology and to conduct a comprehensive assessment of news articles related to these companies, pertinent news articles available in the LexisNexis database on each of these companies have been retrieved and analyzed (more than 10,000 articles). The methodology allows keeping a close watch on these corporations' activities and news across the world. Then, host countries' CPI scores are used to draw a link between irresponsible conduct and level of corruption.

Regardless of the relatively high number of articles used to map the activities of these companies around the globe, the research has several limitations. Only 20 companies have been researched over a limited period of time (10 years). Meanwhile, data were sourced from one database (LexisNexis). The paper focuses on examples of corporate social irresponsibility. Although the incidents are documented, the paper in no way seeks to undermine or downplay the crucial role MNCs have in communities where they conduct business. There certainly are ethical MNCs. However, this paper highlights those that are not.

EXAMPLES

Example 1: Adidas

Adidas is the second largest sportswear company in the world, with revenues of more than $13 billion in 2010. The German company has consistently been criticized for spending millions on sponsoring sports events, such as the Olympics, while disregarding regulation of its suppliers' practices. For example, a 2002 investigation by *The Independent* showed evidence that Indonesian workers producing clothes for the sportswear giant are subject to compulsory overtime, inhumane treatment and below subsistence wages. Adidas paid $74 million to sponsor the 2008 Beijing Olympics with the slogan "impossible is nothing." However, workers in its Chinese contract factories earn a basic $15 a week. A 2008 investigation by *The Times* into the workers' compensation and working conditions has found violations of China's labor laws and Adidas's own workplace policies. *The Times* report revealed documents showing workers toiling for more than 70 hours a week, even though local labor laws limit the average working week to 49 hours.

Example 2: BAE Systems

BAE Systems is a British defense and aerospace company. With customers in more than 100 countries, BAE ranked 238 on the Fortune Global 500 list with $31.7 billion in revenue in 2010. The company has been accused of political corruption and bribery while selling arms in at least five countries (Czech Republic, Romania, Saudi Arabia, South Africa, and Tanzania). BAE has been the subject of a series of bribery investigations by the British Serious Fraud Office

(SFO). The most scrutinized and heavily publicized case involved BAE's sale of military aircraft and equipment to the Saudi government. In 2007, the SFO investigation revealed that a prince from the Saudi royal family received hundreds of millions of dollars in kickbacks to secure an $80 billion arms deal. As BAE has an American subsidiary and generates almost half of its revenue in the United States, the company was also investigated by the U.S. Department of Justice.

In Tanzania, a similar scenario took place on a smaller scale. In April 2008, the SFO accused the British arms giant of bribing the east African country's officials to secure contracts. The scandal forced the Tanzanian minister of infrastructure development, Andrew Chenge, to resign. Investigators found at least $1 million in Mr. Chenge's offshore accounts that came from BAE. In December 2008, the SFO accused BAE of paying £100 million to officials in South Africa to secure a £1.6 billion contract to supply military aircraft. Similar incidents took place in Eastern Europe. In 2003, BAE paid £6 million to Romanian government officials to seize a £116 million contract for the refurbishment of navy ships. Another deal has been uncovered in the Czech Republic pertaining to a £1 billion contract to lease BAE jets to the Czech government. In 2010, the company was fined $400 million in the U.S. and £500,000 in the UK, closing a lengthy bribery investigation.

Example 3: Blackwater

In September 2007, a group of Blackwater contractors guarding U.S. State Department employees opened fire in a crowded Baghdad square. The shootings left 17 Iraqi civilians dead. The incident fueled anti-American sentiment in Iraq and raised questions about the practices of the private security company's employees. In December 2007, Blackwater's executives approved and sent $1 million to its office in Iraq in a bid to hush criticism and influence the Iraqi investigation. Bribes were meant to pay off Iraqi officials who said the fatal shootings of civilians were unjustified. The company was afraid of losing its contract with the State Department, estimated to be worth hundreds of millions of dollars annually. In 2010, the U.S. Department of Justice launched an investigation to determine whether Blackwater, now called Xe Services, broke U.S. laws against bribery of foreign officials.

Example 4: Chiquita Brands

Chiquita Brands is a leading producer and distributor of bananas and other fresh produce. Its 2009 revenues totaled $3.5 billion, while annual earnings came to $2.27 per share. The Department of Justice started investigating the company in 2003 for violating the United States' anti-terrorism laws. Investigations concluded that Chiquita was disbursing "protection money" and providing weapons to a Colombian rebel group on the U.S. government's list of terrorist organizations. American prosecutors accused the Ohio-based company of paying $1.7 million between 1997 and 2004 to the United Self-defense Forces of Colombia, known as AUC after its Spanish acronym.

The AUC has been behind the worst atrocities in Colombia's recent history, and it exports a substantial percentage of the country's cocaine. The American government labeled this right-wing militia a terrorist organization in 2001. Yet Chiquita continued paying the rebel group and its assassins. The company admitted it knew that such payments were illegal, and contended it was merely to secure its Colombian banana plantations. In March 2007, Chiquita agreed to a $25 million fine after pleading guilty and acknowledging it paid terrorists for protection in politically unstable farming territories. In 2010, Chiquita was also sued by hundreds of Colombian families whose relatives were kidnapped and murdered while the company funded paramilitary groups.

Example 5: Daimler

Daimler AG (formerly DaimlerChrysler) ranks as the thirteenth-largest automaker and second-largest truck manufacturer in the world. Total revenues in 2010 were $110 billion. In 2005, U.S. prosecutors accused Daimler of engaging in a systematic practice of paying bribes to win contracts. The Securities and Exchange Commission's (SEC) probe commenced when an auditor complained he was terminated after questioning clandestine bank accounts used to pay foreign bureaucrats. Daimler was charged with bribing foreign officials with millions of dollars and luxury cars to capture business deals. Those deals took place in China, Egypt, Greece, Iraq, Nigeria, Russia, Serbia, Turkey and Turkmenistan between 1998 and early 2008.

The German automaker "made hundreds of improper payments worth tens of millions of dollars to foreign officials" in return for assistance "in securing contracts with government customers for the purchase of Daimler vehicles worth hundreds of millions of dollars," according to the court documents. For instance, Daimler granted an official in Turkmenistan a Mercedes armored car for his birthday. In Iraq, the company paid 10% kickbacks to the former Iraqi regime in violation of the United Nation's Oil-for-Food program. In Egypt, a high profile politician was paid $1.5 million to ensure that Daimler supplied trucks and spare parts to the government. In March 2010, the company pleaded guilty to the corruption charges and paid $185 million to settle the case in the United States.

Example 6: Exxon Mobil

Exxon Mobil is the third largest company in the world in terms of revenues ($284.6 billion in 2010); and is by far the most profitable ($19.3 billion). Exxon Mobil is a major player in oil-rich developing countries, where bribery and corruption are widespread. In 2003, the company was investigated by the SEC. U.S. authorities discovered large payments by Exxon Mobil to officials of Equatorial Guinea deposited in U.S. bank accounts, raising concerns about possible corruption. The total amount of funds held in these bank accounts was a staggering $500 million. Exxon Mobil also allegedly made several payments into bank accounts held in the name of the Guinean president's wife.

In another case, Exxon Mobil was investigated by the U.S. Department of Justice for bribing senior government officials in order to secure contracts in Kazakhstan. The company was accused of funneling more than $78 million in bribes to two officials in Kazakhstan. The money was deposited in a Swiss bank account through an American lobbyist and former advisor to the Kazakhstan president.

Exxon Mobil's history shows that it could be labeled a polluter and environmental degrader. Accounts suggest that the oil giant lobbied the Bush Administration to reject the Kyoto Agreement (aimed at combating global warming) in 2005. The company was also fined repeatedly for breaking environmental laws in the United States and overseas. The most recent case was in New York in October 2009, in which the company was found liable for a $105 million in damages for contaminating part of the city's water supply.

Example 7: Halliburton

Halliburton acquired M.W. Kellogg, one of the world's largest general contractors for construction projects, in 1998. After the acquisition, Kellogg was combined with an existing Halliburton business and renamed Kellogg Brown & Root (KBR). In 2008, the Texas-based oil and gas service company pleaded guilty to paying Nigerian officials $182 million in bribes for contracts to construct liquefied natural gas facilities. The contracts were awarded between 1995 and 2004 valued at more than $6 billion. In 2009, Halliburton and KBR agreed to pay a staggering $579 million fine, the biggest corruption settlement ever paid by an American firm under the foreign corrupt practices act.

Example 8: Hershey

Hershey is the largest American manufacturer of chocolate and candy with revenues of $5.3 billion in 2009. The company has long been criticized for sourcing cocoa from plantations that use slave and trafficked child labor. Seventy percent of the world's cocoa comes from the West African nations of Ghana and Ivory Coast, where hundreds of thousands of children toil on cocoa farms. In October 2000, the BBC aired a documentary, *Slavery: A Global Investigation*, that indicated the magnitude of the problem. Hundreds of thousands of children, many under the age of 10, are "enslaved" to harvest cocoa beans. They handle hazardous agrochemicals, use blades to hack open cocoa pods and carry strenuous loads. In June 2001, the international labor organization stated that trafficked child labor was used in cocoa harvesting in West Africa. From 2002 to 2004, Ivory Coast was riveted by civil war, and revenues from cocoa exports helped expand the fighting. Cocoa became a conflict resource, and the term "blood chocolate" was coined. In December 2005, Ivory Coast's child labor monitoring project acknowledged that children continued to be forced into slave-like work on cocoa farms.

Regardless of these undisputed facts, Hershey and other candy companies continued to source cocoa from Ivory Coast and Ghana without even attempting to improve working conditions on the farms. In 2007, Hershey established a supplier code and committed to "responsible cocoa growing." However, a 2008 *Fortune* magazine investigation showed that Hershey is not playing an active role in improving the cocoa farms conditions in West Africa. According to the report, Hershey is merely contributing to the international cocoa initiative (ICI), which has made little progress to stop child labor.

Example 9: HP

Hewlett-Packard (HP) is the world's largest technology company. Total sales in 2010 exceeded $114 billion and profits were $7.7 billion. In April 2010, German authorities arrested three HP employees and charged them with paying $10.9 million in bribes to Russian officials to land a lucrative contract that ran from 2000 to 2006. The German government has been investigating HP for several years pertaining to a multi-million dollar bribery scheme.

The California-based company sold computer and internet technology (IT) network equipment through its German office to the prosecutor general's office of the Russian Federation. The IT network HP installed under the deal is designed to provide secure communications for prosecutors throughout Russia. German authorities have traced the bribe payments through a sophisticated network of phony companies and bank accounts in many countries. Both the U.S. Justice Department and the SEC have launched their own investigations into whether the American computer giant has violated the Foreign Corrupt Practices Act.

Example 10: Johnson & Johnson

Johnson & Johnson is a New Jersey-based manufacturer of pharmaceutical and personal hygiene products. Revenues in 2010 totaled $62 billion. In 2007, American prosecutors investigated the company for paying bribes to secure overseas business. Johnson & Johnson admitted making "improper payments" in two "small market" countries. The first country was Iraq, where the company violated regulations stemming from the U.N. Oil-for-Food program. The second market was Greece, where the company's subsidiary paid $7 million in bribes to doctors within the Greek state healthcare system between 2002 and 2006. Another bribery case was exposed in June 2010, this time in China. The pharmaceutical giant allegedly paid China's Vice Director of the State Food and Drug Administration (SFDA) to secure quick registration for new drugs and medical products. Authorities in the United States and China are investigating the company.

Example 11: Mabey & Johnson

Mabey & Johnson is a British engineering and bridge-building company. In 2004, *The Guardian* accused the firm of systematically bribing foreign officials to win business contracts. A five-year SFO investigation revealed that Mabey & Johnson made corrupt payments to officials in Angola, Bangladesh, Ghana, Iraq, Jamaica, Madagascar, and Mozambique. In 2009, the firm was convicted of bribing foreign politicians and violating United Nations sanctions against Iraq and was fined £6.6 million.

Example 12: Mattel

Headquartered in California, Mattel is the world's largest toy company with total sales of $6 billion in 2009. Mattel was involved in two major incidents during the study period: lead contamination in its toys and working conditions in its sub-contractors' factories. In 2007, Mattel had to recall almost 20 million toys in the United States because of hazards related to magnets and lead paint. Lead is a toxic substance that causes various health problems, such as kidney failure, brain damage, or even death. Under current American regulations, children's products found to have more than 0.06% lead must be recalled. Lead content in some of the toys Mattel recalled was as much as 180 times the legal limit. All of the recalled toys were made in China, where laws prohibiting the use of lead paint are either non-existent or loosely enforced.

Mattel does not own or operate the factories that produce most of its toys. The American toy giant has contracts with more than 50 Chinese manufacturers, many of whom sub-contract to smaller firms. The pressure that MNCs (Mattel included) put on Chinese contractors to supply cheap products is considerable, and profit margins are very slim. Observers shouldn't find it surprising that contractors are finding the cheapest and easiest means to conduct business. For example, while lead paint is considered toxic, it is cheap, produces glowing colors, and resists oxidization. This cost-slashing approach combined with Chinese government bureaucracy and corruption, creates incentives for cutting corners.

Mattel has also been accused of sourcing its toys from sweatshops. In recent years, several reports have uncovered the ruthless working conditions in Chinese toy factories, which make almost 75 percent of the world's toy output. Complaints of long shifts, inhumane working conditions, hazardous equipment and materials, confined dormitories, abusive supervisors, and wages below even China's legal minimum have been made against many factories.

Example 13: Monsanto

Monsanto, the St. Louis-based agricultural and biotechnology giant, is currently the world's largest producer of genetically engineered (GE) seed. In 2010, sales were $10.5 billion and profits were almost $1.1 billion. Monsanto aggressively promotes its products across the world using tactics that have been called questionable and that have been designed to downplay health and environmental concerns, dismiss consumer opposition, and thwart government regulations. Perhaps the most significant incident of inappropriate conduct by this company was seen in Indonesia with the introduction of genetically engineered cotton.

Before the introduction of GE cotton, the Indonesian government wanted to take steps to ensure these crops would be safe. Instead of complying with the government's regulations, Monsanto bribed officials to circumvent the required environmental assessment. In 2004, the company was charged—under the Foreign Corrupt Practices Act—with paying $50,000 to the Indonesian environment minister to avoid an environmental assessment on its GE cotton. Monsanto was also found to have covered up the bribe with fraudulent invoices as "consulting fees" entered in the company's books and records. The investigation also revealed that Monsanto made at least $700,000 of "questionable or illegal" payments from 1997 to 2002 to at least 140 current and former Indonesian government officials and their family members. The objective of these payments was to obtain legislative and ministerial decrees supporting the cultivation of GE crops. In January 2005, the company agreed to pay fines of $1.5 million to the U.S. Department of Justice and the SEC.

Example 14: Nike

Nike is the world's largest sportswear company. In 2010, Nike reported record revenues of $19.1 billion and profits of almost $1.5 billion. The Oregon-based company's name has often been associated with sweatshop factories in Southeast Asia, where labor is cheap and laws are lax. Although Nike doesn't own any of these factories, the company has a social and ethical responsibility to ensure they are operated in a humane manner. In 1998, Nike's founder and CEO, Philip Knight, accepted social responsibility for the working conditions at these facilities. Mr. Knight acknowledged that "Nike product has become synonymous with slave wages, forced overtime, and arbitrary abuse." Nevertheless, the sweatshop practice seems to have continued into the 21st Century.

In October 2000, a BBC documentary revealed that Nike was using child labor in Cambodia. The documentary showed children as young as 12 making shoes and apparel in sweatshop working conditions. For example, they were required to work seven days a week and up to sixteen hours a day. Nike responded that underage workers would be paid to go to school and would return to work once they reach the legal working age. However, according to a follow up visit made by the BBC crew to the same factories in May 2001, that promise was not kept. The crew found the same girls, who were previously interviewed, working in the same inhumane conditions.

In 2002, a report showed that tens of thousands of workers producing Nike's shoes in Indonesia "are still living in extreme poverty and work in dangerous conditions." Evidence was found that workers were abused by supervisors (physically and verbally), coerced to work long hours, and were paid a meager $2 a day.

In 2005, Nike published its first CSR report including details of the 700 factories that produce its shoes and apparel. The step was seen as a sign of Nike’s commitment to closely monitor the working conditions in its factories. Knight admitted in the report that his company had failed to remedy sweatshop conditions, and he disclosed that “a quarter of its factories were still not meeting minimum standards.” The 108-page report admits to widespread problems in Nike’s Asian facilities. Numerous human rights abuses are documented, including physical assault, restricted access to toilets and drinking water during shifts, a seven-day workweek, excessive overtime, and below legal minimum wages. The most recent sweatshop news involving Nike came from Malaysia. In July 2008, an undercover investigation of Nike’s largest contractor in Malaysia, by Australian Channel 7 News, found and documented cases involving forced labor and workers living in virtual slave labor conditions.

Example 15: Pfizer

Pfizer is the world's largest research-based pharmaceutical company, with revenues of more than $50 billion in 2010. In May 2007, the Nigerian government accused Pfizer of "fraudulent representation, illegal/unethical conduct and practice, negligence, and contravention of customary international law." Nigerian officials contended that the American pharmaceutical giant tested an antibiotic as a treatment for meningitis, Trovan, on 200 Nigerian children and infants. The $6 billion lawsuit stated that Pfizer researchers knew the fatal ramifications of the experiment, did not get the children's families' consent, and left no records in Nigeria. Pfizer's actions caused the death of 11 children and left others deaf, blind, brain-damaged, or paralyzed. In 2008, Pfizer hired private investigators to expose corruption links to Nigeria's attorney general in order to blackmail him to drop the case. A $75 million settlement was reached in July 2009.

Example 16: Puma

Puma is one of the world's largest sportswear companies, designing and selling footwear, apparel and accessories. 2009 revenues exceeded $3 billion. Puma, like most sportswear companies operating in developing countries, has been under fire for sweatshop exploitation. In 2004, an American watchdog organization, the National Labor Committee (NLC), accused the company's contract manufacturers in China of abusing and exploiting workers. According to NLC, the German company's production facilities in China are sweatshops, where workers toil 16 hours a day for as little as 31 cents an hour. The NLC and China Labor Watch jointly issued a report claiming that employees suffer from "grueling hours, pitifully low wages, exploitation, abuse, and denial of their rights." In 2008, the German magazine, *Der Spiegal,* reported slave-like conditions in a Chinese factory manufacturing shoes for Puma in Dongguan. The article detailed how the factory forced employees making Puma sneakers to work almost 100 hours a week in sweatshop circumstances and live in rooms accommodating as many as 12 people. A 2010 investigation by the British newspaper, *The Independent*, revealed that 75 Puma suppliers failed audits. Most of those contract manufacturers disregarded rules on hours and compensation, ignored workplace safety, and disregarded rules on the usage of chemicals.

Example 17: Royal Dutch Shell

Royal Dutch Shell is the second largest company on the planet, with $285 billion in revenues in 2010. It is also one of the most profitable companies in the world ($12.5 billion). Nevertheless, the Anglo-Dutch oil giant has a controversial CSR record. In the past ten years, Shell has come under fire and has been seen by some as a company that "damages the environment and supports corrupt regimes." One of the most controversial cases happened in Nigeria, where Shell is the largest foreign investor and biggest oil producer. Nigeria is one of the poorest and most corrupt countries in the world. In 2010, Transparency International ranked Nigeria 134 with a CPI score of 2.4. In spite of the millions of dollars of oil income pouring into the country on a daily basis, more than 70% of the people live on less than $1 a day. Although the majority of Nigeria's oil is found in the Niger Delta, the region has been plagued with violence, pollution, and famine.

Oil spills in the delta area have caused an extensive environmental catastrophe. According to Amnesty International, the oil-rich delta's residents are going through a "human rights tragedy" caused by environmental damage. "The Niger Delta provides a stark example of the lack of accountability of a government to its people and of multinational companies' almost total lack of accountability when it comes to the impact of their operations on human rights," said Audrey Gaughran, Amnesty International's head of business and human rights. In November 2009, Nigerian human rights activist, Nnimmo Bassey, accused oil multinationals operating in Nigeria of ruining the Niger Delta and devastating its people's lives. (Bassey was voted by *Time* magazine a "Hero of the Environment 2009.")

In the year 2002, Shell has admitted 262 oil spillages in Nigeria, involving 2,700 tons of crude oil. Shell also identified 548 sites and pipelines that needed remedial action to reduce pollution. For the year 2009, Nigerian reports estimate at least 2,000 oil spills in the Niger Delta region, and most of these are from Shell's operations. Leaks from refineries and pipelines contaminate rivers, creeks, ponds, lakes, forests, and farms. This contamination causes widespread famine and illness. Shell has been accused of covering up these disastrous oil spills, and citing local sabotage, as the source of the problem.

In addition to oil spills, Shell Nigeria has been accused of gas flaring (an illegal and dangerous practice of burning gas that is released when oil is extracted). Shell's gas flaring has caused acid rain, respiratory and skin diseases, and environmental degradation in dozens of local communities in the delta area. In February 2008, Shell was sued by a local NGO in an effort to stop the practice of gas flaring. Not surprisingly, an ongoing conflict between local communities and the oil giant persists. The oil spills and other oil-related pollution contaminate food and water supplies. Damage to crops leads to further community aggravation. This conflict has turned violent on many occasions. Claims have been made that assert Shell has paid the Nigerian military to protect the company's facilities from local protesters and to crush civil unrest. In 2003, Shell admitted that the company has inadvertently fuelled instability, poverty, violence, and corruption through its operations in Nigeria. "Sometimes we feed conflict by the way we award contracts, gain access to land, and deal with community representatives," the company said.

Example 18: Saipem

Saipem is an Italian oil and gas industry contractor. The company was part of the Halliburton consortium building liquid natural gas facilities in Nigeria between 1994 and 2004. An Italian probe linked the company to an international investigation into alleged bribes of $182 million to attain contracts worth more than $6 billion. In 2010, Saipem pleaded guilty and agreed to pay a criminal penalty of $30 million to settle the case in Nigeria. In addition, Saipem paid $365 million to U.S. regulators.

Example 19: Siemens

Siemens AG is the largest engineering corporation in Europe. Revenues in 2010 topped $100 billion. In 2006, police searched Siemens' corporate offices as part of an investigation into suspected bribery and kickbacks in several countries. In 2007, German and U.S. authorities accused the Munich-based technology giant of bribing government officials in Argentina, Bangladesh, China, Iraq, Israel, Nigeria, and Venezuela between 2001 and 2004 to gain and retain contracts. Siemens was shown to have paid $40 million in bribes to capture a $1 billion contract to handle national identity cards in Argentina, $5 million to secure a mobile phone contract in Bangladesh, $14 million for a medical equipment contract with the Chinese government, $1.7 million to Saddam Hussein and his associates, $20 million to senior Israeli officials to construct power plants, $12.7 million to senior Nigerian bureaucrats for government contracts, and $16 million for a rail line contract in Venezuela. According to German prosecutors, the company turned to markets in less developed countries as a competitive strategy, and bribery became a consistent practice. "Bribery was Siemens's business model," said Uwe Dolata, the spokesman for the Association of Federal Criminal Investigators in Germany. "Siemens had institutionalized corruption," he added. In 2008, the company pleaded guilty and paid $1.6 billion in fines to German and U.S. regulators in the biggest corporate corruption case in history.

Example 20: Trafigura

Founded in 1993, Trafigura is a Dutch MNC trading in metals and oil. In 2009, the company generated a net profit of $938 million on total sales of $47.3 billion. Since its creation, Trafigura's name has been associated with several scandals. Specifically, the company has been linked to the corrupt practices of smuggling, toxic waste disposal, and bribery. Three incidents related to the company stand out as examples of irresponsible conduct: Iraq's Oil-for-Food scandal, Ivory Coast's toxic waste dumping, and Jamaica's government bribery.

In 2001, Trafigura was accused of paying bribes to the Iraqi regime to secure oil supply contracts under the United Nations' Oil-for-Food program. Moreover, the company was involved in oil-smuggling schemes by "topping up" tankers at Iraqi ports with extra oil (violating the UN's sanctions and enabling the former Iraqi regime to illegally get $1.8 billion). U.S. warships intercepted one of Trafigura's vessels carrying hundreds of thousands of barrels of illegal Iraqi oil. Iraq is one of the most corrupt countries in the world.

In August 2006, the dumping of toxic material in densely-populated public sites across Abidjan, Ivory Coast, led to 15 deaths and widespread sickness. In the weeks following the dumping, local residents reported occurrences of vomiting, burns, inflammation of the eyes, respiratory problems, diarrhea, and nausea (100,000 poisoning cases). The company had originally sought to discharge the chemical slops from one of its tankers, the Probo Koala, in the port of Amsterdam, but could not follow through its plan because of serious objections. In September 2009, Trafigura agreed to pay $46 million to the 31,000 people confirmed to have been made ill by the dumping of the toxic wastes, in addition to $198 million to the government of Ivory Coast. In July 2010, a Dutch court fined the company €1 million at the conclusion of a seven-week trial related to the incident.

In October 2006, in Jamaica, Trafigura paid the ruling people's national party $31 million Jamaican dollars (about $500,000) to secure a contract to sell and haul Nigerian crude oil to Jamaica. The incident became known in Jamaica as the "Trafigura Scandal," forcing the Information Minster, Colin Campbell, to resign.

CONCLUSION

This paper looks into the reported practices of 20 MNCs around the globe over the decade (2001 – 2010) from a CSR perspective. After reviewing more than 10,000 articles published in the United States, United Kingdom, and around the world, this research concludes that the vast majority of all reported regulatory infractions and corporate social irresponsibility practices took place in developing or less developed countries. Developing countries usually score low on the corruption perceptions index (CPI), and this index score indicates the presence of practices that can allow MNCs to ignore laws. Although MNCs are obligated to obey the law regardless of where they operate, examples from the 20 case studies show that this is not the case. Doing business varies from one country to another and from one culture to another. However, doing business differently is not the same as doing business corruptly. As the U.N. compact calls for holding a parent company liable for abuses of its subsidiaries, MNCs should be (at least partially) held accountable for the infractions taking place at their various offices and even suppliers' and contractors' production facilities.

The study shows some incidents of corporate social irresponsibility. Examples include: dumping toxic wastes, bribing government officials and politicians to obtain and retain contracts, ignoring product safety, sweatshops and employing child labor, funding repressive regimes and militias, and pollution and environmental degradation. These major CSR problems took place in 31 different countries: Angola, Argentina, Bangladesh, Cambodia, China, Colombia, Czech Republic, Egypt, Equatorial Guinea, Ghana, Greece, Indonesia, Iraq, Israel, Ivory Coast, Jamaica, Kazakhstan, Madagascar, Malaysia, Mozambique, Nigeria, Romania, Russia, Saudi Arabia, Serbia, South Africa, Tanzania, Turkey, Turkmenistan, USA, and Venezuela. Of these 31 countries, 27 (or 87%) are considered developing nations according to the IMF's 2010 World Economic Outlook report. The four developed countries are Czech Republic ("graduated" in 2009), Greece, Israel, and USA. The paper is not intended by any means to downplay or challenge the beneficial work the vast majority of MNCs do around the globe. The focus was on irresponsible practices to highlight the importance of CSR to MNCs.

Table 1 depicts the CSR issues this paper documents. All incidents (except for bribery in Israel and pollution in the United States) occurred in countries that recorded CPI scores below five on a scale from 0 (perceived to be highly corrupt) to 10 (perceived to have low levels of corruption). The table also implies that MNCs do not conduct business in developing countries in the same way they do in western industrialized countries, where product safety, work safety, and environmental protection laws are relatively strong and enforceable. Most of the MNCs investigated in the news and business articles reviewed for this paper are extremely profitable multi-billion dollar corporations. Exxon Mobil, for instance, was the most profitable company in history in 2009 ($45 billion). Such power and leverage may give corporations the flexibility to seek out those environments in which laws and business practices provide the most favorable conditions to maximize profits.

Table 1				
Company	***Headquarters***	***Major CSR Issues***	***Countries Involved***	***Corruption Index****
Adidas	Germany	Sweatshops	China Indonesia	3.5 2.8
BAE Systems	UK	Bribery	Czech Republic Romania Saudi Arabia South Africa Tanzania	4.6 3.7 4.7 4.5 2.7
Blackwater	USA	Bribery	Iraq	1.5
Chiquita	USA	Funding militias	Colombia	3.5
Daimler	Germany	Bribery	China Egypt Greece Iraq Nigeria Russia Serbia Turkey Turkmenistan	3.5 3.1 3.5 1.5 2.4 2.1 3.5 4.4 1.6
Exxon Mobil	USA	Bribery Funding repressive regimes Pollution and environmental degradation	E. Guinea Kazakhstan USA	1.9 2.9 7.1
Halliburton	USA	Bribery	Nigeria	2.4
Hershey	USA	Child labor	Ghana Ivory Coast	4.1 2.2
HP	USA	Bribery	Russia	2.1
Johnson & Johnson	USA	Bribery	China Greece Iraq	3.5 3.5 1.5
Mabey & Johnson	UK	Bribery	Angola Bangladesh Ghana Iraq Jamaica Madagascar Mozambique	1.9 2.4 4.1 1.5 3.3 2.6 2.7
Mattel	USA	Hazardous products, Sweatshops	China	3.5
Monsanto	USA	Bribery	Indonesia	2.8
Nike	USA	Sweatshops	Cambodia Indonesia Malaysia	2.1 2.8 4.4
Pfizer	USA	Hazardous products	Nigeria	2.4
Puma	Germany	Sweatshops	China	3.5
Royal Dutch Shell	Netherlands	Pollution and environmental degradation Funding repressive regimes	Nigeria	2.4
Saipem	Italy	Bribery	Nigeria	2.4
Siemens	Germany	Bribery	Argentina Bangladesh China Iraq Israel Nigeria Venezuela	2.9 2.4 3.5 1.5 6.1 2.4 2.0
Trafigura	Netherlands	Funding repressive regimes Dumping toxic wastes Bribery	Iraq Ivory Coast Jamaica	1.5 2.2 3.3
Source: Transparency International (2010): http://www.transparency.org/cpi2010/results				

REFERENCES

Aguilera, R., D. Rupp, C. Williams & J. Ganapathi (2007). Putting the S back in corporate social responsibility: A multilevel theory of social change in organizations. *Academy of Management*, 32(3), 836-863.

Amnesty International: Pollution has created human rights tragedy in the Niger Delta. (2009) Retrieved September 20, 2010, from http://www.amnesty.org.nz/get-involved/join-amnesty-team/join-specialist-network/environmental-defenders-network-eden/campaign

Atkinson D. & L. Buckingham (2009, October 31). Countdown to BAE court clash, *The Daily Mail*.

BBC News: Shell admits fuelling corruption. (2004, June 11) Retrieved October 15, 2010, from http://news.bbc.co.uk/2/hi/3796375.stm

BBC News: Monsanto fined $1.5m for bribery. (2005, January 7) Retrieved August 9, 2010, from http://news.bbc.co.uk/2/hi/business/4153635.stm

BBC News: 'Toxic ship' firm in Jamaica row. (2006, October 11) Retrieved August 10, 2010 fromhttp://news.bbc.co.uk/2/hi/africa/6041652.stm

BBC News: Saudi prince 'received arms cash'. (2007, June 7) Retrieved June 10, 2010 fromhttp://news.bbc.co.uk/2/hi/business/6728773.stm

Briggs, B (2009, November 22). Environment activist accuses oil firms of 'wreaking havoc' in Nigeria, *The Sunday Herald*.

Brodzinsky, S (2007, May 2). Terrorism and bananas in Colombia, *Time*.

Busse, M. & C. Hefeker (2007). Political risk, institutions and foreign direct investment. *European Journal of Political Economy*, 23(2), 397-415.

Carr, I. & O. Outhwaite (2008). The OECD anti-bribery convention: ten years on. *Manchester Journal of International Economic Law*, 5(1), 3-35.

Clayton, J. (2010, December 1). Heads of Shell and Halliburton sought in bribery inquiry, *The Times*.

Crawford, D. (2010, August 13). Probe of bribery at HP heats up, *Wall Street Journal.*

Dahlsrud, A. (2008). How corporate social responsibility is defined: an analysis of 37 definitions. *Corporate Social Responsibility and Environmental Management*, 15(1), 1-13.

Donaldson, T. (2005, June 3). Defining the value of doing good business, *Financial Times*.

Emeruwa, V. (2009, February 19). Nigeria: Indigenes sue oil companies, *Africa News*.

Evans, R. & D. Leigh (2009, July 10). Mabey and Johnson admits bribing officials abroad to secure contracts, *The Guardian*.

Ewing, J. (2010, April 15). Trio arrested in H.P. case on kickbacks, *New York Times*.

Fortune Magazine: Global 500 list. (2010, July 26) Retrieved November 12 from http://money.cnn.com/magazines/fortune/global500/2010/full_list/

Francis, D. (2003, November 13). Why fighting corruption helps the poor?, *Christian Science Monitor*.

Friedman, M. (1970, September 13). The social responsibility of business is to increase its profits, *New York Times*.

Frith, M. (2005, April 16). The ethical revolution sweeping through the world's sweatshops, *The Independent*.

Galpin, R. (2002, March 7). Spotlight on Indonesian 'sweat shops', *BBC News*.

Gow, D. (2008, May 27). Siemens boss admits setting up slush funds, *The Guardian*.

Graham, D. & N. Woods (2006). Making corporate self-regulation effective in developing countries. *World Development*, 34(5), 868-883.

Hickman, M. (2010, October 1). Blood, sweat and tears: the truth about how your sportswear is made, *The Independent.*

Hopkins M. (2007). *Corporate social responsibility and international development: Is business the solution?* London, UK: Earthscan Publishing.

Howden, D. (2009, July 1). Report blames Shell over ‘cover-up’ of Nigeria’s oil spills, *The Independent.*

International Monetary Fund: *World Economic Outlook.* (2010) Retrieved January 10, 2011 from http://www.imf.org/external/pubs/ft/weo/2010/01/weodata/groups.htm#oem

Kenyon, P. (2000, October 15). Gap and Nike: No sweat?, *BBC News*.

Kwok, C. and S. Tadesse (2006). The MNC as an agent of change for host-country institutions: FDI and corruption. *Journal of International Business Studies*, 37(6), 767-785.

Lashmar, P. (2003, May 11). Exxon probed over $500m Africa scandal, *The Independent*.

Leigh, D. & R. Evans (2007, February 14). Firms accused of bribing Saddam to be investigated by fraud office, *The Guardian.*

Leigh, D. & R. Evans (2008, April 23). Tanzanian minister quits over BAE investigation, *The Guardian*.

Leigh, D & R. Evans (2008, December 6). BAE accused of £100m secret payments to seal South Africa arms deal, *The Guardian*.

Leigh, D. (2009, September 16). Inside Trafigura: Accusations, sour deals and friends in high places, *The Guardian*.

Levenson. E. (2008, November 17). Citizen Nike, *Fortune*.

Lichtblau, E (2008, April 9). In justice shift, corporate deals replace trials. *New York Times*.

Lichtblau, E. & C. Dougherty (2008, December 15). Siemens to pay $1.34 billion in fines”, *New York Times*.

Macalister, T. (2004, August 26). Shell hit by $1.5bn Nigeria spill claim, *The Guardian*.

Mazzetti, M. & J. Risen (2010, January 31). U.S. examines whether Blackwater tried bribery, *New York Times.*

Mason, R. & A. Wilson & J. Quinn (2010, February 5). BAE fined $400m over Saudi payments, *The Telegraph.*

McWilliams, A., D. Siegel & P. Wright (2006). Corporate social responsibility: Strategic implications, *Journal of Management Studies*, 43(1), 1-18.

Mintzberg, H. (1983). The case for corporate social responsibility, *Journal of Business Strategy*, 4(2), 3-15.

Navarro, M. (2009, October 19). City awarded $105 million in Exxon Mobil lawsuit, *New York Times*.

O’Donnell, J. (2007, September 18). Mattel toys’ lead was 180 times the limit, *USA Today*.

O’Higgins, E. (2006). Corruption, underdevelopment, and extractive resource industries: Addressing the vicious cycle, *Business Ethics Quarterly*,16(2), 235-254.

Osborn, A. (2000, November 23). Adidas attacked for Asian 'sweatshops', *The Guardian*.

Parenti, C. (2008, February 15). Chocolate's bittersweet economy: Seven years after the industry agreed to abolish child labor, little progress has been made, *Fortune*.

Parry, R. (2002, March 8). Nike and Adidas ‘have failed to stop sweatshop abuses’, *The Independent*.

Polgreen, L. (2006, October 23). Ivory Coast officials blamed for lethal toxic slick, *New York Times*.

Reuters: *Saipem, Eni to pay $365 mln in Nigeria bribe case*. (2010, July 7). Retrieved March 19, 2011 from http://www.reuters.com/article/2010/07/07/eni-nigeria-idUSLDE66628H20100707

Roberts, D. (2010, July 8). The higher costs of bribery in China, *Businessweek*.

Robertson, D. & T. Baldwin & T. Reid (2009, October 2). Contracts worth billions at risk as Serious Fraud Office goes gunning for BAE”, *The Times*.

Sampford, C. (2006). *Measuring Corruption*, London, UK: Ashgate Publishing.

Santangelo, B., G. Stein & M. Jacobs (2007). The Foreign Corrupt Practices Act: Recent cases and enforcement trends. *Journal of Investment Compliance*, 8(3), 31-55.

Schubert, S. & T. Miller (2008, December 20). At Siemens, bribery was just a line item, *New York Times*.

Seelye, K. (2007, February 13). Johnson & Johnson says improper payments were made, *New York Times*.

Seligson, M. (2006). The measurement and impact of corruption victimization: Survey evidence from Latin America. *World Development*, 34(2), 381-404.

Sheridan, M. & C. Newell (2008, March 30). Adidas workers on £11 a week in China, *The Times*.

Spence, A. (2010, April 15). US Government joins Hewlett-Packard 'bribery' investigation, *The Times*.

Stephens, J. (2009, July 31). Pfizer to pay $75 million to settle Nigerian Trovan drug-testing suit, *The Washington Post.*

Stephens, J. (2000, December 17). Where profits and lives hang in balance, *The Washington Post*.

Stephens, J. (2007, May 30). Pfizer faces criminal charges in Nigeria, *The Washington Post*.

Stevulak, C. & J. Campbell (2008). Supply-side corruption: perspectives on a trillion-dollar problem. *Journal of Corporate Citizenship,* 29(1), 33-48.

Story, L. & D. Barboza (2007, August 15). Mattel recalls 19 million toys sent from China, *New York Times*.

Straub, S. (2008). Opportunism, corruption and the multinational firm's mode of entry. *Journal of International Economics*, 74(2), 245-263.

Teather, D. (2005, April 14). Nike lists abuses at Asian factories, *The Guardian*.

Transparency International: *Corruption Perception Index*. (2010), Last accessed 4 January, 2011. http://www.transparency.org/policy_research/surveys_indices/cpi/2010/results

United Nations Global Compact: *The Ten Principles*. (2009), Last accessed 12 January, 2011. http://www.unglobalcompact.org/AboutTheGC/TheTenPrinciples/index.html

Visser, W. & D. Matten & M. Pohl & N. Tolhurst (2008). *The A to Z of Corporate Social Responsibility: A complete reference guide to concepts, codes and organizations*. New Jersey: NJ: Wiley and Sons.

LINKING STRATEGIC MANAGEMENT AND SHAREHOLDER VALUE

William R. Bigler, Louisiana State University in Shreveport
Cheng Ho Hsieh, Louisiana State University in Shreveport

ABSTRACT

This article describes an approach to linking competitive strategy, innovation, profitable growth, strategy execution, and enterprise-wide risk management with shareholder value. We posit that these five Elements are the minimum necessary and sufficient strategy and management factors that affect shareholder value. There are many frameworks for these Elements found in academic and practitioner literatures. A way out of debating the effectiveness of each framework is to posit the required outcomes of each Element. We call these the Metric Concepts. These Metric Concepts inform the classic drivers of shareholder value and provide a way to link strategic management decisions with shareholder value. We also offer a set of best practices to guide management teams and boards in how to operationalize the linkages among the five Elements, the Element Metric Concepts and the Drivers of Shareholder Wealth.

PURPOSE AND OVERVIEW OF THE ARTICLE

Some version of a value-based management (VBM) framework has been in use for at least twenty years (Koller, Goedhart, and Wessels (2010) to assess and predict the financial value of a business organization and thus the financial value to its shareholders[1]. A VBM framework is an inclusive model that depicts what the authors think are the important predictors of firm and shareholder value. While there are many versions of this framework, the basic idea is the same: the financial value today must be equal to the discounted future free cash flows from operations using the firm's weighted average cost of capital as the discount rate. Most of the versions are based on sound financial theories and accounting principles. However, uncertainty still exists in their execution in practice. The major difficulty lies with the credible estimation of the financial variables in a VBM model. Further, how to translate strategic decisions into financial inputs in any sound VBM model is still an open question. Therefore a more meaningful and specific linkage between strategic management and firm value and shareholder value is needed.

The purpose of this article is to describe an approach to linking key decisions from strategic management to shareholder value with a greater degree of specificity than is reported in the current literature. Admittedly, the linkages between strategic decisions and the financial inputs to a VBM model will never be perfectly straightforward in every case, but they can be strengthened with the approach presented in this article. Many consulting and investment banking firms have developed their own VBM frameworks with suggested impacts on shareholder value (see for example, Hass and Prior (2006), Madden (2010) and Viebig, Poddig and Varmaz (2008)). However, these frameworks typically have used financial variables to predict or explain other financial variables. Our model uses shareholder value as measured by Total Shareholder Return[1]. In this article, strategic management is defined as key decisions in five Elements: competitive strategy, innovation, profitable growth, strategy execution, and enterprise-wide risk management. We will discuss why we posit that these five Elements are the minimum necessary and sufficient factors affecting shareholder value. Based on an exhaustive review of the various literatures, we also will discuss for the first time a new concept that we have termed “Element Metric Concepts” or simply Metric Concepts. These Metric Concepts complement the classic Drivers of Shareholder Value (Rappaport, 1998) with suggested directionality (up or down for improvement) and provide a more direct way to link key strategic management decisions with shareholder value.

In today’s business climate, the topic of linking strategic management with measures of shareholder value has once again become of key importance to boards of directors and management teams. We ask the question – Is there an approach that is more specific and comprehensive from a leadership and management perspective and that more directly ties the outcomes of strategic management to increases in shareholder wealth? Our approach answers yes. And in addition to greatly improving current methods, this approach would give security analysts greater transparency into the interplay among strategic management, operation excellence, and shareholder value.

We agree with (Rappaport 1986, 1998), (Koller, Goedhart, and Wessels (2010), and Madden (2000, 2005, 2010), among others) that the key super-ordinate goal of a for-profit firm should be maximizing shareholder value. Other observers disagree. The financial collapse of 2008-2009 has resulted in a call in certain quarters for an examination of shareholder value disciplines as the cause. Some believe these disciplines give too narrow a motivation for people with jobs that give them a power of purpose or that their very premises are flawed (Hamel, 2009; Martin, 2010). Porter (2011) makes the case that firms should create “shared value,” not shareholder value in the narrowly used sense of the phrase. Porter (2011) extends the historic thinking of shareholder wealth disciplines (Rappaport 1986, 1998) but does not negate them outright. In our view, supporting authors have provided a convincing argument for the efficacy and benefits of shareholder value disciplines in a free market economy so that this potential debate can be put aside for now (Koller, Goedhart, and Wessels (2010), Madden (2000, 2005, 2010), among others). The purpose of this paper is not to continue this debate, but to take shareholder value maximization as the super-ordinate goal and focus on the linkage between strategic management and this goal. The method we use could aid those who disagree with this goal to link key strategic management decisions to whatever they posit should be the super-ordinate goal of the for-profit firm.

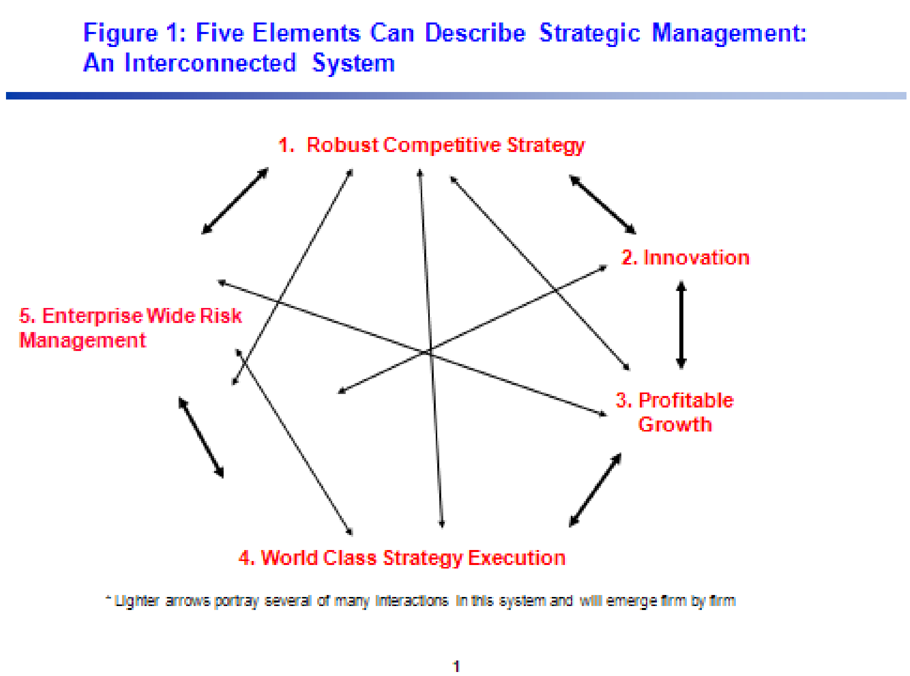
This paper is organized as follows: Section II presents the five-Element model of strategic management and why we posit this model is valid and useful for the field of strategy and for the purposes of our article. Section III describes the derivation of the phrase Element Metric Concept and explains the alignment between the Metric Concept for each Element and the Drivers of Shareholder Value. Section IV outlines the key best practices currently being used to link strategic management to shareholder wealth. Section V explains how to apply leadership and management "best practice" to the linkage of strategic management and shareholder value with some caveats. Section VI concludes this paper and discusses future enhancements.

THE FIVE ELEMENT MODEL OF STRATEGIC MANAGEMENT

Support and Justification for the Five Elements

For the purposes of our paper, we posit that strategic management can be usefully described and modeled by these five Elements, depicted in Figure 1:

1. Strategy formulation
2. Innovation
3. Profitable growth
4. Strategy execution
5. Enterprise-wide risk management



We also posit that these five Elements are the *minimum necessary and sufficient* categories that will most directly allow key strategic management decisions within each to be linked to increases or decreases in shareholder value.

There are many frameworks for these Elements with suggested impacts on shareholder value through some version of value-based management. Almost every firm and consulting firm seems to have its own method of managing these Elements. And most of these methods are not based on the same set of principles or laws of strategy, if such even exist. While we could discuss why the field of strategy has not settled on a dominant framework and if this is good or bad, the issue of extreme diversity is not important for this paper. Our contribution is to provide a framework that links acceptably valid and useful Elements to shareholder value maximization with a greater degree of specificity than is reported in the extant literature. This more specific and direct linkage makes strategic management decisions more "operational" for estimating and predicting shareholder value.

We will provide an academic underpinning for the validity and usefulness of the five Elements below. Given the cumulative knowledge currently available in the various literatures in which these five Elements are discussed, we trust the reader will grant at least face validity for our assertions about them. Innovation, strategy execution and enterprise-wide risk management are some of the most visible items on the agendas of top management teams and boards of directors at this time (Skarzynski and Rowan (2008), Snider and Duarte (2008), Kaplan and Norton (2008), Bigler and Norris (2004, 2001), Lam (2003), among others). Robust competitive strategy, profitable growth and shareholder value are also perennial topics of interest (Johnson (2010), Baghai, Coley, and White (2000), Slywotsky and Morrison (1997, 1999), Gertz and Baptista (1995), Rappaport (1986, 1998), Stewart (1991), Charan and Tichy (1998), McGrath and Macmillan (2005)). Academic citations of the five Elements driving shareholder wealth are equally numerous (Moldoveanu (2009), Marcel (2009), Mors (2010), Lahiri (2010), Leiblein and Madsen (2009), Terziovski (2010), Adnor and Kapoor (2010), Dushnitsky and Shapira (2010), Hermelo and Vassolo (2010), Kahl and Rosen (2009), Oh and Oetzel (2010), Hoburn and Zelner (2010), Kacperczyk (2009), Miguel, Pindado, and Torre (2004), Carlin and Gervais (2009), Viebi, Poddig, and Varmaz (2008)).

Academic corroboration for our position of the validity and usefulness of the five Elements comes from (Nag, Hambrick and Chen, 2007). The article "What Is Strategic Management, Really? Inductive Derivation of a Consensus Definition of the Field" is arguably the most comprehensive literature review of its kind to that date. Table 2 of that article lists fifty-four Distinctive Words these authors combed from their literature search to give the basis for their posited definition of strategic management. These fifty-four descriptors are nested into six factors that become the basis for their synthesized definition in Table 2 – italics and lettering ours:

"The field of strategic management deals with . . .

a. . . . the major intended and emergent initiatives

Examples of statistically valid words: strategy, innovation, acquisition, investment, operation

b. . . . taken by general managers on behalf of owners (for us shareholders)

Examples of statistically valid words: top, incentives, board, CEO, ownership

c. . . . involving utilization of resources

Examples of statistically valid words: stock, capability, assets, technology, competency

d. . . . to enhance the performance

Examples of statistically valid words: growth, advantage, returns, decline, dominance

e. . . . of firms

Examples of statistically valid words: firm, business, company, enterprise

f. . . . in their external environments

Examples of statistically valid words: industry, competition, market, risk

Four of our five Elements include words on the list of Distinctive Words above. The exception is our phrase Strategy Execution. Strategy execution did not become an important topic until after this important article was published. But according to the Conference Board (2008), strategy execution was either the No. 1 or No. 3 challenge CEOs faced that year. We posit then that there is enough face and content validity for the five Elements to be useful for practitioners and for the purposes of this article.

Definitions of the Five Elements

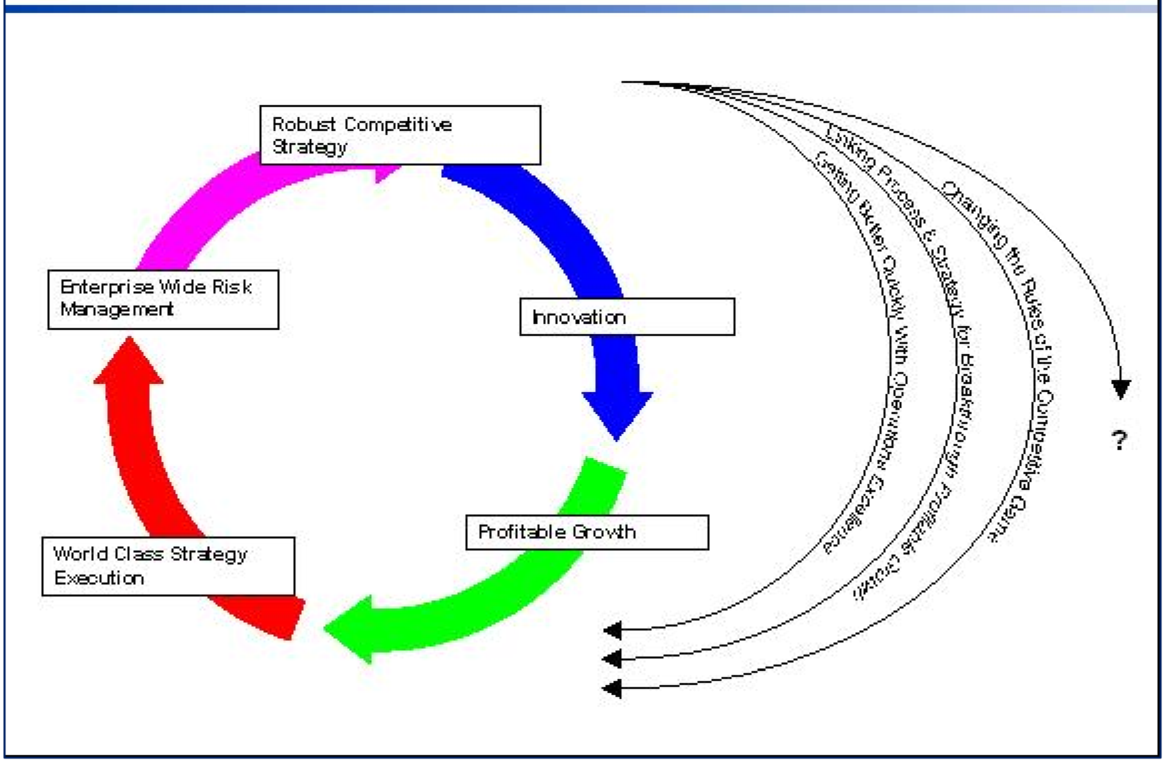
With at least face validity and a level of academic content validity hopefully established, each Element can be defined with one or two key corroborating sources:

1. Robust competitive strategy – an approach to positioning of the firm or business unit to maximize customer willingness to pay at the lowest cost position consistent with the value provided for customers (Ghemawat and Rivkin, 1998).
2. Innovation approach – an efficient and effective approach for embedding innovation as an ongoing capability and articulating innovation initiatives (Skarzynsky and Gibson, 2008).
3. Profitable growth at the right pace – a unique path for each firm to articulate growth initiatives through organic growth. Acquisitions are still important but are viewed here as supportive of organic growth (Charan and Tichy 1998).

4. World class strategy execution – an approach to strategy execution and its interface with company operations (Bigler and Norris, 2004 and Kaplan and Norton, 2008)
5. Enterprise-wide risk management – an approach for identifying and understanding insurable and non-insurable risks and an approach to mitigate these risks (COSO, 2011).

These Elements are inclusive of many variables that are known to or posited to drive increases in shareholder value. Figure 1 shows that causation can happen anywhere in the model, especially over time. Figure 2 depicts the "virtuous cycle" of improving the five Elements through what we call the "waterfall effect." In other words, it allows improvements in the Elements in each new cycle, and other things held equal, further increases of shareholder value.

Figure 2: The "Waterfall" Effect of Improving the Five Elements Allows the Potential for Large Increases in Shareholder Value



While there is a “downward fading effect” of current cash flows into the future caused by the ever present crush of competition, the newer cash flows made possible by effective leadership and management of the five Elements offset this effect for firms that have embedded the competencies within these Elements (see Madden (2005, 2010) for a similar argument). Such firms enjoy an increasing inflow of capital and resources. Discounting techniques discount future cash flows to the present time and thus take time into effect as a variable. But this is not the same as viewing a firm as an appreciating asset that has improvement potential as it moves on its journey to the future.

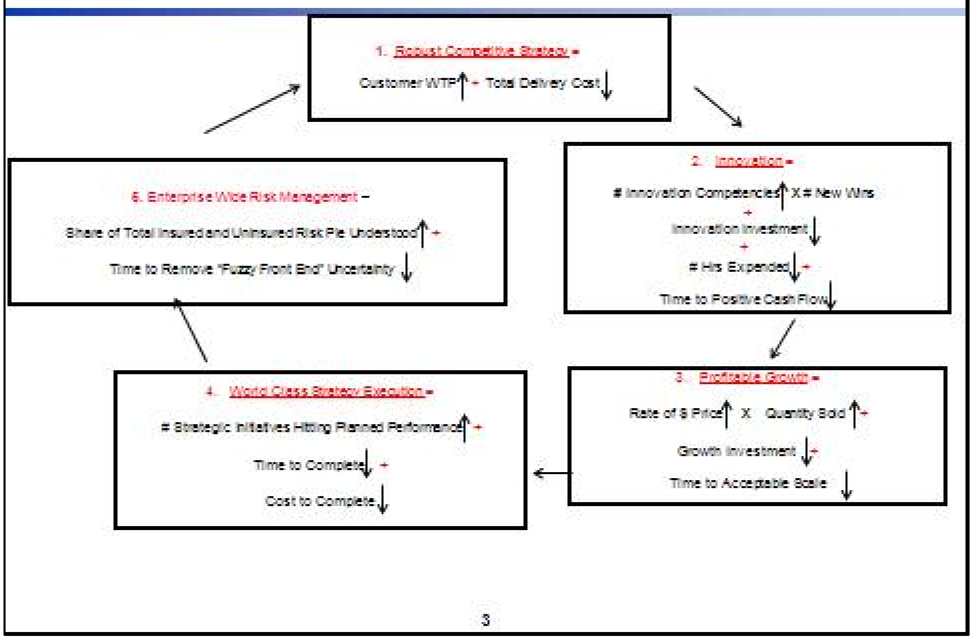
KEY METRIC CONCEPT FOR EACH ELEMENT ALIGNED WITH THE DRIVERS OF SHAREHOLDER WEALTH

Each of the five Elements in the model contains a Key Metric Concept that serves as the basis for a variety of inputs into any value-based management financial model. These Metric Concepts will be made even more operational by a number of common operating and financial measures that will emerge on a firm-by-firm basis. Examples of the measures include expected sales growth, fixed and variable cost changes, working capital and fixed capital needed to fuel the expected sales increase. Each of these measures “takes its marching orders” from the Metric Concepts. Each of the Metric Concepts has a numerator and a denominator. The denominator may contain multiple metrics. In each case we desire for the numerator to increase and the denominator(s) to decrease for maximum value of each Metric Concept. These quotients are not necessarily real numbers per se and represent the imperatives and directionality for increasing shareholder wealth.[2] Time is an important metric in many of the denominators because it is the only non-renewable resource. It is an extremely important asset for firms if properly understood and made a key priority in the strategic and operating management of the firm (Bigler and Norris 2004), (Bigler (2009). When these Metric Concepts are all maximized or optimized, maximization in shareholder value will result, as long as there are no negative macroeconomic occurrences such as a general recession, political upheaval, or natural calamity that affects all firms.

To our knowledge, the logic behind these Metric Concepts and the specific measures within each are relatively new to the field of strategic management. The justification for using this approach comes from citations in the manufacturing technology field via a logic and measure called the Figure of Merit – FOM (Noori, 1990). A Figure of Merit is a quantity used to characterize the performance of a device, system or method, relative to its alternatives. For a FOM to be useful, the measures used in the calculation must represent the system or process being evaluated with the minimum necessary and sufficient *desired outcomes*. Measures that represent *the means* to those outcomes are to be avoided. The measures used try to get as close to “root cause” as possible. (See Bigler and Norris (2004) for the first use of FOM in strategy execution.) The measures for each Metric Concept below are presented for this first time, but they align with content of suggested citations.

Figure 3 depicts the Element Metric Concepts that are discussed below:

Figure 3: Metric Concepts for the Five Elements



Robust competitive strategy – should assure increases in Customer Willingness to Pay at the lowest total delivered cost per unit sold consistent with the customer value supplied.

Innovation approach – should assure that:

- ❖ The correct number and kind of innovation competencies is functioning;
- ❖ The number of new wins is on target;
- ❖ The number of release time hours of people involved and full time hours expended is on target or better;
- ❖ The time to positive cash flow from the new products and services is the shortest possible or prudent.

Profitable growth at the right pace – should maximize or at least optimize:

- ❖ Price increases through higher customer willingness to pay and/or
- ❖ Increases in quantity sold through organic growth;

- ❖ Investments (including mergers/acquisitions) for growth to acceptable scale at the shortest time possible or prudent.

World class strategy execution – should have:

- ❖ The greatest number of strategic initiatives hitting planned performance targets at
- ❖ The shortest time and at
- ❖ The lowest cost to complete.

Enterprise-wide risk management

We introduce the concept of the Risk Pie. This is the sum total of risks that face an entire enterprise. The size of the pie increases or decreases from year to year, which is a kind of enigma. How do we know what we do not know? A good framework for enterprise-wide risk management will have placeholders for every kind of risk possible. At any given time period for a company, some risk categories will be in action and while others are dormant. Good risk management proactively searches for risk occurrences in those categories deemed dormant. Thus the enterprise-wide risk management should:

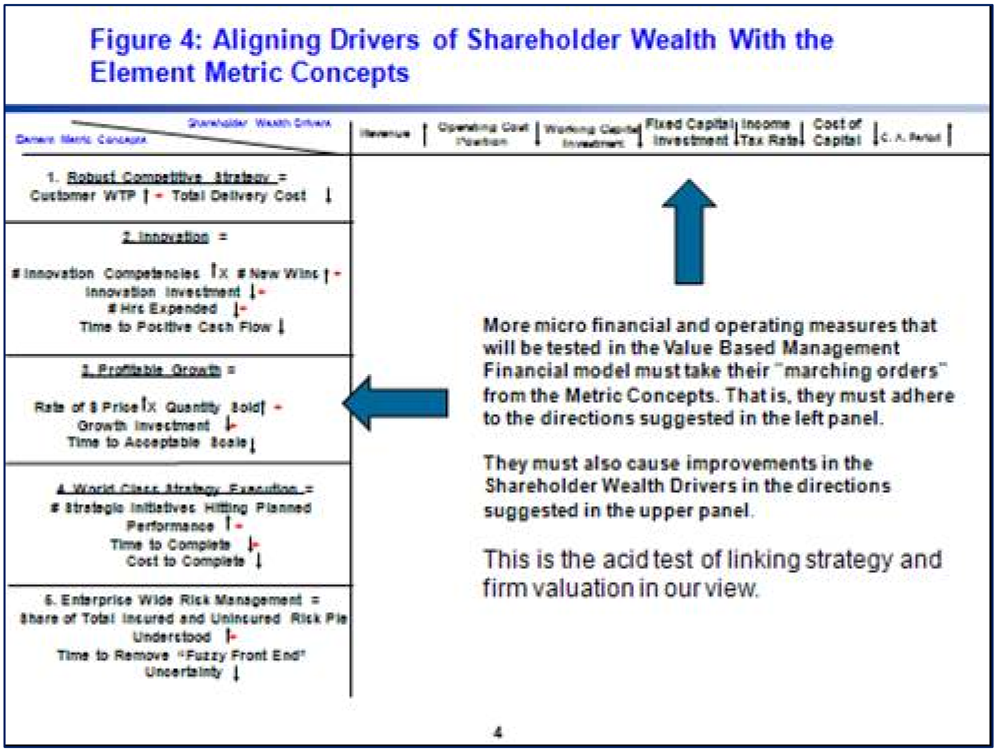
- ❖ Increase the share of total insured and non-insured risks understood at any time period;
- ❖ Remove the "fuzzy front end" of uncertainty around every key risk category in the shortest time possible or prudent.

The Element Metric Concepts in turn must help improve the Drivers of Shareholder Value (Rappaport (1986, 1998)). Shareholder value in laymen's terms is the "believable long term future" discounted for the firm's risk exposure. The firm's believable future is the forecast into the future of net free cash flows from strategy and operations. The Drivers and the direction required for each to increase shareholder value are::

1. Revenue – increasing
2. Operating costs – decreasing
3. Incremental working capital investment to drive revenue – decreasing
4. Incremental fixed capital investment to drive revenue – decreasing
5. Income tax rate – decreasing
6. Cost of capital – decreasing
7. Competitive advantage period – increasing

Competitive advantage period is the length of time into the future the firm is expected to have sustainable advantage over competitors.

Figure 4 shows a simple matrix of the interactions between and among the Element Metric Concepts and the Drivers of Shareholder Wealth.



The permutations of the interactions can be vast, and key interactions will emerge in a customized way across firms and vary over time within the same firm[3]. The numerous financial and operating measures that will be entered into a value-based management financial model must align with the directionality suggested for the Element Metric Concepts <u>*and*</u> Shareholder Wealth Drivers. In addition, this approach to linking strategic management to shareholder wealth will give security analysts greater transparency into the operating units of the firms they analyze. They will have a set of targeted questions framed by the Element Metric Concepts and their interactions with the Drivers of Shareholder Wealth. The Element Metric Concepts can help with more robust and accurate forecasting of future cash flows that get "closer to the truth" for investor and security analyst reviews. Many established publicly traded companies typically suggest *strategic initiatives* from their version of the five Elements, as well as financial goals and guidelines for each planning cycle. A strategic initiative is a key piece of work that is expected to directly increase the value of the firm and shareholder wealth. A strategic initiative would include the following attributes:

- It is a large, visible piece of work.
- It is typically new for each round of strategic planning based on the five Elements of strategic management.
- It can be seen as “counter culture” to the on-going work of the firm, which is the existing day-to-day work that supports effective operations.
- It typically requires cross-functional and cross-process teams to guide it through the corporate culture.

Business unit leaders who have profit and loss accountability then go back to their teams and make estimates of the likely rate of sales growth, cost as a percent of sales, working capital, and capital expenditure. They then negotiate the upcoming budget using the most recent year of the forecast. These estimates are typically based on extrapolations from past trends and a desire in some cases to under-budget so as to over-perform (see Greiner and Cummings, 2009 for a critique and criticism of typical strategic planning processes). The Element Metric Concepts offer a better way to link the key strategic initiatives and their impacts on the forecasted numbers. The time dimension in many of the Element Metric Concepts forces vigilance over the timing needed to gain competitive advantage over competitors and thereby, other things held equal, increases shareholder value. Including key consideration of the Element Metric Concepts with the time variable should allow clearer communication with security analysts and add more transparency to the conversation. The management team may think that this transparency exposes it to criticism. However, over time the team will find that vigilance due to the added transparency can help to better prioritize the strategic initiatives required for sustainable advantage and wealth creation.

BEST PRACTICE OF LINKING STRATEGIC MANAGEMENT CONTENT TO SHAREHOLDER VALUE

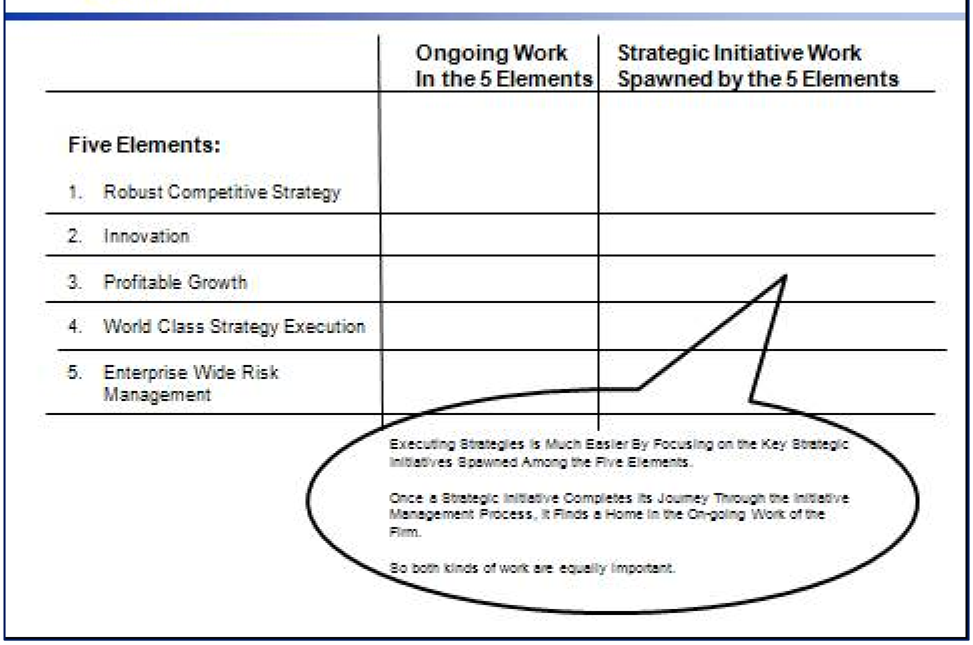
Nearly any approach to linking strategy formulation, innovation, profitable growth, strategy execution, and enterprise-wide risk management to shareholder wealth can suffice if it meets a practitioner or researcher’s needs, as long as the approach provides clear operational linkage between these Elements and shareholder wealth. *Of further importance, however, are the leadership and management* <u>*principles*</u> *that tie the financial and operating measures nested under each Metric Concept into a value-based management model to maximize shareholder value.* Based on our literature review, we think these principles are lacking in most approaches to value-based. And these principles, along with the directionality of the Element Metric Concepts, can greatly help to make all of the decisions and activities more transparent for analysts. Based on Meyer (1993), Stalk and Hout (1990), Kaplan and Norton (2008), Bigler and Norris (2004), Frigo and Litman (2007) and Bigler (2009, 2010) current best practices will:

1. Distinguish between the on-going work of the firm and strategic initiatives.

❖ The goal of sustainable competitive advantage from the five Elements is most easily executed through strategic initiatives and not the on-going work of the firm. It is in the on-going work of the firm that a mix of subject matter, process, structure and culture barriers is almost always found in the established publicly traded firm. These barriers can stall strategy execution and delay the growth of the firm value by as much as 25% per year (Bigler and Norris (2004)).

Figure 5 depicts these relationships among the five Elements and ongoing and Strategic Initiative work.

Figure 5: Ongoing and Strategic Initiative Work In the Five Elements



2. Establish an executive process to oversee strategic initiative management as a key (if not *the* key) executive process in the firm (Bigler (2001), Bigler and Norris (2004), Bigler (2009)).

- ❖ Strategic initiative management is always cross-functional and cross-process in nature.
- ❖ As such, cross-functional and cross-process teams are crucial for organization health and performance.
- ❖ A way has to be developed to form, manage and lead these teams as this can be “counter-culture” to “silo-oriented” companies.
- ❖ Use a Stage-Gate Model to serve as the overarching Initiative Management Process to manage the strategic initiatives (Bigler and Norris (2004), Chapter 4). Stage-Gate Models derive from practice in new product development (Moore and Pessemier (1993)) and can be adapted for the management of strategic initiatives. An Initiative Management Process assesses strategic initiatives in their journey to completion. This is an orderly process that determines proper resource allocation, assesses what barriers are getting in the way of initiatives to completion, or alternatively allows for the early and prudent termination of strategic initiatives.

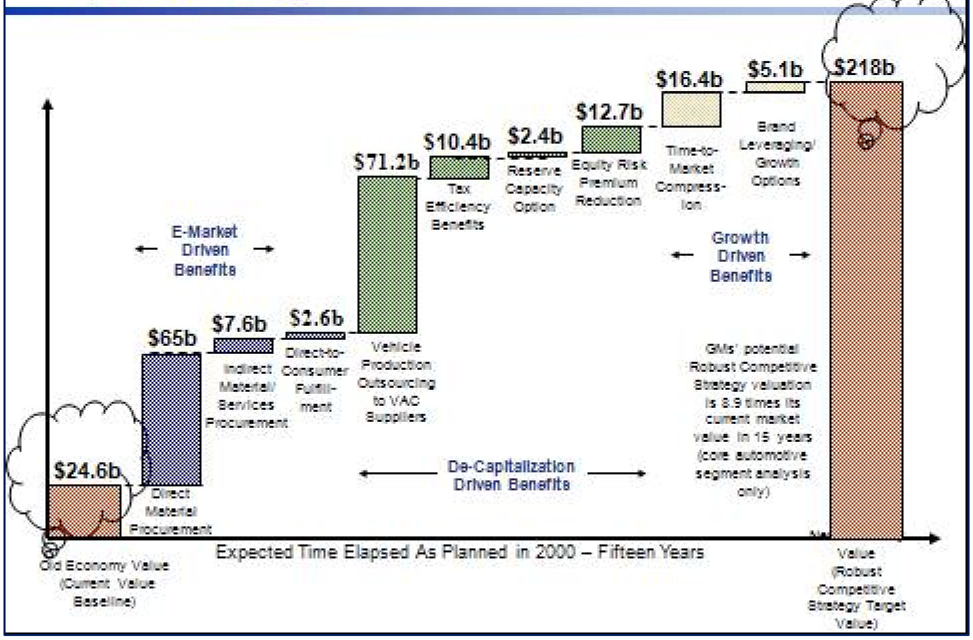
3. Develop an approach to assess the balance in the portfolio of strategic initiatives through time.

- ❖ What is the optimal balance among getting better, getting broader, getting bigger, and getting bolder initiatives (Bigler and Norris (2004))?
- ❖ What should such balance be going forward at any point in time?

4. Develop an approach to sequence the strategic initiatives through time into the future.

- ❖ Figure 6 depicts our notion of the “value staircase” and is from the work that one of the authors did at General Motors in the 2000 time frame while in a Big Four consulting practice. The nine key strategic initiatives were sequenced over a fifteen-year period for optimal strategy execution and expected shareholder wealth creation. Total shareholder value was expected to grow from $24.6 billion to $218 billion over the fifteen years.

Figure 6: Climbing the Value Staircase: *Sequence of the Initiatives Is Key*



5. Develop the criteria to prioritize the strategic initiatives dynamically through time.

Versions of the Figure of Merit (FOM) (FOM = Initiative Benefit ÷ Time to Completion ÷ Cost to Completion) may be used. In this equation, benefit could be revenue, costs, quality, and/or free cash flows, among others. The FOM is a forward-looking metric. Sunk costs are irrelevant for ongoing prioritization of the strategic initiatives.

- ❖ Rank the strategy initiatives high to low in terms of FOM.
- ❖ Allow monthly re-assessment of the portfolio of strategic initiatives and early corrective action.

6. Develop the criteria to terminate strategic initiatives at the earliest prudent time.

- ❖ Initiatives always at the bottom of the FOM ranking should be considered for termination at the earliest possible time, unless prior customer commitment exists.

7. Develop an approach to make sure on-going work and strategic initiatives are adequately but as efficiently and productively resourced as possible.

    - ❖ Align the capacities and processes of the firm or business unit against growth goals. For example, the sales process has three Full Time Equivalents (FTEs).[4] Together they might have 150 hours of capacity per week. Sum the time to complete in the FOM rankings for the strategic initiatives;
    - ❖ Compare actual capacity in hours per week to what the strategic initiatives demand down to where available capacity has been consumed;
    - ❖ Make adjustments – prioritize initiatives to work on those that are top priority that consume 150 hours per week and put other initiatives in backlog until top priority initiatives have been completed or hire more sales people to execute more initiatives.

8. Develop an approach to integrate completed strategic initiatives back into the on-going work of the firm.

    - ❖ Determine which business unit, department or cross-functional process should "own" the strategic initiative when it has completed its journey through the stage-gate Initiative Management Process, discussed in Principle 2.

9. Develop an approach to improve Best Practices 1 through 8 continuously through feedback loops of learning.

    - ❖ Select a new target valuation for the firm. Launch experiments and assess improvement impacts of moving toward the target valuation. Use some form of "root-cause" analysis to make useful adjustments in the five Elements, guided by the directionality of the Element Metric Concepts.

APPLYING LEADERSHIP AND MANAGEMENT "BEST PRACTICE" TO THE DAY-TO-DAY LINKAGE OF STRATEGIC MANAGEMENT AND SHAREHOLDER VALUE: SOME CAVEATS

So far there has been no discussion of:

- ❖ Vision, mission and values (Collis and Rukstad, 2008)

- The role of heart and purpose and meaningful work for the people in the firm (Kotter and Cohen, 2002)
- Leadership (George, 2003)
- Information technology (Broadbent and Kitzis, 2005)
- Company culture (Kotter and Heskett, 1992)
- Change management (Conner, 2006)
- Talent recruitment and development (Pfeffer, 1994)
- Compensation (Risher, 1999)
- Supply Chain Management (Slone, Dittmann and Mentzer, (2010)
- Mergers and acquisitions (Salter and Weinhold, 1979)

Over the years these topics, among many others, have been deemed important for organizational performance and have spawned myriad suggestions for "Best Practice." Our research and extensive work in the field have led us to view these factors as important but more appropriately addressed as a solution for the given firm based on the interactions and dynamics in Figure 4 and the above described best practices.

To work on these topic areas without a foundation in linking the five Elements and their Metric Concepts to shareholder value is a potential waste of time and money or may lead to an outright blunder. Recent business history calls to mind a number of examples: differences between and among turnaround situations; new venture startups that turn into huge first mover advantages like Facebook; new venture startups that learn from incumbents and vault over them like Google over Ask Jeeves; major business model innovations that have bankrupted an incumbent like Netflix vs. Blockbuster; experiences of old line industrial companies like General Electric, Ford, and Anheuser-Busch, and business-to-business firms like Danaher. These contexts are different and will bring on variations in how firms approach vision, mission, and values as communicators of strategy, culture, people and talent, among others. What remains the same over these different contexts are the Elements, the Metric Concept for each, the Drivers of Shareholder Value, and their interactions.

Emerging best practices for leading and managing the actual day-to-day linkages among the five Elements and shareholder value include:

1. Conduct a baseline assessment of the five Elements and gain employee buy-in;
2. Set out goals for improved status for the five Elements, the Element Metric Concepts and the seven Drivers of Shareholder Value;
3. Lay out a stretch but prudent time line for the sequence and start date of the key strategic initiatives;
4. Install an Initiative Management Process as a key executive process of the firm to lead and manage the strategic initiatives.
5. Lead and manage barrier identification and removal;

6. Practice the discipline of Continuous Performance Improvement to set the bar higher as success and confidence of the firm's people take hold.

CONCLUSIONS AND FUTURE ENHANCEMENTS

Value-based management models are used extensively to assess firm value and shareholder value; however, how to improve translating strategic decisions into inputs to a VBM model is still an open question. Therefore more direct linkages between strategic decisions and a firm's value and shareholder value are needed. This article describes such an approach to linking competitive strategy, innovation, profitable growth, strategy execution, and enterprise-wide risk management with shareholder wealth with a degree of specificity not yet described in the literature. To summarize the main sections of this article:

1. The five Elements can usefully describe the breadth of strategic management.
2. Each of the five Elements has a Metric Concept that specifies key outcomes for more specific linkage to one of more of the
3. Drivers of Shareholder Value.
4. Best Practices guide management teams in how to operationalize the linkages among the five Elements, the Element Metric Concepts and the Drivers of Shareholder Wealth. They also help make the corresponding decisions and initiatives more transparent to security analysts.

Throughout this article we have suggested imperatives for boards and top management teams. The relationships between the Drivers of Shareholder Wealth and the Elements as shown in Figure 4 are not linear and are full of trade-offs. For this reason increasing firm value is difficult and is the ultimate challenge for CEOs, top management teams and boards of directors. We think we have described the "elephant" in such a way that the minimum necessary and sufficient concepts, variables, and measures (and their directionality) are clear and evident. We hope this helps in suggesting both *what* needs to be done and *how*.

We have cited representative sources for each of the five Elements to provide some validity for the model. The expansiveness of the literatures precludes a complete review. We feel it is time for an enhancement to prevailing approaches that, in effect, causes researchers to confine their work to small pieces of a larger system. We must begin to forge new ways to allow readers to assess the coherence and authority and indeed truth of various writings, as they tackle thorny systemic issues that require a wide-ranging literature and experience set. We hope we have contributed to "getting closer to the truth" (Popper (1979)) with this article. But we know we have more to learn.

We also did not discuss in detail the efficacy and effectiveness of having shareholder value maximization be the super-ordinate goal of the firm. We believe that shareholder wealth maximization is as robust and complete a measure and set of disciplines as possible. That some management teams may have practiced the disciplines in a non-effective way is not prima facia evidence that the disciplines are faulty. Having a proper view of shareholder wealth disciplines through Value Based Management (Madden, 2005):

1. Does not cause quarterly earnings fixation (Booth, 1998);
2. Is not synonymous with people layoffs (Hillier, Marshall, McColgan and Werema, 2007);
3. Is not injurious to "green initiatives" (Fisher-Vandin and Thorburn, 2008 and Godfrey, Merrill and Hansen, 2008)
4. Does not mean that work cannot be meaningful and infused with purpose for people (McDonnell, 2011;
5. Does not cause the knee jerk to off-shore manufacturing (de Miguel, 2005).

In reality the opposite is true. Anything that increases the risk for a firm and/or lowers its expected free cash flow – into a very long-term view of the firm – causes destruction of shareholder value. These issues will keep us and other researchers and practitioners busy for years to come.

ENDNOTES

1. The word value is used in different ways in different literatures. For marketing value is customer value Day (1990) and Gale (1994). Strategic management refers to the company value chain as the steps a firm performs to provide value for customers (Porter, 1985). Finance uses value to mean firm value and shareholder value (Rappaport, 1998). We are using the word value in the financial sense. The value of an entire firm is the expected free cash flow from the firm's strategy (discounted using the firm's weighted average cost of capital). Shareholder value is Firm Value minus the value of outstanding debt. The most widely used practical measure of shareholder value is Total Shareholder Return, which is stock price appreciation plus dividends. To round out this discussion, shareholder value and shareholder wealth are used interchangeably and we try to use shareholder value predominantly.
2. In working with firms using the five Elements and Metric Concept definitions, if each of the measures in each Metric Concept is trusted as reliable, then the resulting divisions can act like real numbers. Measures taken the first time become "baseline" measures, from which future numbers are compared for improvement or lack thereof.
3. We can use the logic found in a recent book that chronicles Michael Porter's work (Magretta, 2012, p. 165) to understand the number of interactions in a firm among the Metric Element Concept Measures, the Drivers of Shareholder Value Measures and the myriad financial measures input to a VBM financial model that are guided by these interactions. In explaining why it is hard for a competitor to copy a strategy of a firm like IKEA that has an activity set that is linked and mutually reinforcing, he uses this math: If the probability of copying one activity is say .9 the probability of copying five activities is .9 X .9 X .9 X .9 X .9 = .59. Sixteen Metric Concept measures, seven Drivers of Shareholder Wealth and sub-measures like COGS, SG&A expenses, etc. from the income statement and balance sheet will produce a large number of interactions. The

good news is the technology via spreadsheets is readily available for executives to perform scenarios with all of these interactions quickly and easily once the model has been populated with starting measures.

4 FTE is the equivalent number of full time people resources assigned to a strategic initiative. For instance, six people working half time are three FTEs.

AUTHORS' NOTES

Authors' names are in alphabetical order and each author contributed equally

Biographical notes: William Bigler has a PhD is Strategic Management from Louisiana State University in Baton Rouge, Louisiana. He is Associate Professor of Management and Director of Graduate Programs in the College of Business at LSU in Shreveport, Louisiana. He spent 25 years in strategy consulting before returning to academia three years ago. He is the author of a number of articles in leading journals and one book. His research interests are in the areas of innovation, growth, strategy effectiveness, strategy execution, risk management and firm valuation. His work tries to forge a linkage between academic rigor and the demands of practice in today's complex world

Chengho Hsieh has a PhD in Finance from Louisiana State University in Baton Rouge, Louisiana. He is a professor of finance in the College of Business at LSU in Shreveport, Louisiana. His teaching and research interests include asset pricing, financial derivatives, investing and financing strategies, and real estate.

BIBLIOGRAPHY

Baghai, Mehroad, Coley, Stephen and White, David, 2000, The Alchemy of Growth: Practical Insights For Building the Enduring Enterprise (New York, NY: Perseus Publishing).

Bigler, William R., 2001, "The New Science of Strategy Execution: How Incumbents Become Fast, Sleek Wealth Creators," Strategy and Leadership Journal, Vol. 29 lss:3, pp. 29-34.

Bigler, William R., and Norris, Marilyn, 2004, The New Science of Strategy Execution: How Established Firms Become Fast, Sleek Wealth Creators, (Westport, CT: Praeger Publishers).

Bigler, William R., 2009, "Strategy Execution Through Executive Process Innovation: A Longitudinal Case Example and Research Model," International Journal of Management and Enterprise Development, Vol. 7, No 1, pp. 98-123.

Bigler, William R., 2010, "Increasing Shareholder Wealth by Linking Board, Executive and Middle Manager Decision Points," Advanced Management Journal, Vol. 75, No. 2, pp. 29-37.

Booth, Laurence, 1998, "What Drives Shareholder Value?", Rotman School of Management, University of Toronto, Presented at the Federated Press, "Creating Shareholder Value" Conference, October 28.

Broadbent, Marianne and Kitzis, Ellen, 2005, The New CIO Leader: Setting the Agenda and Delivering Results, (Boston, MA: Harvard Business School Press).

Carlin, Bruce Ian and Gervais, Simon, 2009, "Work Ethic, Employment Contracts, and Firm Value", The Journal of Finance, Vol. 64, Issue 2 pp 785–821.

Charan, Ram and Tichy Noel, 1998, Every Business Is A Growth Business: How Your Company Can Prosper Year After Year, (New York, New York: Times Business).

Collis, David and Rukstad, Michael, "Can You Say What Your Strategy Is?, Harvard Business Review, April, 2008.

Conference Board, Rudis, Esther V. CEO Challenge: Perspectives and Analysis – 2007 Edition, April 2008, Report # R-1418-08-RR.

Conner, Daryl, 2006, Managing at the Speed of Change: How Resilient Managers Succeed and Prosper and Where Others Fail, (New York, NY: Random House)

COSO (Committee of Sponsoring Organizations of the Treadway Commission), 2011, "Internal Control – Integrated Framework" (www.coso.org).

Danielson, Morris, Heck, Jean and Shaffer, David, 2008, "Shareholder Theory – How Opponents and Proponents Both Get It Wrong, Journal of Applied Finance, Fall-Winter, pp. 62-66.

Day, George S., 1990, Market Driven Strategy: Processes for Creating Value, (New York, NY: The Free Press).

De Miguel, Pedro Tapia, 2005, "The Impact of Logistics and Manufacturing Outsourcing on Shareholder Value", Thesis, Graduate School of Vanderbilt University.

Dushnitsky, Gary and Shapira, Zur, 2010, "Entrepreneurial finance meets organizational reality: comparing investment practices and performance of corporate and independent venture capitalists" Strategic Management Journal, Vol. 31, Issue 9, pp 990–1017.

Economist, The, 2010, "Shareholders vs. Stakeholders: A New Idolatry – The Economic Crisis Has Revived the Old Debate About Whether Firms Should Focus Most on Their Shareholders, Their Customers or Their Workers", April.

Fisher-Vanden, Karen and Thorburn, Karen, 2008, "Voluntary Corporate Environmental Initiatives and Shareholder Wealth", Working Paper, Center for Corporate Governance, Tuck School of Business at Dartmouth.

Frigo, Mark and Litman, Joel, 2007, Driven: Business Strategy, Human Actions and the Creation of Wealth, Strategy and Execution LLC.

Gale, Bradley, 1994, Managing Customer Value, (New York, NY: The Free Press).

George, Bill, 2003, Authentic Leadership: Rediscovering the Secrets to Creating Lasting Value, (San Francisco, CA: Jossey-Bass).

Gertz, Dwight L., and Baptista, Joao P. A., 1995, Grow to Be Great: Breaking the Downsizing Cycle (New York, NY: The Free Press).

Ghemawat, Pankaj and Rivkin, Jan, "Creating Competitive Advantage", Harvard Business School Note, 9-798-062, 1998.

Godfrey, Paul, Merrill, Craig and Hansen, Jared, 2008, The Relationship Between Corporate Responsibility and Shareholder Value – An Empirical Test of the Risk Management Hypothesis, (New York, NY: John Wiley and Sons. Ltd.

Gorton, Gary, Kahl, Matthias and Rosen, Richard J., 2009, "Eat or Be Eaten: A Theory of Mergers and Firm Size", The Journal of Finance, Vol. 64, Issue 3, pp 1291-1344.

Greiner, Larry and Cummings, Thomas, 2009, Dynamic Strategy-Making: A Real-Time Approach fort the 21st Century Business Leader, (San Francisco, Jossey-Bass).

Hamel, Gary, 2009, "Moon Shots For Management," Harvard Business Review.

Hamel, Gary and Prahalad, C.K., 1994, Competing for the Future: Breakthrough Strategies for Seizing Control of Your Industry and Creating the Markets of Tomorrow (Cambridge, MA: Harvard Business Press).

Hass, William and Pryor Shepherd., 2006, Building Value Through Strategy, Risk Assessment and Renewal (Chicago, IL: Board Perspectives, CCH Incorporated)

Hillier, David, Marshall, Andrew, McColgan, Patrick and Werema, Samwel, 2007, "Employee Layoffs, Shareholder Wealth and Firm Performance", Journal of Business Finance and Accounting, April/May.

Holburn, Guy L. F. and Zelner, Bennet A., 2010, "Political capabilities, policy risk, and international investment strategy: evidence from the global electric power generation industry", Strategic Management Journal, Vol. 31, Issue 12, pp 1290–1315.

Johnson, Mark W., 2010, Seizing the White Space: Business Model Innovation For Growth and Renewal (Cambridge, MA: Harvard Business Press).

Kacperczyk, Aleksandra, 2009, "With greater power comes greater responsibility? takeover protection and corporate attention to stakeholders", Strategic Management Journal Vol. 30, Issue 3, pp 261–285.

Kaplan, Robert S. and Norton, David P., 2008, Execution Premium: Linking Strategy and Operations for Competitive Advantage (Cambridge, MA: Harvard Business School Press).

Koestenbaum, Peter, 1991, Leadership: The Inner Side of Greatness (Cross Point, Indianapolis, IN: Jossey-Bass).

Koller, Tim, Goedhart, Marc and Wessels, David, 2010, Valuation: Measuring and Managing the Value of Companies, (John Wiley and Sons).

Kotter, John and Heskett, James, 1992, Corporate Culture and Performance, (New York, NY: The Free Press).

Kotter, John and Cohen, Dan, 2002, The Heart of Change: Real-Life Stories of How People Change Their Organizations, (Boston, MA: Harvard Business School Press.

Lahiri, Nandini, 2010, "Geographic Distribution of R&D Activity: How does it Affect Innovation Quality?" Academy of Management Journal, Vol. 53, Number 5, pp1194-1209.

Lam, James, 2003, Enterprise Risk Management: From Incentives to Controls, (Hoboken, NJ: John Wiley & Sons).

Leblein, Michael J., and Madsen, Tammy L., 2009, "Unbundling competitive heterogeneity: incentive structures and capability influences on technological innovation." Strategic Management Journal, Vol. 30, Issue 7, pp 711–735.

Madden, Bartley, 2000, CFROI Valuation: A Total System Approach to Valuing the Firm (Oxford, UK: Butterworth-Heinemann).

Madden, Bartley, 2005, Maximizing Shareholder Wealth and The Great Good (Learning What Works Publishers).

Madden, Bartley, 2010, Wealth Creation: A Systems Mindset for Building and Investing in Businesses for the Long Term (Hoboken, NJ: Wiley Finance).

Magretta, Joan, 2012, Understanding Michael Porter: The Essential Guide to Competition and Strategy, (Boston: The Harvard Business Review Press).

Marcel, Jeremy, 2009, "Why top management team characteristics matter when employing a chief operating officer: a strategic contingency perspective." Strategic Management Journal, Vol. 30, Issue 6, pp 647-658.

Martin, Roger, 2010, "The Age of Customer Capitalism", Harvard Business Review, January-February.

McDonnell, Brett, 2011, "Strategies for Employee Role in Corporate Governance", Wake Forest Law Review, 46, Rev. 429.

McGrath, Rita and MacMillan, Ian., 2005, Market Busters: 40 Strategic Moves That Drive Exceptional Business Growth (Boston, MA: Harvard Business School Press)

McKinsey & Company Inc., Koller, Tim, Goedhart, Marc and Wessels, David, 2010, Valuation: Measuring and Managing the Value of Companies (Hoboken, NJ: Wiley Finance).

Meyer, Christopher, 1993, Fast Cycle Time: How to Align Purpose, Strategy and Structure for Speed, (New York, NY: The Free Press).

Miguel, Alberto, Pindado, Julio and Torre, Chabela, 2004, "Ownership structure and firm value: new evidence from Spain", Strategic Management Journal, Vol. 25, Issue 12, pp 1199–1207.

Moldoveanu, Mihnea, 2009, "Thinking strategically about thinking strategically: the computational structure and dynamics of managerial problem selection and formulation." Strategic Management Journal, Vol. 30, Issue 7, pp 737-763.

Moore, William and Pessemier, Edgar, 1993, Product Planning and Management: Designing and Delivering Value (New York, NY; McGraw-Hill).

Mors, Marie Louise, 2010, "Innovation in a global consulting firm: when the problem is too much diversity." Strategic Management Journal, Volume 31, Issue 8, Pages: 841–872.

Noori, Hamid, 1990, Managing the Dynamics of New Technology: Issues in Manufacturing Management, (New Jersey: Prentice Hall).

Pfeffer, Jeffrey, 1994, Competitive Advantage Through People: Unleashing the Power of the Work Force, (Boston, MA: Harvard Business School Press).

Popper, Karl, 1979, Objective Knowledge: An Evolutionary Approach, Revised Edition, (Oxford, UK: Oxford University Press).

Porter, Michael, 1985, Competitive Advantage: Creating and Sustaining Superior Performance, (New York, NY: The Free Press.

Porter, Michael, 2011, "Creating Shared Value: How to Reinvent Capitalism – and Unleash a Wave of Innovation and Growth", Harvard Business Review, January-February.

Rappaport, Alfred, 1986, Creating Shareholder Value: The New Standard for Business Performance (New York, NY: The Free Press).

Rappaport, Alfred, 1998, Creating Shareholder Wealth: A Guide for Managers and Investors Revised and Updated (New York, NY: The Free Press).

Risher, Howard, editor, 1999, Aligning Pay and Results: Compensation Strategies That Work From the Boardroom to the Shop Floor, (New York, NY: Amacom Published in Cooperation With American Compensation Association)

Salter, Malcolm and Weinhold, Wolf, 1979, Diversification Through Acquisition: Strategies for Creating Economic Value, (New York, NY: The Free Press).

Skarzynsky, Peter and Gibson, Rowan, 2008, Innovation to the Core: A Blueprint for Transforming the Way Your Company Innovates (Cambridge, MA: Harvard Business School Press).

Slone, Reuben, Dittman, Paul and Mentzer, John, 2010, The New Supply Chain Agenda: The 5 Steps That Drive Real Value, (Boston, MA: Harvard Business Press).

Slywotsky, Adrian and Morrison, David, 1997, The Profit Zone: How Strategic Business Design Will Lead You to Tomorrow's Profits (Times Business).

Slywotsky, Adrian and Morrison, David, 1999, Profit Patterns: 30 Ways to Anticipate and Profit From Strategic Forces Reshaping Your Business (Times Business).

Snyder, Nancy Tenant and Duarte, Deborah, 2008, Unleashing Innovation: How Whirlpool Transformed an Industry *(*Cross Point, Indianapolis, IN: Jossey-Bass).

Stalk, George and Hout, Thomas, 1990, Competing Against Time: How Time-Based Competition is Reshapinig Global Markets, (New York, NY: The Free Press)

Stewart, Bennett, 1991, The Quest for Value: The EVA Management Guide (New York, NY: Harper Business).

Terziovski, Milé, 2010, "Innovation practice and its performance implications in small and medium enterprises (SMEs) in the manufacturing sector: a resource-based view." Strategic Management Journal, Vol. 31, Issue 8, pp 892–902.

Viebig, Jan, Poddig Thorstein, and Varmaz, Armin, 2008, Equity Valuation: Models From Leading Investment Banks, (Chichester, England: John Wiley and Sons)

GUAM DOCTORS CLINIC: A CASE STUDY ON OPERATIONS MANAGEMENT

Ronalisa Provido, University of Guam
Karri Perez, University of Guam

ABSTRACT

This paper looks at the issue of staffing and correct staffing number and organizational pattern at the Guam Doctors Clinic. The operation is experiencing operational issues and wants to examine these functional areas as a starting point in an effort to determine the underlying problems that may be causing the difficulties in the company's operation. The objective is to formulate appropriate business practices to create the highest level of efficiency within the company, which is the essence of the study of operations management.

Daniels et al, (2011, pg. 752) noted that:"The relationship between superior HRM and high productivity, competitive advantage, and shareholder value confirms the value of people to performance". As also noted by Daft (2012), most businesses attribute their success to the right people and their failure (or catastrophes) to the wrong people. By determining the proper structure, number and functionality of staff, the clinic can maximize the efficiency of labor and increase the profits of the company. Observation, benchmarking, and buy or make analysis (using employees or contracting out) are the main tools used to arrive at the conclusion.

INTRODUCTION

Business Overview

Guam Doctors Clinic (name changed to protect identity) began operating independently in 1998 after severing ties with a bigger medical clinic. Guam Doctors Clinic, or GDC, formed a privately-held corporation with its doctors as stockholders of the firm. There are seven physicians on the board, but only six of them are currently working at the clinic.

Mission Statement

GDC's mission statement is to provide compassionate medical care delivered by qualified health care professionals and caring staff. They seek to build lasting relationships with patients and employees. The firm is committed to continuous quality improvement and highest ethical standards.

Staffing

GDC is a multi-specialty group practice to include family and internal medicine as well as podiatry. The clinic offers drug testing, medical review officer services, x-rays, mammogram and ultrasound, physical examinations, stress test, in-house laboratory, and in-house pharmacy. As of July 2011, GDC has six doctors and one part-time physician assistant. Primary clinic MD to non-MD staff ratio is 1:2.31. Corporate MD to non-MD corporate office staff is 1:2.54. Overall, MD to non-MD ratio is 1:4.85. Ratio of payroll expenses to sales is 1:2.

The clinical executive committee meets once a month. Current organizational chart points to doctors heading different departments such as executive, facilities management, fiscal affairs, medical records, and clinical operations. There is a concentration of 20 employees including doctors, physician assistants, and clinic staff in the clinical operations department under 1 doctor who has 6% ownership, while the corporate staff of 12 fall under the fiscal affairs department, and report to the doctor with 49% ownership. Three doctors are in-charge of three other departments with 1 to 3 staff each. One of the doctors is not assigned any department to oversee. The radiology department did not have any staff.

The executive office has one HR/Executive Assistant in this department. GDC has not filled the COO position for over one year, which is the position that the HR/Executive Assistant is supposed to report to. Facilities management and Management Information Systems (MIS) departments are under an owner who is a Podiatrist, with 3 staff. The fiscal affairs division includes accounting, payroll, and billing. The Interim Controller is the staff lead. The medical records division is overseen by the second largest owner, with 2 receivable clerks in the staff. Clinical operation is where all the MDs, physician assistant, nurses, medical receptionist and other clerks fall under. This is the largest department in the clinic. The Clinic Manager (also an RN) leads the staff. The Clinic Manager is the spouse of the doctor who is not assigned any departments to oversee.

STATEMENT OF THE PROBLEM

Right-sizing

GDC identified staffing to be a potential problem in their operations. They are not certain if they employ the optimum number of personnel, if they are compensated correctly, or if they are functioning efficiently. One-third of their staff is in the fiscal affairs division, including 9 in the billing and collection department, one payroll clerk, one staff accountant, and a controller. Collections is identified as an ongoing problem.

Daily Operations

Doctors are assigned administrative duties in different departments. Combined functions create efficiency problems because it dilutes the ability to focus on and finish a task. When a healthcare professional must choose between a patient for consultation and a leaking roof, the choice is obvious. There is a conflict of functions.

Lack of A Strategic Plan

The future is uncertain for the company when doctor-owners retire. There is no succession plan, and this is a concern because all six doctors are 60 to 70 years old. Their current organizational structure points to an Operations Manager as the lead, and yet the position remains vacant.

STUDY FOCUS

This study focuses on the operations aspect of GDC. Although human resources, accounting, marketing, and clinic operations may fall under operations management, this paper does not specifically address those areas of study. The goal is to identify problem areas in operations with regards to human capital and present options to alleviate them; ultimately to deliver the best value for GDC.

Operations are what must be done internally in order to deliver value to the customer, whether in goods or services. (M. Davis, 2007) It is the conversion process that transforms inputs such as raw material and labor into outputs in the form of finished goods and services. From an organizational perspective, operations management may be defined as the management of direct resources required to produce and deliver value. All functions in the organization, from marketing, finance and accounting, production, purchasing, or human resource, adds value to the customer.

Related Studies

Higher staff ratio leads to more efficiency

In the article, "How much staff should a doctor have?" *by* Rosemarie Nelson, she responds "it depends." The concept of lean staffing as presented in business administration textbooks has attracted business owners because of its promise of lower personnel costs. But often in the real world, the expectations for lean staff are too high or the practice is simply understaffed. For example, when there is no nurse to accompany a male doctor in a urology exam for a female patient, the exam cannot be performed. This leads to wasted time because it cannot be billed. Both the physician and patient are idle because there is no nurse available.

According to the table from "Performances and Practices of Successful Medical Groups: 2009 Report Based on 2008 Data" published by the Medical Group Management Association (MGMA) and included in Nelson's article, more profitable practices generally have more staff per full-time equivalent (FTE) physician. It demonstrates the consistently higher ratio of support staff to physicians in better performing practices.

	Staff FTEs per FTE MD Better Performers	Staff FTEs per FTE MD Other Practices
Multispecialty	5.24	4.43
Orthopedic surgery	7.7	5.49
Cardiology	6.86	5.41
Primary Care - Single Specialties	4.56	3.5
Surgical - Single Specialties	5.95	3.54
Medicine - Single Specialties exc. General Med.	5.61	3.09

From: http://www.kevinmd.com/blog/2010/10/staff-doctor.html

Guam Survey of Wages and Salaries

From the company website http://www.guamemployers.org/about.html, The Employers Council, Inc. is a source for comprehensive information and support regarding various Human Resources issues in the U.S. Territory of Guam and in the Western Pacific. It was established in 1966 and has continued to be the prominent source of information and advice for employers regarding workplace standards and issues.

In September to November 2009, The Employers Council compiled and prepared the 2009 Survey of Wages and Salaries among selected jobs and organizations on Guam. The report contains job title, incumbents, lowest to highest hourly wage, average wage, median, and standard deviation. When there are less than three respondents to a job title, the wages are not published. This survey is the basis for comparative analysis with GDC's payroll.

METHODOLOGY

The data in this case study were gathered to analyze underlying problems in GDC's operations. The following methods were used:

Data collection

A face-to-face interview of the client was performed, as well as interview of industry representatives and comparative firms. Textbooks, internet, survey and other secondary research materials were also consulted.

Buy or make decision

Buy or make decision is a business decision that compares the costs and benefits of manufacturing a product or product component against purchasing it. If the purchase price is higher than what it would cost the manufacturer to make it, or if the manufacturer has excess capacity that could be used for that product, or the manufacturer's suppliers are unreliable, then the manufacturer may choose to make the product. For this study we will look at the cost of accounts receivable collection (contracted services) versus the cost of wages and benefits for Billing and Collection Clerks (employing staff). There are 8.5 full-time personnel in this position, and one supervisor. For purposes of comparability, the wage of one staff with additional responsibilities was reduced by the amount allocated to duties other than billing.

Benchmarking

Benchmarking is the process of comparing the firm’s business processes and performance metrics to same industry bests. This data can be compiled through various public sources, but gathering data for small and private industries may be a challenge. High performing firms set the targets for the industry. This way, other firms learn how well the targets perform and, more importantly, the business processes that explain why these firms are successful.

Percentages

A percentage is a way of expressing a number as a fraction of 100. Percentages are used to express how large or small one quantity is relative to another quantity. The first quantity in this study is the actual wage that GDC paid for the job title, shown as a change from the second quantity based on The Employers Council, Inc.’s survey. For example, an excess of $5.07 GDC wage from industry lowest wage of $7.25 divided by industry lowest wage gives a percent increase of 70%. This means that GDC wage is 70% higher than industry lowest wage. When GDC wage falls below industry wage, the percent is negative. To illustrate the GDC’s position with respect to industry, three wage points were analyzed: lowest, average, and median.

ANALYSIS

Current staffing levels and pay rates

After reviewing and comparing staffing levels and pay rates for the administrative staff, it appears that the rates being paid by the clinic are comparable to other locally staffed medical clinics. Moreover, the average tenure of the current staff is 14 years. The clinic is not experiencing a high and rapid turnover rate which might lend itself to inefficiency. The staffing levels and staffing guide appear to be comparable other medical clinics with the same number of physicians.

In the report published by MGMA, the multispecialty practice benchmark ratio of MD to Staff is 1:5.24 while all other practices ratio is 1:4.43. GDC is at 1:4.85 so they fall within the normal range. A summary table follows:

	Staff FTEs per FTE MD GDC	Staff FTEs per FTE MD Better Performers	Staff FTEs per FTE MD Other Practices
Multispecialty	4.85	5.24	4.43

Field research on a comparable firm was performed. According to a representative of the comparable firm, they have 9 Physicians, one Clinic/ Operations Manager, and 10 Billing and Collection Clerks. There is no significant variation in staffing between the two comparable firms. Below is a summary of relevant statistics:

Job Title	Incumbents	
	GDC	Comparable Firm
FTE Physicians	6	9
Operations Manager	VACANT	0
RN/ Clinic Manager	1	0
Clinic/ Operations Manager	not combined	1
Head Nurse	combined	1
Billing/Collection Supervisor	1	unknown
Billing/Collection Clerk	8.5	10

A comparative analysis with The Employers Council's published survey of wages and salaries on Guam (2009) showed that based on 10 identical job titles in GDC employee roster, their wages are 31% higher than the industry's lowest wage paid, wages are 23% lower than the island average, and 20% lower than the median wages for the positions on the island. Other job titles with combined duties were not included in this comparison.

Employers Council Job Title	GDC Job Title	Lowest	Average	Median
STOCK CLERK	Supply Clerk	70%	15%	30%
EXECUTIVE SECRETARY	HR/Executive Assistant	50%	-14%	-15%
LICENSED PRACTICAL NURSE	LPN-Screening Nurse	44%	-13%	-7%
CONTROLLER	Interim Controller	47%	-32%	-27%
MEDICAL RECORDS CLERK	Medical Records Clerk	2%	-30%	-23%
MEDICAL RECEPTIONIST	Receptionist	1%	-29%	-26%
INSURANCE CLERK (Health Care)	Billing/Collection	15%	-30%	-34%
REGISTERED NURSE	RN / Clinic Manager	60%	-27%	-24%
CASHIER (Health Care)	Cashier	0%	-34%	-32%
ACCOUNTANT I	Staff Accountant	19%	-38%	-37%
		31%	-23%	-20%

Current staffing structure

Currently the clinic is operating without an operations manager. Administrative tasks are still a requirement of the business, thus, the physicians have undertaken the functions in conjunction with their duties as doctors. The clinic is a privately held corporation, with the physicians playing the roles of oversight as board members as well performing the job duties of employees. This organizational structure may make for difficulties in role definition and responsibilities.

Billing and collection outsourcing can increase the efficiency in collections department. Based on the estimated ratio of payroll expenses to sales of 1:2 as well as the employee roster provided by GDC's representative, the billing and collection payroll expense is 6% of sales. Field research showed that standard on-island rates for billing and collection services would cost 7% - 8% of the total collected (8% used for conservative estimate).

GDC CURRENT PRACTICE	
	Common-size
Sales	100%
Payroll	
Billing/Collection Clerks	5%
Billing/Collection Supervisor	1%
All other	44%

OUTSOURCE OPTION	
	Common-size
Sales	100%
Payroll - all other	44%
Collection expense - outsource	8%

Succession Planning

The clinic will need to consider future long-term plans for the business. Should one of the goals be continuation of the business for the next 10 years, a plan needs to be developed for the future of the organization.

RECOMMENDATIONS AND CONCLUSION

After a thorough review of the research and comparative analysis of the organizational structure of similar size organizations located locally, the following conclusions and recommendations can be made.

Recommendations

Collections and Outsourcing Options

The clinic currently has their collections function in-house. One of the issues mentioned as needing to be addressed is the collection function and improving the collection rate. Other similar size medical clinics researched yielded mixed results as to this function being in-house or outsourced. A similar sized medical clinic also maintained the collections function in-house, with approximately the same level of staffing as the GDC group. Because this comparative group was privately held, the rate of collections and success of the collection function was unavailable.

Another recommendation is to consider outsourcing the billing and collection function. This option is available utilizing both on-island and off-island billing and collection agencies. In field research, several medical clinics use the on-island billing and collection agencies because should there be issue with collections, or a dispute, the issue will be resolved within the Guam legal system.

Standard on-island rates for billing and collection services would cost 7% - 8% of the total collected. With this type of fee structure, the billing and collection service is incentivized to maximize collections.

A more detailed cost analysis of having the billing and collection function in-house versus outsourcing needs to be conducted, considering the rate of successful collection currently versus the projected rate of collection that could be achieved by outsourcing.

The outsourcing option offers benefits and drawbacks. Benefits include the ability for the clinic to focus on providing medical services versus the business administration function. A drawback is lessening of control over the function.

Explore the Possibility of Hiring an Operations Manager

The clinic is in the business of providing medical services. There is a need for someone to lead the business, set the targets and manage the daily operations of the clinic. This role is currently being filled by the physicians who are trying to fulfill this role while at the same time caring for the needs of the patients.

The administrative staff also needs someone to oversee them in their daily tasks.

Succession and Business Planning

The owners need to meet to develop and 5 and 10 year strategic plan for the company, including projected needs for staffing and methods to meet those needs. A plan for growth or sustainment for the company needs to developed, executed, reviewed and maintained.

CONCLUSION

The clinic has been in business on Guam for many years, and has a long-standing reputation as a quality medical care provider for the island and region. In order to continue to be able to fulfill their role, the business needs to reassess their structure and determine if the current organizational structure meets their current and future needs and will allow them to meet their future goals.

Strategic planning for the future, including growth and sustainability needs to be undertaken, while at the same time actions need to be taken to ensure that they have the business and operational expertise on board to make the operations and daily business administrative decisions that are necessary to ensure success.

REFERENCES

Daft, R. L. (2012). *Management* (10th ed.) United States: South-Western , Cengage Learning.

Daniels, J., Radebaugh, L. H., Sullivan, D. P. (2011). *International business: environments and operations* (13th ed.) New York, New York: Prentice Hall.

Davis, M., et al. (2007). Introduction to Operations Management. In *Fundamentals of Operations Management (Chapter 1).* Retrieved from http://highered.mcgraw-hill.com/sites/dl/free/0070965390/451252/samplech01.pdf

Nelson, R. (2011). *How much staff should a doctor have.* Retrieved from http://www.kevinmd.com/blog/2010/10/staff-doctor.html

The Employers Council, Inc. (2011), *The 2009 Survey of Wages and Salaries*. Retrieved from http://www.guamemployers.org/about.html

PROTECTED CONCERTED ACTIVITY UNDER THE NATIONAL LABOR RELATIONS ACT AND EMPLOYEE USE OF SOCIAL MEDIA: POLICY AND PRACTICE ISSUES FOR EMPLOYERS

Gerald E. Calvasina, Southern Utah University
Richard V. Calvasina, University of West Florida
Eugene J. Calvasina, Southern University

ABSTRACT

National Labor Relations Board (NLRB) Chairman Mark Gaston Pearce thinks that "the right to engage in protected concerted activity is one of the best kept secrets of the National Labor Relations Act", and "that a right only has value when people know it exists" (NLRB, 2012). The launch of a webpage by the NLRB to make the public aware of the rights of employees to act together for their mutual aid and protection, even if they are not in a union, highlights the agency's recent efforts to reign in employer efforts to control employee use of social media with respect to employee engagement in protected concerted activity. NLRB efforts are being praised by organized labor and its supporters and roundly criticized by opponents. The purpose of this paper is to examine employee use of social media regarding protected concerted activity, the efforts by the NLRB to facilitate employees' ability to engage in protected activity via social media, and what should employers be doing to facilitate compliance with the NLRB's recent efforts to reign in employers' efforts to control employee use of social media.

WHAT IS SOCIAL MEDIA?

Social media has been broadly defined as "any web-based applications that allow people to broadcast information to an entire network" (Deschenaux, 2011). Examples of social media networks commonly cited in the literature are listed in Table 1.

Table 1. Social Media Networks
Social Networking sites such as Facebook and Linkedin.
Video-sharing websites such as You Tube.
Blogs, such as www.newsweek.com/blogs
Microblogs, such as Twitter
Online forums and discussion boards, such as Google Groups (Segal, 2011).

Numerous potential benefits and legal risks for organizations have been identified in the literature, and the ever increasing utilization of social media by individuals and organizations has been characterized as being similar to "the disruptive impact of the internet itself back in the 1990's" (Deffebach, 2011). Never the less, the use of social media by employees in organizations has been characterized as "soaring" world-wide in 2011 (Brin, 2012). Palo Alto Networks, a network security company, surveyed 1,600 enterprises between April 2011 and November 2011 and reported "a 300 percent increase in active social networking (e.g., posting, applications) compared with activity during the same period in the latter half of 2010" (Palo Alto Networks, 2012).

Palo Alto Network's chief marketing officer Rene Bonvanie noted "whether or not employees are using social networks or sharing files at work is no longer a question: this data clearly demonstrates that users are embracing and actively using such applications" (Palo Alto Networks, 2012). Facebook alone has been identified as having over one billion users (Vance, 2012). Researchers of another recent study commissioned by Google reported that "businesses and their leaders are getting over the initial fears about using social tools in the workplace and are recognizing that they have strategic value" and "hoped to increase their on-the-job use of social media tools"(Leonard, 2012).

Some of the potential benefits that organizations may obtain from utilization of social networking platforms include improved communication and productivity (SHRM.org, 2010). Other potential benefits are listed in Table 2.

Table 2: Potential benefits associated with social media use in the workplace
Facilitates open communication, leading to enhanced information discovery and delivery.
Allows employees to discuss ideas, post news, ask questions and share links.
Provides an opportunity to widen business contacts.
Targets a wide audience, making it a useful and effective recruitment tool.
Improves business reputation and client base with minimal use of advertising.
Source: SHRM.org, (2010).

In addition to potential risks associated with violations of the NLRA, a number of legal issues and other laws associated with employee use of social media have been identified in the literature and are listed in Table 3.

Efforts by employers to control the increased use of social media by employees have contributed to many of the legal issues that have been identified. Employers' efforts to block, ban or impose limitations on social media use are also in part creating additional legal headaches employers have had to deal with (Deffebach, 2011).

Table 3. Potential legal issues and laws associated with employee use of social media.
Trademark and or copyright infringement
Privacy rights (Fair Credit Reporting Act (FCRA) & Genetic Information Nondiscrimination Act (GINA)
Insider trading
FTC rules on blogging
Employees using social media may defame another individual
Disclosure of trade secrets
Increased exposure to discrimination or harassment charges (Anti-Discrimination Laws (Title VII)
Careless employee driving of a company vehicle
State & Federal laws regulating employer screening of social media sites in selection processes
Sources: Hettinga, Ploor, & Immel (2010), Deschenaux (2011), DiBianca, (2012), and Gross (2012).

Employers themselves have also created problems for themselves in how they have been using social media. For example, employers using information from applicants' social network sites as part of their selection processes has given rise to allegations involving violations of privacy and civil rights statutes (Thompson, 2012). Some employers have been requiring applicants to provide their passwords to social media sites to enable employers to access otherwise restricted on-line information about the applicants. Allegations in this area have received attention at both the state and federal level of government and the call for increased regulation to curtail employer practices (Smith, 2012 - B). Representative Eliot Engel has introduced the Social Networking Online Protection Act (SNOPA) at the federal level and a number of states including Maryland, Michigan, Minnesota, Missouri, New York, South Carolina, and Washington have been considering legislation to prohibit employers from requiring job applicants to provide employers with log-in information for their social media sites (DiBianca, 2012).

WHAT IS PROTECTED CONCERTED ACTIVITY?

Section 7 of the National Labor Relations Act (NLRA) gives employees "the right to self-organization, to form, join, or assist labor organizations, to bargain collectively through representatives of their own choosing, and to engage in other concerted activities for the purpose of collective bargaining or other mutual aid or protection"(Sec. 7, NLRA, 2012). The basic rights protected by Section 7 involve efforts by employees to act together attempting to improve their pay and working conditions or to fix job-related problems, even when they are not represented by a labor union. Employees of employers covered by the NLRA who are fired, suspended or otherwise penalized for engaging in protected concerted activity are protected. The basic requirements for protected concerted activity are detailed in Table4.

Table 4. Basic Requirements for Protected Concerted Activity
Is the activity concerted?
Generally, this requires two or more employees acting together to improve wages or working conditions, but the action of a single employee may be considered concerted if he or she involves co-workers before acting, or acts on behalf of others.
Does it seek to benefit other employees?
Will the improvements sought – whether in pay, hours, safety, workload, or other terms of employment – benefit more than just the employee taking action? Or is the action more along the lines of a personal gripe, which is not protected?
Is it carried out in a way that causes it to lose protection?
Reckless or malicious behavior, such as sabotaging equipment, threatening violence, spreading lies about a product, or revealing trade secrets, may cause concerted activity to lose its protection (Sec. 7, NLRA, 2012).

The NLRB's attention in this area has been on-going. In August of 2011, January of 2012, and again in May of 2012, Acting General Counsel for the NLRB Lafe E. Solomon issued reports dealing with the use of social media in the workplace. The General Counsel carries out the "prosecutorial function" of the NLRB and is appointed by the President and approved by the US Senate. The General Counsel oversees elections, investigates unfair labor practice charges and, where appropriate prosecutes such charges (Grossman, 2012). Noting the increased use of social media in the workplace by employers and employees, the reports focused on policies and rules developed by employers to facilitate effective use of social media in the workplace. These polices covered a variety of topics including confidentiality, privacy protection of employer information, intellectual property, and contact with the media and governmental agencies (Solomon, 2012).

Solomon's May 2012 report on this issue focused on the policies and rules that employers have developed in response to the increased use of social media in the workplace and to a variety of legal concerns. In the May 2012 report, Solomon presented specific examples of various employer policies and rules which the NLRB determined to be "overbroad and thus unlawful under the NLRA"(Solomon, 2012). These examples are listed in Table 5. The report examined seven recent cases and the Acting General Counsel concluded that in six of the cases, some of the provisions in the employers' policies and rules were overbroad and thus unlawful. In one case, he did conclude that the entire social policy "as revised" was lawful under the NLRA (Solomon, 2012).

Table 5: Policies and rules identified as potentially overbroad/unlawful under the NLRA
Rules governing the use of social media technology and the communication of confidential information.
Policy governing the use of social media technology and non-public information and friending co-workers.
Guidelines on privacy, legal matters, online tone, prior permission, and resolving concerns with respect to use of social media technology.
Policy provisions on protecting information and expressing opinions.
Rule dealing with the duty to report "unsolicited" electronic communications.
Rules governing the use of social media and contact with government agencies and the media (Solomon, 2012).

When the NLRB investigates whether an employer violates employees' Section 7 rights to engage in concerted activity, the NLRB utilizes a two-step inquiry to determine if a rule or policy would have the effect of "chilling" employees in the exercising of their Section 7 rights…

> First, a rule is clearly unlawful if it explicitly restricts Section 7 protected activities. If the rule does not explicitly restrict protected activities, it will only violate Section 8(a)(1) upon a showing that:
>
> (1) Employees would reasonably construe the language to prohibit Section 7 activity:
> (2) The rule was promulgated in response to union activity; or
> (3) The rule has been applied to restrict the exercise of Section 7 rights.
>
> Rules that are ambiguous as to their application to Section 7 activity, and contain no limiting language or context that would clarify to employees that the rule does not restrict Section 7 rights, are unlawful (Solomon, 2012).

RECENT CASES

In a case involving a chain of nationwide retail stores, the company's social media policy included a section on information security. The NLRB found a section that included a section that stated "Don't release confidential guest, team member or company information" to be unlawful because it could be reasonably interpreted as prohibiting employees from discussing or disclosing information regarding their own conditions of employment. Solomon went on to note that the right to discuss their wages and working conditions is a long recognized right under the NLRA and, that unless the policy specifically exempts Section 7 activity it will be considered unlawful (Solomon, 2012). Additional sections of the employer's policy that the NLRB found to be overbroad included provisions instructing employees not to share confidential information with co-workers unless the coworkers need it to do their job and not to have discussions regarding confidential information in the break room, at home, or in open areas and public places (Solomon, 2012).

In the second case, dealing with non-public information and friending of co-workers, the NLRB again found the policy to have the potential to chill the exercise of employees' Section 7 rights. Specific aspects of the policy the NLRB found to be troubling included requirements that when discussing the employer on a social media site, that the employee note that their views are personal, that they are completely accurate and not misleading and do not reveal non-public information. The policy also instructed employees to check with the employer before posting information that they were unsure as to whether it was permissible under the policy. The NLRB has previously held that requiring employees to secure permission from the employer as a precondition to engage in Section 7 activities to be unlawful (Solomon, 2012). Solomon also noted the term “completely accurate and not misleading” in the policy was overbroad because it could reasonably be interpreted to chill discussion of legitimate issues and again did not exclude Section 7 activity (Solomon, 2012). The NLRB also found troubling provisions requiring employees using social media to “treat everyone with respect”, that “offensive, demeaning, abusive or inappropriate remarks are as out of place online as they are offline”, a provision instructing employees to “think carefully about friending co-workers” , and an instruction to “report any unusual or inappropriate internal social media activity” all have the potential to discourage employees from exercising their Section 7 rights (Solomon, 2012).

In another case involving an international health care services company that managed billing and other services for health care institutions, issues the NLRB found to inhibit employees exercise of their Section 7 rights included provisions instructing employees to respect privacy when disclosing personal information about co-workers, or when commenting on legal matters and pending litigation. And in addition, an admonition was given to employees to not “pick fights” and that “when engaging with others online, adopt a warm and friendly tone” (Solomon, 2012). The NLRB concluded that these provisions in the policy could be reasonably construed to “prohibit robust but protected discussion about working conditions or unionism” and would thus be interfering with employees’ exercise of their Section 7 rights (Solomon, 2012).

In many of the cases, the NLRB concluded that employer policies that included a “savings clause” will not “cure the ambiguities” in company policies that have been determined to be overbroad and as a result, do not provide specific guidance as to employees’ right to engage in protected concerted activity. If the savings clause does not explain to employees what concerted activities are and the right to engage in them, the NLRB is likely to determine the clause to be insufficient to uphold the policy (Solomon, 2012).

In the case involving the company policy that limited employees’ ability to contact government agencies and the media, the NLRB found several aspects of the policy to be unlawful. Sections of this company’s policy the NLRB determined to be unlawful included a prohibition on making “disparaging or defamatory” comments, a prohibition from participating in these activities on company time, and the employee obligation to “obtain the written authorization of the Corporate Communications Department before engaging in public communications regarding the employer of its business activities” (Solomon, 2012).

WHAT CAN AN EMPLOYER DO?

Solomon’s report did include one employer’s “revised” social media policy that included examples of prohibited conduct that the NLRB did conclude was lawful in full. The case involving Walmart’s social media policy dated back to July of 2010. Walmart’s initial policy was deemed to be unlawfully overbroad (Kearney, 2012). While the Walmart policy includes many of the prohibitions on issues such as being honest and accurate, posting only appropriate and respectful content, and using social media at work, the policy is not ambiguous as to its application to Section 7 activity and does not contain limiting language as to employee's Section 7 rights. Further, the "employer's rule provides sufficient examples of plainly egregious conduct so that employees would not reasonably construe the rule to prohibit Section 7 conduct (Kearney, 2012). Specific sections of Walmart's policy that Solomon noted in his report that satisfied the NLRB's initial concerns also included the "employer's rule prohibiting inappropriate postings that may include discriminatory remarks, harassment and threats of violence or similar inappropriate or unlawful conduct" (Solomon, 2012). The rule dealing with being "respectful", "fair and courteous" when posting included specific examples of "plainly egregious conduct" and thus not overly broad admonition that could be interpreted to chill employee Section 7 rights (Solomon, 2012). The provisions of the rule in Table 6 were specifically cited by Solomon in his report supporting this section of Walmart's policy.

Table 6:" Be respectful" provisions
the rule counsels employees to avoid posts that "could be viewed as malicious, obscene, threatening or intimidating." It further explains that prohibited "harassment or bullying" would include "offensive posts meant to intentionally harm someone's reputation" or "posts that could contribute to a hostile work environment on the basis of race, sex, disability, religion or any other status protected by law or company policy." The Employer has a legitimate basis to prohibit such workplace communications, and has done so without burdening protected communications about terms and conditions of employment. Source: Solomon (2012).

Walmart's policy also included specific provision restricting posting of trade secrets, using social media at work and a prohibition on retaliation for reporting violations of the policy. Given that both Solomon and Kearney appended Walmart's Social Media policy to their reports, employers considering revising or developing a social media policy would be well advised to examine what elements may be appropriate for their organization. Employers should not attempt to rely on a "savings clause" to overcome overly broad and or ambiguous rules. Rules that "clarify and restrict their scope by including examples of clearly illegal or unprotected conduct, such that they could not reasonably be construed to cover protected activity" will generally not be considered unlawful (Solomon, 2012). While employers may legally prohibit all computer activity at work that is not work-related, this effort "may not yield optimal results" given the current attitude toward the use of social media (SHRM.org, 2010). General recommendations for a social networking use policy are presented in Table 7.

Table 7: Social network general use policy recommendations:
Defines what social networking is particular to your organization, so employees know exactly what is meant by the term.
Establishes a clear and defined purpose for the policy.
Communicates benefits of social networking and of having a policy.
Provides a clear platform for educating employees.
Takes into consideration any legal ramifications of not following laws.
Refers to proprietary and confidential information at risk.
Talks about productivity in terms of social networking.
Provides guidance regarding social networking outside of company time/property that could be associated with the company, employees or customers. Some employers may prohibit posting of company information on social networking sites without explicit consent.
Outlines disciplinary measures to be taken for policy violations (SHRM.org, 2012).

With respect to recent NLRB guidance, employers may prohibit social media users from posting in the name of the employer without consent, restrict publication of employer trade secrets, may prohibit inappropriate postings that may include discriminatory remarks, harassment and threats of violence, and post that could be viewed as malicious, obscene, threatening or intimidating(Solomon, 2012). While the guidance from Solomon's most recent report may be challenged in the courts, employers should exercise caution when developing policy in this area (Smith, 2012 - A).

SUMMARY AND CONCLUSIONS

As evidenced by the three reports issued by the General Counsel's office with respect to employer policies and rules on employee use of social media and their impact on employees' Section 7 rights, it is clear that given the ever increasing use of social media in the United States and around the world, employers must exercise caution when attempting to regulate employee use of social media. Employers should remember that "there is no one-size-fits-all approach" when it comes to developing a social media policy for their organization (SHRM.org, 2010). There are many potential benefits that both employers and employees may enjoy from utilizing social media. There are also many potential legal and employee relations pitfalls that a less than comprehensive and well-defined social media policy can create.

REFERENCES

Brin, Dinah Wisenberg (2012). Social networking use soars in workplaces around the world, downloaded 6/27/2012 from http://shrm.org/hrdisciplines/technology/articles/pages/socialne...

Deffebach, Matthew (2011). Blocking employee use of social media? It's time to rethink why, downloaded 6/27/2012 from http://prnewsonline.com/prinsiders/Blocking-Employee-Use-of-...

Deschenaux, Joanne (2011). Employee use of social media laws fail to keep pace with technology, downloaded 6/27/2012 from http://www.shrm.org/legalissues/federalresources/pages/employeeuseo...

DiBianca, Molly (2012). More states consider facebook-privacy legislation, downloaded 6/25/2012 from http://www.delawareemploymentlawblog.com/2012/04/states-consider...

Gross, Jeffrey (2012). Why businesses need a policy governing employee use of social media, downloaded 6/27/2012 from http://www.jdsupra.com/post/documentViewer.aspx?fid=6007c5d2-3069-4bf4-8a64-5ecad10b3886 .

Grossman, Robert J. (2012). The nlrb flexes its muscles, *HR Magazine*, August 2012, pp. 30-36.

Hettinga, Andrew, Ploor, Pamela, and Immel, Otto (2010). Employee social networking – hidden dangers for employers, downloaded 6/27/2012 from http://www.quarles.com/publications/Detailaspx?publication=f44348.. .

Kearney, Barry J. (2012). Advice memorandum from associate general counsel division of advice, Walmart Case 11-CA-067171, downloaded from http://www.nlrb.gov .

Leonard, Bill (2012). Google survey examines social medial use in business, downloaded 7/27/2012 from http://www.shrm.org/hrdisciplines/global/Articles/Pages/GoogleSurv...

NLRB, (2012). NLRB launches webpage describing protected concerted activity, NLRB Office of Public Affairs, downloaded 6/26/2012 from http://www.nlrb.gov/news/nlrb-launches-webpage-describing-protected-concerted-activity .

Palo Alto Networks (2012). Employees three times more active on social networking applications than previous year, downloaded 6/25/2012 from http://www.paloaltonetworks.com/news/press/2012/2012-0117-aur.html

Sec. 7, NLRA (1935). Downloaded 7/30, 2012 from http://www.nlrb.gov/concerted-activity .

Segal, Jonathan A. (2011). Dancing on the edge of a volcano, HRMagazine, April 2011, 83-86.

SHRM.org (2010). What are the advantages and disadvantages of social networking sites? What should we include in a policy? Downloaded 8/31/2011 from http://www.shrm.org/TemplatesTools/hrqa/Pages/socialnetworkingsitespolicy.aspx .

Smith, Alan (2012 - A). NLRB takes sledgehammer to social media policies, downloaded 8/16/2012 from http://www.shrm.org/LegalIssues/FederalResources/Pages/NLRBSocialMediaPolicies.aspx

Smith, Allen (2012 - B). Social networking online protection act introduced, downloaded 6/25/2012 from http://www.shrm.org/LegalIssues/FederalResources/Pages?SNOPA.aspx .

Solomon, Lafe E. (2012). Report of the acting general counsel concerning social media cases, downloaded 6/25/2012 from http://www.nlrb.gov/news/acting-general-counsel-releases-report-employer-social-media-policies Operations Management Memo.

Thompson, Teresa (2012). Are you prying into applicant's private space? The questionable practice of asking applicants for passwords or access to private social networks, downloaded 6/25/2012 from http://www.networkedlawyers.com/are-you-prying-into-applicant's-pri...

Vance, Ashlee (2012). The making of 1 billion, Bloomberg Business Week, October 8-14, pp. 64-70.

THE IMPACT OF CURRENCY REDENOMINATION ON MONETARY GIFT GIVING IN GHANA: AN EXPLORATORY ASSESSMENT

Vivian A. Dzokoto, Virginia Commonwealth University
Edwin Clifford Mensah, University Of North Carolina At Pembroke
Annabella Opare-Henaku, Virginia Commonwealth University

ABSTRACT

The current study explores the impact of a currency redenomination on monetary gift giving in Ghana. Interviews with an economically diverse sample of Ghanaian adults suggest that the numerosity effect related to the difference in scale between the old and new currencies, coupled with the social desirability of giving a good gift result in increases in gifting amounts post-redenomination. In the light of other economic changes that occur as a result of redenomination (such as price increases due to price rounding and inflation), the increasing value of monetary gifts can become an additional source of post-redenomination financial strain. The findings illustrate the reality that the impact of currency redenominations are not simply economic in scope, and demonstrate the necessity for the human factor to be considered in conjunction with economic factors when planning a currency redenomination.

Keywords: Gift giving, Money, Currency redenomination, Africa

INTRODUCTION

In human societies, the act of gift giving serves as a means of connecting with others, thus functioning as mechanism for promoting group welfare and social cohesion (Raeff, Greenfield, and Quiroz 2000; Triandis 1989). Gift giving has been described as an economically irrational (Dunn, Huntsinger, Lun and Sinclair 2008), globally universal (Joy 2011; Sherry 1983), culturally sanctioned (Mauss 1990 practice that members of society engage in on a regular basis. Conceptualized as much as an act of enslavement as it is an act of generosity (Godelier 1999), it occupies a significant percentage of the consumer market in many western economies (National Retail Federation, 2010). While gifting can be altruistic (Belk and Coon 1993), majority of the research on gifting has been conceptualized in the context of the gift exchange: the recipient is obligated to reciprocate and remains in the giver's debt until the presentation of a comparable gift to the donor (Godelier 1999; Gouldner 1960; Sherry 1983).

An intricate system of social norms influences the practice of gift giving, as the following examples from North America illustrate. The consumer item designated as a Christmas gift is predicated upon the nature of relationship between the donor and recipient (Belk 1976; Sherry 1983; Wagner, Ettenson, and Verrier 1990). The amount and energy spent in acquiring gifts for others is strongly influenced by gender (Fischer and Arnold 1990). Gifts are transmitted asymmetrically across gender (Cheal 1986) and age (Cheal 1988). The probability of gifting and the total amount of money spent on gifts are a function of factors such as family income, ethnicity, education levels, family size, and life cycle stage (Garner and Wagner 1991).

While the goal of gift giving is to bring pleasure to the recipient, it can be a source of unpleasantness. Studies have found discrepancies between the perceived and actual gift preferences of recipients (Teigen, Olsen and Solas 2005). Due to a concern with negative evaluation (Schlenker and Leary 1982), gift selection can be a negative and anxiety-provoking process for the donor (Otnes, Kim and Lowrey 1992), while the experience of receiving an unwanted or socially inappropriate gift can trigger a deterioration of interpersonal relationships (Ruth, Otnes and Brunel 1999). A donor in a position of power can use gifts to exploit the recipient (Kaufman and Stavrou 2004). The embarrassment and sense of dependence associated with receiving gifts is considered so aversive by some individuals that they go to great lengths to avoid the gifting economy when possible (Marcoux 2009). In short, gift giving is a double-edged sword.

The acceptability of various commodities as gifts varies across cultures (Cheal 1988). In many developed, Western economies, money is gifted under the labels of financial donations to non-profit organizations working to support various philanthropic causes (Sargeant and Woodliffe 2007), end of year bonuses to reward employee performance, and tips in appreciation of services rendered. However, money is not considered an appropriate commodity to be used for gift exchange among peers (Baker and Jimersion 1992; Webley, Lea and Portalska 1983). In contrast, financial gifting (the gifting of money to others) is a central part of contemporary life in developing economies, such as the West African nation of Ghana (Utley 2009). The receipt of a monetary gift was frequently cited as an antecedent of happiness in 2 qualitative studies exploring emotions in rural (Dzokoto and Okazaki 2006) and urban (Dzokoto 2011) Ghanaian communities.

Ghana's Currency Redenomination

Ghana's currency underwent redenominated in July 2007. According to the Bank of Ghana (2007), the decision was necessitated by the fact that the number of zeroes in the old currency made the currency susceptible to accounting irregularities, and incompatible with data processing software, contributing to high transactions cost. The redenomination involved rescaling the value of the old currency by dropping four zeros such that 10,000 units of the old currency was equivalent to 1 New Ghana Cedi. The process did not only rescale the currency, but also introduced new notes and coins into the Ghana's economy market. While the highest note of the old currency was 20,000 cedis that of the new currency was 50 New Ghana Cedi (equivalent to 500, 000 old Ghana cedi). The highest coin of the new currency was set at 1 Ghana cedi (equivalent to 1,000 old Ghana cedi), and the others coins introduced are the 50, 20, 10, and 1 pesewa coins.

Currency Redenomination and Gifts

While there has been minimal study of giving in the context of currency redenominations, the available literature does suggest that currency redenominations do impact monetary gifting. For example, Cannon and Cipriani (2006) observe an increase in money contributed as church offerings in some Euro block countries after the national currency switched to the Euro. However, in the same study, other Euro-using countries reported a decline in offerings. Qualitative studies exploring the impact of Ghana’s currency redenomination briefly mention increases in church offertory (Dzokoto and Mensah 2010) and increases in tips and church offertory contributions (Dzokoto, Mensah, Twum-Asante and Opare Henaku 2010).

The goal of the current study is to revisit the impact of redenomination on giving behavior in Ghana, exploring a wider variety of gifting behaviors in an economically diverse sample. Previous Ghanaian data did not specifically explore the experiences of low income members of the population. While some people may be inclined to increase the amount of money they would use as a gift (as a result of the money illusion), others may be constrained from doing so due to economic limitations. Thus, it might be too simplistic to assume that all Ghanaians increased their gifting as a result of the currency redenomination. The question therefore remains, whether the 2007 currency redenomination in Ghana did result in an increase in monetary gift giving in the context of remittances, rites of passage gifts, charity, dashing, and religious giving? Our study seeks to address this question qualitatively, using a semi-structured interview approach.

In this article, we contribute to the literature on gifting in several ways. First, we review the practice of monetary gifting, which has been under-studied in the gifting literature due to its philanthropic function in western economies where gifting mostly occurs in the form of commodities and experiences (Clarke 2006). We do so in a West African context, which has also been understudied in the gifting literature. Secondly, we explore the impact that a currency redenomination has on gifting, a phenomenon that has not been addressed in the gifting literature, and has been minimally addressed in research exploring the impact of currency redenominations on the economic practices of a society. Finally, we explore cognitive and cultural psychological theories that impact the intersection of redenomination and monetary gifting, which set the stage for potential application of lessons learned in the Ghanaian context to similar economies.

Monetary Gift Giving in Ghana

The popularity of monetary gifts in Ghana and similar African contexts is captured in Maranz's (2001) analysis of normative African financial habits. Material and financial involvement with immediate friends, relatives, and secondary relationships are identified as an important feature of social interaction. The author observes that financial assistance of friends in need serves as an investment for the future - a virtual banking or savings system- in anticipation of a time when the giver might need assistance (in the same or a different form). While this is a non-mandatory social norm, people who choose to deviate from it risk marginalization by friends and relatives. While it is socially unacceptable to reject assistance, its acceptance may imply a future obligation (Maranz 2001). While assistance can take the form of money, food, hospitality, or specific consumer items, money makes a good gift since the recipient can exchange it for needed goods and services. Apart from personal emergencies, institutionalized Ghanaian settings that revolve around gifting of money include remittances, observations of rites of passage, religious offerings, and tips. While monetary gifts may not resemble gifts from a western perspective, we argue that they do meet the criteria of gifts (Macklin and Walker 1988), because the act of giving money in these settings is not for payment of goods and services, but serves to fulfill a social obligation and has an element of voluntariness associated with it (in terms of individuals make their own decisions about how much to gift).

Remittances

Comninos et al. (2008) estimate that at least a quarter of Ghanaian households receive money from either another local household, or an international one, with the total annual amount remitted equivalent to the total amount of Overseas Development Assistance (excluding debt) that the country receives per annum. Financial support of others, especially extended family members, is a consequence of the realities of life in a developing country in which 29% of the population lives below the national poverty line (World Bank 2009), and 11% of the population is unemployed (CIA Factbook 2011). Furthermore, an undetermined percentage of the population is underemployed (Sackey and Osei 2006), many people have irregular income streams, and the state and economy cannot be counted on to provide infrastructural and economic stability. Due to this reality, the generosity of one's social network friends and relatives can be a crucial factor in the ability to meet or alleviate economic needs (Maranz 2001), and gifting is often conceptualized as familial sharing. For some therefore, remittances from extended family members considered to be more prosperous are counted on as an income supplement to help meet basic needs such as food, clothes, shelter, education, and health care (Garlick 1971). Remittances act as a double-edged sword: they are human investments that enhance the quality of life of the recipient, but they also reduce the ability of the donor to accumulate economic wealth (Meyer 1995). While this institution persists more out of obligation than altruism, there is a loosely implied obligation of future unspecified support on the part of the recipient.

Rites of Passage

Weekends in many parts of Ghana are spent observing rites of passage such as weddings, baby naming ceremonies, engagements, birthdays, and funerals. It is expected that extended family and friends will show solidarity in these situations by attending social functions to commemorate these events and presenting gifts (in cash or in kind) (Maranz 2001).

Funerals may very well be the most important rite of passage from a Ghanaian perspective. They serve the dual purpose of acknowledging the deceased's investment in the family (delayed reciprocity) as well as providing the extended family an opportunity to show off wealth in a socially acceptable medium (de Witte 2003). For example, in Ghana's Ashanti region in central Ghana, where funerals are considered the center of social life, most aspects of funerals have an element of public performance to them (de Witte, 2003). Funerals are advertised in newspapers, radio, and television (Bonsu 2007). A variety of performers are hired to make a successful funeral. These include orators to praise the life of the departed, and dance troupes to provide traditional entertainment and music bands (or disc jockeys to provide contemporary music) to honor and celebrate the life of the deceased. The family of the deceased chooses and purchases several funeral cloth designs, which every member has sewn into outfits for the various funeral days (wake, burial day, memorial service, 40th day celebration). Funerals are becoming increasingly commercialized (de Witte 2003) such that many of them are events are catered, videographed events, with gifts of funeral memorabilia (tokens such a T-shirts and mugs bearing the deceased person's image) presented to attendees. Clearly, successful funerals are expensive events. Given the expense that the family of the deceased incurs to throw a successful funeral, financial gifting at funerals (called *nsawa*) serves a means for people to recoup some (or all) of the incurred costs, while it serves as a means for people to communicate their condolences to the bereaved. The acknowledgement of monetary gifts at funerals is done publicly, ranging from donations being recorded in donation books to public announcements of individual donations. De Witte (2003) observes that some funeral organizers print official receipt books with the deceased's image on them for issue to all the nsawa givers (money gifters).

Pellow (1997) observes that at Muslim wedding receptions, monetary gifts are made to the bride, and also to praise-singers hired for the occasion. Here, the master of ceremonies publicly encourages the attendees to gift money, and publicly announces each gift. In addition, separate wedding functions are typically held on the basis of gender. As part of the bridal festivities, the bride is literally showered with money by friends, relatives and well-wishers at her home on the morning of the wedding. On the groom side, public requests (by the master of ceremonies) for monetary gifts from male friends and relatives results in an atmosphere of competition used to generate financial support towards the wedding expenses (Pellow 1997; Smith 1957).

Needless to say, for people attending rite of passage functions, the knowledge that gift presentation will have an audience publicity creates pressure to gift a socially acceptable and preferably admirable amount.

"Dashing"

Many economies support a culture of extra cash gratuity payments for services rendered. These are known as tips. Dashing in Ghana is best described as a variant of tipping with extremely diffuse expectations (in terms of contexts in which dashing is expected) and extremely little specification about how to determine the appropriate amount. The definition of "dashing" is very fluid. The term applies to both monetary and non-monetary gifting, and covers primarily individual-to-individual giving that may or may not be related to a special occasion (such as Christmas or rites of passage). Non-celebratory monetary "dashing" can range from allowing someone to keep the change after the purchase of a small item to giving a person "something small" (in other words, a "small" amount of money) in appreciation of a service rendered. However, explicit requests for dashes (not considered begging within the Ghanaian context) can be made, for example during the Christmas season, or in some cases, for no reason at all other than the fact that the potential recipient assumes that the potential giver can financially afford it (as many first time visitors to Ghana discover very quickly). Finally, dashes can in some contexts be synonymous with bribes (Utley 2009). A night on the town in Ghana's capital city with a vehicle could potentially involve interaction with the following people, to all of whom "dashing" would be considered appropriate in a non-celebratory context: a pump attendant at a fuel station, a bank teller assuming one decides not to use the ATM, (or if one does decide to use the ATM, the security guard standing by the ATM), a police man at a security check point (set up in a residential neighborhood due to a wave of robberies), the wait staff at a restaurant, and the security guard in the restaurant parking lot.

Dashing is a very interesting form of gifting for a number of reasons. First, while the cash amount involved in an individual dash may be small, the cumulative amount spent on dashes may be anything but (although we suspect people generally do not tend to notice it). While dashing most often occurs down the socio-economic ladder (from the presumed "haves" to the "have nots"), a series of non-monetary dashes can be used as a form of upward reciprocation in acknowledgement of assistance rendered (for example, in appreciation to someone who provided capital to start a small-scale business; Pellow 1978). Given the low possibility of future encounters in many cases, there is a generally a low expectation of any form of future reciprocity; but yet there is an unspoken obligation of future assistance in kind from the recipient, if such an opportunity should present itself. For example, if someone dashed a bank teller some money after making a withdrawal, the teller could expedite future bank transactions, such as allowing their donor to cut in line if supervisors are not present. In that sense, dashing can serve as a "pre-tip", an investment for future services rendered.

Two forms of gifting that are akin to charitable contributions are also practiced in Ghana: religious giving, group donations, and alms giving. These are outlined below.

Religious Giving

Seventy-five percent of Ghanaians (CIA factbook 2011) identify as members of one of two religious groups (Christianity and Islam) that strongly encourage giving to others. Christians are admonished to "give, and it will be given to you. They will pour into your lap a good measure, pressed down, shaken together, and running over. For by your standard of measure it will be measured to you in return" (Luke 6:38). Furthermore, it is considered "more blessed to give than to receive" (Acts 20:35). Muslims are exhorted to "reverence GOD as much as you can, and listen, and obey, and give (to charity) for your own good" (The Holy Koran 64:16), with assurances that "Anyone who is protected from his own stinginess, these are the successful ones" (64:16), and that "If you make a generous loan to God, he will pay you back double" (Sourate LXIV 17) (Rahmanhttp n.d). Giving is thus an important part of Ghanaian religious ceremonies, with a resultant variety of giving rituals.

For instance, Sutherland (1989) highlights the "Kofi and Ama" offertory: an Africanized adaptation of church offertory in orthodox Ghanaian churches. Here, worshippers dance (to music) to the front of the church, and deposit their monetary donations in bowls, boxes, or bags labeled according to the day of the week on which they were born (Kofi (male) and Afua (female) are Friday-borns), and Ama is a Saturday-born female; see for example Tufuo and Donkor, 1989 for a discussion of the day or "soul" names). This practice, done as much as monthly in some settings, and as little as annually in others (during fundraisers), naturally introduces an element of competition since everyone desires their day to win. In Sutherland's "The Marriage of Anansewa", this reality is satirized by the character Kweku Ananse who after receiving money through deliberate deceit of others decides to go shopping and buy the "latest suit in town" so that he can go to church to "deposit with the best of spenders" (pg 39). The past two decades have seen a rise in Charismatic and Pentecostal churches (Bonsu 2010; Gifford 2003; Meyer 2008) which observe the doctrine of giving tithes (giving ten percent of net income to the church) and offerings. Some churches feature more than one offering in a service, and foster an environment of additional financial support via "Sowing a financial seed to the church" (pg 189, de Witte 2003). It has been argued that the size and frequency of church donations can be used as a financial indicator in Ghana (Afrane 1997).

Charity

Sadaka (alms-giving) is practiced by devout Muslims. It is believed that beggars do the donors a favor by providing them with an opportunity to gain credit with Allah. Membership in voluntary organizations provides yet another avenue for financial donations in Ghana. Especially in urban areas, religious groups (such as Women's fellowships (church sub-group), Muslim brotherhood), civic groups (e.g. Rotary Club, Soroptimist Club, Youth groups), alumni groups (mostly secondary school), and sometimes professional organizations often adopt a project (e.g. ward in a public hospital, building in a school), and raise funds or make out-of-pocket contributions towards a cause. Currently, no data exists on annual amounts of charitable contributions. However, newspaper reports of such donations are commonplace, often with photographs of the donor group, the donation, and representatives of the recipient.

Summing up, money plays an important role in the gifting behavior of Ghanaians. Financial gifting enhances the welfare of the group by supporting those in need to afford life's basic necessities, and demonstrating solidarity with those observing a rite of passage. The social status of the donor can be enhanced by contribution of a sizeable gift, for which reason individuals are motivated to give. Individuals make decisions about the size of a monetary gift on the basis of factors such as individual income, existing financial commitments, nature of the relationship, social status of both the recipient and the donor, factors similar to those shaping behavior in commodity gift economies (Sherry 1983). The public nature of the presentation can be a source of motivation to contribute a large amount (Gott 2007).

METHOD

A total of 106 male and female adult participants from diverse occupational backgrounds to reflect economic diversity were recruited from various neighborhoods in Accra, Ghana's capital city to participate in an interview. Interviews were conducted in English or Twi (a Ghanaian language) at or near participants' homes or place of work. 66 members of the sample were recruited for a study exploring the redenomination experiences of Accra's urban poor, and were remunerated for their participation in the study. The rest of our sample consisted of volunteers. Sample demographic information is summarized in table 1. Interviews were recorded.

Table 1. Participants Demographics [Sample Size N=106]	
Demographic Features	**Number of Respondents**
Gender:	
Females	55
Males	51
Age:	19
≤ 20	21
21- 40	57
41- 60	0
61- 80	6
81+	1
Missing	2
Education:	
None	8
Basic	15
JSS	21
SSS	7
Middle School	2
Other	6
Missing	7
Marital status	
Single	26
Married	22
Divorced	2
Widowed	3
Missing	13

Table 1. Participants Demographics [Sample Size N=106]	
Demographic Features	**Number of Respondents**
No. of children:	
None	19
1-4	29
5-7	9
Missing	9
Occupations:	
Unemployed	5
Student	1
Farmer	1
Lecturer	3
Trader [a]	31
Business [b]	2
White Collar [c]	9
Doctor/Pharmacist	4
Apprentice	5
Porter	9
Beggar	3
In-traffic Car Glass Cleaners	5
Shoe Repairer/shine	4
Security	3
Truck Pusher	3
Welder	1
Retired	2
Other [d]	13
Disability	
Blind	3

[a] Seller (hawkers/peddlers), hairdresser, day labourer, [b] Privately owned small business owner
[c] Accountant, banker, civil servant, consultant, [d] Cleaner/Gardener, missionary

The interview format was semi-structured. After providing demographic information, interviewees discussed their experiences of the currency redenomination and talked about their spending behaviors after the currency change. Participants provided information about their perceptions about why the denomination occurred, who authorized the process, how they heard about the currency change, whether they preferred the old currency to the new currency and the reasons for their preferences, how they became conversant with the old-to-new currency conversions, and how long it took them to do so.

Next, interviewees were asked to discuss how their financial lives were different due to the mandated use of the new currency, which featured notes (that were of higher value and therefore more portable than its predecessor), and coins (which were previously not in widespread use due to inflation). The Urban poor sample was specifically asked about saving habits (this is unrelated to the current study). Due to the potential modification of experiences in order to provide socially desirable responses, participants were not explicitly asked about their individual gifting behavior. However, if they provided information about their personal gifting experiences, follow up questions were asked to obtain more detail.

DATA ANALYSIS

Two interviews were translated and transcribed into English. Meaningful units of text (words, phrases, sentences, or multiple sentences) that made direct or indirect references to variants of gifting in Ghana (church, dashing, etc) were identified in the data and subjected to thematic analysis (Braun and Clarke 2006). Independent coding was conducted by two trained raters. The overall content analysis involved 1072 independent judgments, which resulted in an inter-rater reliability of 0.83, which is an acceptable level of reliability (Kassajarin 1977). Altogether, 20 instances of gifting from 15 participants were cited in the data set, with no inter-rater disagreements.

RESULTS

The results indicated that redenomination impacted gifting in multiple ways. Six major themes were identified. These themes reflect six independent, mutually exclusive types of responses to monetary gift-giving in the context of a redenominated currency with lower numerosity than its predecessor. Overall, the results thus indicated that:

(i) The impact of a currency redenomination on monetary gift-giving was complex, and resulted in distinct (and some completely opposite) behaviors in different potential monetary gift-givers.
(ii) Redenomination did not exclusively result in an increase in the size of monetary gifts.
(iii) Redenomination did not consistently benefit the monetary gift giver
(iv) Redenomination did not always benefit the monetary gift recipient
(v) For those with limited means, the need to give a gift within the context of a redenominated currency with lower numerosity inspired creativity to prevent the loss of face.

Each of these categories of redenomination impacts is discussed below, with emblematic quotes from the translated interview transcripts.

Commodity Substitution to Increase Numerosity

Interviews with a sample of a community of low income earners in a predominantly Muslim neighborhood in Ghana's capital revealed the profound effect that currency change had on gifting behaviors related to rites of passage. As previously stated, the traditional Muslim wedding involves the act literally showering the bride with cash. This was easy in the old currency, but impossible in the new currency as the following narrative illustrates:

> The 100, the 500 was paper so that was what we used, but now…. If you are attending a wedding you may not have much money on you. You may have just about 60,000 (6 dollars pre-redenomination)… and give 20,000 to the mother. The reminder you can change into 500 notes and use for the "Buki" (showering the bride). But now it (the smallest note) is 10,000 (in other words, a single 1 new Ghana cedi paper bill) and may be you have only two or only one (paper bill) which you will shower on the woman, which is not fine.

Decreasing the volume of bills required for monetary transactions was one of the motivations for the currency redenomination. However, as the above narrative shows, the low value of notes had its advantages due to the manner of presentation at Muslim weddings. The low value notes were beneficial to low income earners by making it possible for people to meet their social obligations of monetary gifting in an economical manner, while giving the illusion of giving a large amount. Hence the new currency posed a problem for people with limited financial means. The equivalents of the notes that would have been used were coins in the new currency. Coins would be inappropriate to throw for two reasons. First, it would be physically dangerous, and secondly, coins are generally not considered appropriate to use for gifting. The problem posed by the limits of the new currency was creatively solved as illustrated below:

> "*So now our children exchange it (the money) for the Naira (Nigerian currency of lower numerosity) and we use it for the 'Buki' (bridal shower) because of the 10,000. Afterwards, the bride will convert it back (to Ghanaian currency)*."

In other words, due to the decreased numerosity of the new currency, people resorted to converting their gift money to that of another country that had values similar to the old Ghanaian currency. Clearly, in this particular context, the new currency was unable to functionally replace its predecessor. Disadvantages of using Naira instead of the national currency included the time and effort needed to go a money changer, and the loss in value of the monetary gift due to transaction costs for both the donor and the recipient. Futhermore, this "Nairalization" was not perceived as an optimal solution:

> That is what happens now when we do weddings. It is not proper that we have to go and buy some other country's money for that. It is not fine. We need to use our own.

Commodity Substitution to Maintain Value

Due to the constraints of the new currency, people who could not afford to increase their gifting amount resorted to switching currencies for Muslim bridal showers. For some other rites of passage, however, non-monetary gifts are appropriate. A few participants reported that in order to be able to gift, they had switched from gifting money to commodities. For example,

> Like a woman who just gave birth? I can give 5 cedis. Yes. I give paper notes otherwise (if I don't have much money) I can buy key soap and give it to her.

It appears that switching commodities (where possible in a socially appropriate manner) allowed individuals to meet their gifting obligations and save face in an affordable manner. While such an opportunity may be of benefit to the donor, it is unclear whether the same can be said for the recipient. In the Ghanaian context gifts tend to be directed towards meeting people's needs rather than their wants, something that is especially important in low income environments such as the interviewee's. The brand of soap mentioned in the excerpt has many practical uses such as hand washing clothes and dishes, and bathing children. However, it is unclear whether this hypothetical new mother would need other items more than the gifted commodity. Furthermore, some individuals anticipate being gifted money to help to recoup celebration costs. Hence gifts in kind may not be perceived as helpful. Also, if majority of the guests decided to give the same or similar gifts, this would result in waste since the Ghanaian economy does not have opportunities for people to return things to stores for refunds or store credit. Ghana's economy is based primarily on small-scale retailing.

Increased Giving to Save Face

Consistent with previous data, increased gifting post-redenomination was noted, as illustrated below:

> (Before the currency change) when you go to church and you don't have but are able to give 10,000 as offering you will feel that you have given something but today when you go to church and offer 2 cedi as collection you feel that it is meager or too small for you. So you have to give something like 5cedis of the new currency before you feel that you have given something worthwhile.

While church offerings are voluntary in theory, this interviewer alludes to the social pressure related to giving an amount that "feels" socially appropriate. This is consistent with the literature on the dark side of giving (Marcoux 2009)which highlights that negative emotions such as embarrassment can be associated with what is supposed to be a pleasurable activity. As this narrative indicates, the financial burden of a larger monetary gift is considered preferable to the negative affective and social consequences of under-gifting. This reality clearly benefited some ‘dashing” recipients:

> I have a madam here when she does not have change she gives me 50,000, which is 5 Ghana. Yes. Thinking about it, yes (people give me more than before) because even here some people here give me 1cedi and tell me that I should use it to buy iced water.

While the amount of 5 cedis was considered an appropriate amount to give a new mother if someone could afford it, 5 cedis was generally considered excessive for a dash at the time of data collection. Nevertheless, due to the combination of unavailability of change and social pressure to dash, some donors found themselves dashing larger than normal amounts in order to maintain social status.

Decreased Giving with Loss of Face

In contrast to what previous Ghanaian research has alluded to, increased gifting does not occur across the board, as the following interview excerpt indicates:

> If I compare it, nowadays when people want to give you money they may end up saying there is no change. People can no longer give big gifts. Suppose the person has 50, 000 (5 new Ghana cedis), he cannot give it to you, for him to lose. But formerly even when the person had it, it consisted of different notes, so he could give you 5000 or 10,000 and keep the rest.

Once again, while the increased portability of the new currency was a boon for conducting financial transactions, it sometimes posed an obstacle to dashing, since this form of monetary gifting involves small amounts of money. The new currency gave people who did not have small bills a legitimate escape from meeting the social expectations of dashing, possibly a good thing for people who were either reluctant or unable to give in the first place (for motivational or budgetary reasons). Unlike the “madam” referred to in the previous section, a 5 cedi dash was considered excessive by most people. Hence, if people did not have lower denominations on hand, it was socially acceptable to blame not dashing on an external factor: the unavailability of change.

While being given an out from “dashing” may be advantageous to the would-have-been donor, a decrease in dashing opportunities has negative implications for lower income individuals who expect dashes to help them meet their needs, especially after a redenomination where prices of goods and services experienced increases.

Escaping from the Gift Economy

Lack of change provided individuals a reprieve from the "dashing" economy. Escaping from the gift economy is a theme alluded to by an individual acknowledging financial constraints and potential embarrassment in a church setting:

> If you place it (coins) in the collection bowl it will make noise and …everybody will see that you…. even Jesus will not be happy with that! And the thing will make a tingling sound and embarrass you. Meanwhile, nobody is forcing you, you don't have money. It would have been better if you had not gone to church that day.

The impact of the perception of social pressure is evident in this individual's experience. In addition to the threat of embarrassment for being publicly acknowledged as contributing coins in church (due to the noise of dropping them), the social pressure is further enhanced by the assumption of religious displeasure as a result of offering up coins in church. The perception of negative evaluation by Jesus is inconsistent with the Christian bible story (Luke 21:1-4) in which Jesus acknowledges that a "widow's mite" (two low value coins) given as an offering counted more than larger donations by the rich. We have no evidence to confirm or deny whether Ghanaian churches expressly decreed that individuals should not give money for offerings in the form of coins. However, such a decree seems unlikely. Nevertheless, giving in the form of offerings and tithes is explicitly addressed in many Pentecostal and charismatic Ghanaian churches. Before the currency change, part of this discourse concerned the inappropriateness of the tattered nature of some notes that individuals put in the offering bowls. As such, church goers are encouraged not only to give, but give in an appropriate manner. This sentiment, whether implied or not, could result in the assumption that coins were not appropriate for giving in church, since for many Ghanaians, coins were not considered "real" money.

The possibility of avoiding the dark side of gifting by non-attendance to events that require it is raised here. As previously stated, some individuals deliberately take action to avoid participating in gift economies (Marcoux 2009). De Witte (2003) describes how some Ghanaians negotiate avoiding the gift economy while still meeting perceived social obligations in the context of funerals by attending the funeral events but not consuming drinks at the reception. Unfortunately, there may be circumstances in which avoidance may be incompatible with honoring social obligations. Some Ghanaian churches have addressed the coin issue by instituting a supplementary offertory practice called "top up" where coins are acceptable (Dzokoto et al. 2011).

Different Rules for Charity

Coins in the new currency were considered a form of money with limited uses (Dzokoto et al. 2011). However, our interviews revealed a setting in which coins were considered appropriate for gifting: charitable contributions to beggars. This practice was observed in self-identified Muslims, for whom alms-giving is an important practice, as well as non-Muslims. Interviews with street beggars indicated that most of their daily income was obtained in the form of coins, which they exchanged at the end of the work for paper bills. However, a preference for paper bills was expressed as illustrated below:

> If you give coins, I will accept. If you give notes, I will accept. I do not have money but I will plead that you try your best to give the paper note. But even if you give 2000 I will accept. As for me, I am a beggar. And all the money is good. The fact is you are a beggar so if someone gives you something you don't have to say I don't like it. May be if she/he has a bigger amount he will not give you. Or what do you think? Like if the person says I don't have and you give me something small and I say I don't like it. Why should I say that?

In addition, Muslim interviewees reported giving money in the form of coins when performing the salaka (alms giving):

> Coins are necessary when doing salaka, you use 2000, 1000, or 500 to give to someone (amounts quoted in old currency equivalent)

Given that coins were considered inappropriate for "dashing" even to people of lower economic status than the donor, it is curious that this sentiment did not carry over to giving money to beggars. We suggest a possible explanation. Begging in Ghana is strongly associated with physical disability, which in turn is linked to lower levels of employment and employability than in the general population (Kassah 2008). This suggests that beggars are perceived as being unlikely to be able to reciprocate in kind in the future, and hence impression management may not be necessary in this context. Furthermore, physical disability in Ghana has a negative connotation, which raises the possibility that people without disabilities may deem themselves superior to people with physical disability who choose to beg for money as a full time job. This perceived difference in status may further reduce the need to monitor the social acceptability for giving in a context that is voluntary and is not tied to social obligations.

DISCUSSION

While currency redenominations are economically motivated, their implementations also spur psychological and social aftereffects. Anticipated economic consequences, which are easily identified post-implementation, are the driving force of currency redenominations. Cognitive (psychological) processes associated with currency changes have been documented primarily as a result of the transition to the Euro (Gamble 2006; Gamble, Gärling, Västfjäll, and Marell 2005; Marques and Dehaene 2004; Mussweiler and Englich 2003; Ranyard, Routh, Burgoyne, and Saldanha 2007). Social sequelea of currency redenominations, however, have generally been understudied. This is an unfortunate omission, given that they form an integral part of the long lasting, economic, political, psychological, and cultural realities that currency redenominations create.

Psychological theory indicates that the numerosity effect can influence perception and subsequently, behavior (Pelham, Sumarta, and Myaskovsky 1994; Raghubir and Srivastava 2002). In the form of the money illusion effect, numerosity differences between an old form of currency and its replacement can foster differences in price perception (Marques and Dehaene 2004; Mussweiler and Englich 2003). Within the Ghanaian cultural context, the money illusion effect has been implicated in post-redenomination experiences such as trivialization of price increases (Dzokoto and Mensah 2010).

The results of our study suggest that the transition to a currency that involves a decrease in scale (fewer zeroes) enhances the economic irrationality of the practice of monetary gift giving in collective societies where the preservation of face and the maintenance of social status are paramount. Due to societal norms about the importance of supporting others through monetary gifts, perceived social pressure to give, and the social status associated with giving a "good" gift, users of the new currency may increase the size of their monetary gifts independent of changes in earned income. Simply put, face trumps economic rationality. The resultant decrease in available financial resources to provide for life's necessities is particularly significant in low income earners, who either have to make do with less in order to give more, or come up with creative ways to modify their gift giving to save face.

In comparison to their first world counterparts, developing economies are more likely to choose currency redenomination as a tool to foster economic development. Unfortunately these are also the countries which have large numbers of low income earners who are most susceptible to the unanticipated, negative social effects that a currency redenomination may bring. While currencies may change, social obligations do not. Therefore, if the poor are unable to develop creative ways of balancing their need to adjust to a new currency with their social obligations, they will be subject to economic expectations that exceed their financial capabilities. In cultures shaped by values such as the preservation of face and the pre-capitalistic ethic of financial support of others for the benefit of the group, this can lead to unwelcome, additional financial strain.

Our results indicate that the demand characteristics associated with post-redenomination monetary gifting affect both the "haves" and the "have nots". As a result of price-rounding and trivialization of price increases, all Ghanaians – not just the poor- had to pay more for goods and services than pre-redenomination (Dzokoto et al. 2010). For the "not-so poor", the amount of money given as dashes, church offerings, and at social occasions increased in accordance with the money illusion effect, under social pressure. Also, while this was not explored in our interviews, the obligation of mutual assistance suggests the possibility of an increase in the size of inter-household remittances (due to the numerosity effect) as well as increased requests for assistance from lower income friends and relatives (since they would be more significantly impacted by post-redenomination price increases for goods and services, and thus be less able to meet their basic needs). Money illusion and social desirability would result in requests for financial assistance would be honored with larger amounts of money than pre-redenomination. All in all, the multiple post-redenomination demands on middle to high income earners would inevitably result in additional financial strain.

Why do social demands trump budgetary constraints? An explanation lies in Markus and Kitayama's (1991, 2010) psychology theory of different cultural selves, or ways of being. Individuals who grow up in cultures such as Ghana develop an interdependent sense of selfhood – an internalized representation (schema) of being in the world predicated upon relationships with others. This representation affects individual agency such that behavior is largely influenced by the perceived expectations of others, reactions of others, and impact on others. These effects have found to be salient in interdependent contexts even in the physical absence of others (Kitayama, Snibbe, Markus, and Suzuki 2004). Furthermore, choices made in interdependent contexts are associated with perceived threat to the self if there is anticipation of that the decision will be made public (Heine and Lehman 1997). Fostering social harmony and support – and by extension, giving socially acceptable gifts - are therefore key components for the optimal functioning of the interdependent self. Gifting obligations towards others in ones social network are in effect gifting obligations towards one's interpedently-defined self. Hence, while there is an illusion of indivual agency in the context of gift-giving, the reality is one of paradoxical "voluntary" obligation (de Witte 2003). Van Djik (2004) and Salter and Adams (2010) point out that in recent times, the increasingly popular Pentecostal and charismatic churches have began to advocate a lower degree of interdependence in financial matters, such that financial obligations are first to the nuclear family. However, given that church members still have financial obligations to the church, it is it possible that the church - and possibly other church members (considered members of the global Christian family) - replace the extended family in internalized social representation of the self in the case of Ghanaian Christians. Indeed, as Meyer (2004) points out, contemporary Pentecostal and charismatic churches promote the awareness of membership Christian community that is not ethnic or national in scope, but rather global in nature.

CONCLUSION

On one hand, money is a medium through which people can acquire goods and services. To use a new form of currency to achieve this goal, people must learn to identify the new currency and learn the old-to new currency conversions. This is usually anticipated and addressed by pre-redenomination public educational campaigns (Dzokoto, et al. 2010). On the other hand, money is a tool with which members of society negotiate, validate, and modify their social ties (Zelizer 2000). Typically ignored in the redenomination planning discourse is the extent to which the new currency will be suited for the varied and important social roles that its predecessor played and the adaptations that might be necessary to make the replacement currency functionally equivalent or superior.

The human factor in the form of psychological and cultural processes influences the nature and speed of adaptation to a new currency. These factors must become the focus of additional academic inquiry, such that their short and long term effects on populations can be known and anticipated. Finally, relevant theories from cognitive and cultural psychology, as well as local cultural knowledge should be taken into account during the planning process of a currency change to minimize potential negative effects post redenomination. Given the multiple functions of money, it is impossible for the impact of currency redenominations to simply be economic in scope.

AUTHORS' NOTE

This research was partly supported by the Institute for Money, Technology and Financial Inclusion at the University of California, Irvine. Any opinions, findings, and conclusions or recommendations expressed in this article are those of the authors and do not necessarily reflect the views of the Institute for Money, Technology and Financial Inclusion at the University of California, Irvine. The authors are indebted to Bill Maurer, Ph.D for helpful conceptual suggestions in the development of this article. The authors thank Francis Owusu, Lauren Washington, Sonia Haro-Garcia and Elizabeth Clark for their research assistance.

REFERENCES

Afrane, Sam (1997), "Impact assessment of microfinance interventions in Ghana and South Africa: A synthesis of major impacts and lessons." *Journal of Microfinance,* 4, 37–58.

Baker, Wayne. E., and Jason Jimerson. B. (1992), "The sociology of money." *The American Behavioral Scientist,* 35 (July), 678-93.

Bank of Ghana (2007). "The new Ghana cedi." <http://www.ghanacedi.gov.gh/>.

Belk, Russell W. (1976), "It's the thought that counts: a signed digraph analysis of gift-giving." *Journal of Consumer Research,* 3 (December), 155–62.

Belk, Russell W., and Gregory Coon S. (1993), "Gift giving as agapic love: An alternative to the exchange paradigm based on dating experiences." *Journal of Consumer Research* 20 (December), 393–417.

Bonsu, Samuel K. (2007), "The presentation of dead selves in everyday life: obituaries and impression management." *Symbolic Interaction*, 30 (Spring), 199-219.

Bonsun, S.K. (2010), "Marketing a new African God: Pentecostalism and material salvation in Ghana." *Intl Journal of Nonprofit and Voluntary Sector Marketing*, 15(November), 305-23.

Braun, Virginia, and Victoria Clarke (2006), "Using thematic analysis in psychology," *Qualitative Research in Psychology*, 3 (April), 77-101.

Cannon, Edmund, and Giam Cipriani P. (2006). "Euro-illusion: A natural experiment." *Journal of Money, Credit and Banking,* 38 (August), 1391–403.

Central Intelligence Agency (2011). *CIA Factbook.* https://www.cia.gov/library/publications/the-world-factbook/geos/gh.html. Accessed on April 21, 2011.

Cheal, David J. (1986), "The social dimensions of gift behaviour," *Journal of Social and Personal Relationships,* 3 (December), 423-39.

Cheal, D.J. (1988), *The gift economy.* NY: Routledge.

Clark, Peter (2006), "Christmas gift giving involvemenr,"Journal of Consumer Marketing, 23 (December), 283-91.

Comninos, Alex, Steve Esselaar, Ali Ndiwalana, and Christoph Stork (2008), "Towards evidence-based ICT policy and regulation: M-banking the unbanked," *Research ICT Africa* 1, Policy paper 4.

De Witte, Marleen (2003), "Money and death: Funeral business in Asante, Ghana," Africa, 73, 531-59.

Dunn, Elizabeth, Jeff Huntsinger, Janetta Lun, and Stacey Sinclair (2008), "The gift of similarity: How good and bad gifts influence relationships," *Social Cognition,* 26 (August), 469-81.

Dzokoto, Vivian (2011), "Ghanaian Happiness: global, cultural, and phenomenological perspectives," In Selin, H. (Ed). *Happiness across cultures*. Dodrecht : Springer.

Dzokoto, Vivian A. and Clifford Mensah E. (2010), "Making sense of a new currency: An exploration of Ghanaian adaptation to the new Ghana cedi," *Journal of Applied Business and Economics,* 10, 11-18.

Dzokoto, Vivian, and Sumie Okazaki (2006), "Happiness as eye-get or white heart: A comparison of somatic referencing in the emotion vocabularies of two West African languages*," Journal of Black Psychology*. 32(May), 117-40.

Dzokoto, Vivian, Annabella Opare-Henaku, Maxwell Twum-Asante, and Evan Anderson (2011) "Change we don't believe in? Coin attitudes, resistance, and use in post-redenomination Ghana," Forthcoming.

Dzokoto, Vivian, Clifford Mensah, Maxwell Twum-Asante, Annabella Opare-Henaku (2010), "Deceiving our minds: A qualitative exploration of the money illusion effect in post-redenomination Ghana," *Journal of Consumer Policy,* 33 (December), 339–53.

Fischer, Eileen and Stephen Arnold.J. (1990), "More than a labor of love: gender roles and Christmas gift shopping," *Journal of Consumer Research,* 17 (December), 333-45.

Gamble, Amelie (2006), "Euro illusion or the reverse? Effects of currency and income on price evaluations," *Journal of Economic Psychology,* 27 (August), 531–42.

Gamble, Amelie, Daniel Västfjäll, Tommy Gärling, and T., Agneta Marell, (2005), "Interaction effects of mood induction and nominal representation of price on consumer choice," *Journal of Retailing and Consumer Services*, 12 (November), 397-406.

Garlick, Peter C. (1971), *African Traders and Economic Development in Ghana*. Oxford: Clarendon Press.

Garner, Thesia I., and Janet Wagner (1991), "Economic dimensions of household gift giving*," Journal of Consumer Research,* 18(December), 368-79.

Gifford, Paul (2003). *Ghana's new Christianity: Pentecostalism in a globalizing African economy*. London: Hurst.

Godelier, Maurice (1999). *The enigma of the gift, trans.* Chicago: University of Chicago Press.

Gott, Suzanne (2007). ""One touch" quality and "marriage silver cups:" Performative display, cosmopolitanism, and marital poatwa in Kumasi funerals," *Africa Today,* 54 (Winter), 79–106.

Gouldner, Alvin (1960), "The norm of reciprocity: A preliminary statement," *American Sociological Review,* 25 (April), 161-78.

Heine, Steven, J. and Darrin Lehman R. (1997), “Culture, dissonance, and self-affirmation,” *Personality and Social Psychology Bulletin*, 23 (April), 389-400.

Joy, Annamma. (2001). “Gift giving in Hong Kong and the continuum of social ties,” *Journal of Consumer Research*, 28 (September), 239-56.

Kassah, Alexander K. (2008). “Begging as work: a study of people with mobility difficulties in Accra, Ghana,” *Disability and Society*, 23(March), 163–70.

Kassarjian, H. H. (1977), “Content analysis in consumer research,” *Journal of Consumer Research,* 4 (June), 8-18.

Kaufman, Carol E., and Stavros Stavrou E. (2004), “‘Bus fare please’: The economics of sex and gifts among young people in urban South Africa.” *Culture, Health, and Sexuality*, 6 (September/ October) 377–91.

Kitayama, Shinobu, Alana Snibbe C., Hazel Markus R., and Tomoko Suzuki (2004), “Is there any “free” choice? Self and dissonance in two cultures, *Psychological Science*, 15 (August), 527-33.

Maranz, David (2001), *African friends and money matters: Observations from Africa.* India: Oasis International Ltd.

Marcoux, Jean-Sebastein. (2009), “Escaping the gift economy,” *.Journal of Consumer Research,* 36 (December), 371 – 85.

Markus. Hazel and Shinobu Kitayama (1991), “Culture and the self: Implications for cognition, emotion and motivation,” *Psychological Review* 98 (April). 224- 53.

Markus, H. & S. Kitayama. (2010), Cultures and selves: A cycle of mutual constitution. *Perspectives on Psychological Science* 5 (July), 420-30.

Marques, Frederico J., and Stanislas Dehaene (2004), “Developing intuition for prices in Euros: Rescaling or relearning prices?” *Journal of Experimental Psychology. Applied*, 10 (September), 148–55.

Mauss, Marcel (1990), *The Gift: The form and reason for exchange in archaic societies* (W.D. Halls, trans.). London: Routledge.

Meyer, Birgit (1995), “Delivered from the powers of darkness. Confessions about satanic riches in Christian Ghana,” *Africa* 65, 236–55.

Meyer, B. (2004), “Christianity in Africa: From African independent to Pentecostal-charismatic churches." *Annual Review of Anthropology* 33, 447-74.

Meyer, B. (2008). “Powerful pictures. Popular protestant aesthetics in southern Ghana,” *Journal of the American Academy of Religion* 76 (March): 82-110.

Mussweiler, Thomas, and Birte Englich (2003), “Adapting to the euro: Evidence from bias reduction,” *Journal of Economic Psychology*, 24 (June), 285-92.

National Retail Federation (2010), “Economy still impacting shoppers, but glimmers of hope appear in first NRF holiday survey,” Retrieved from http://www.nrf.com.

Otnes, Cele, Young Kim C., and Tina Lowrey M. (1992), “Ho, ho, woe: Christmas shopping for “difficult” people,” *Advances in Consumer Research,* 19 (January), 482-87.

Pelham, Brett W., Tin Sumarta T., and Laura Myaskovsky (1994), “The easy path from many to much: The numerosity heuristic,” *Cognitive Psychology*, 26 (April), 103–33.

Pellow, Deborah (1978), “Work and autonomy: women in Accra,” *American Ethnologist*, *5*(4), 770-85.

Pellow, D. (1997), “Male praise-singers in Accra: in the company of women,” *Africa: Journal of the International African Institute*, *67*(December), 582-601.

Raeff, Catherine, Patricia Greenfield M., and Blanca Quiroz (2000), “Conceptualizing interpersonal relationships in the cultural contexts of individualism and collectivism,” *New Directions for Child and Adolescent Development,* 87 (March), 59–74.

Raghubir, Priya, and Joydeep Srivastava (2002), “Effect of face value on product valuation in foreign currencies,” *Journal of Consumer Research*, 29 (December), 335–47.

Rahmanhttp, Md Anisur (n.d), “The Zakat (Charity) related verses in the holy Quran,” Retrieved from http://www.progressive-muslim.org/zakat-charity-quran.htm on April 21, 2011.

Ranyard, Rob, David Routh .A., Carole Burgoyne B. and Gabriela Saldanha (2007), "A qualitative study of adaptation to the Euro in the Republic of Ireland: II. Errors, strategies and making sense of the new currency," *European Psychologist*, 30, 313-22.

Ruth, Julie A., Cele Otnes C., and Frederic Brunel, F. (1999), "Gift receipt and the reformulation of interpersonal relationships," *Journal of Consumer Research,* 25 (March), 385-402.

Sackey, Harry A, and Barfour Osei (2006), "Human resource underutilization in an era of poverty reduction: an analysis of unemployment and underemployment in Ghana," *African Development Review* 18 (September), 221-47.

Salter, Phia. S. and Glen Adams (2010), "Where's the love? Exploring the role of charismatic churches in constructing "true" relationship in Ghana. Social Psychology in Ghanaian Spaces: Implications for the Practice of Liberatory Psychological Science," In Dzokoto, Vivian, "Social Psychology in Ghanaian Spaces: Implications for the Practice of Liberatory Psychological Science,"Paper presented at the 53rd Annual Meeting of the African Studies Association, San Francisco, CA.

Sargeant, Adrian, and Lucy Woodliffe (2007), "Building donor loyalty: The antecedents and role of commitment in the context of charity giving," *International Journal of Nonprofit and Public Sector Marketing,* 18(July), 47-68.

Schlenker, Barry R., and Mark Leary R. (1982), "Social anxiety and self-presentation: A conceptualization and model," *Psychological Bulletin,* 92 (November), 641-69.

Schwartz, Barry (1967), "The social psychology of the gift," American *Journal of Sociology*, 73 (July), 1-11.

Sherry, John F., Jr. (1983), "Gift giving in anthropological perspective," *Journal of Consumer Research,* 10 (September), 157-68.

Smith, M. G. (1957), "The social functions and meaning of Hausa praise-singing," Africa, 27(January), 26-43.

Sutherland, Efua T. (1989), *The marriage of Anansewa/Edufa: Two plays (Longman African Classics Series).* London: Longman.

Teigen, Karl H, Marina Olsen V. G., and Odd. Solas E. (2005), "Giver-receiver asymmetries in gift preferences," *British Journal of Social Psychology*, 44 (March), 125-44.

The World Bank (2009), "Ghana Unemployment Rates," Accessed from http://www.worldbank.org on April 21, 2011.

Triandis, Harry C. (1989), "The self and social behavior in differing cultural contexts," *Psychological Review,* 96 (July), 506–20.

Tufuo, J. W, and Donkor, C. E. (1989). *Ashantis of Ghana: People with a soul.* Anowuo Educational Publications, Accra, Ghana.

Utley, Ian (2009), *Ghana-culture smart! A quick guide to customs and culture.* London: Kuperard Publishers.

Van Dijk, Rick (2003), *Pentecostalism and the politics of prophetic power: Religious Modernity in Ghana.* In: Niels Kastfelt (ed.): Scriptural Politics. The Bible and the Koran as Political Models in the Middle East and Africa. London: Hurst & Company,

Wagner, Janet, Richard Ettenson, and Sherri Verrier (1990), "The effect of donor-recipient involvement on consumer gift decisions," *Advances in Consumer Research,* 17 (January), 683- 89.

Webley, Paul, Stephen Lea L., and Portalski Portalska R. (1983), "The unacceptability of money as a gift," *Journal of Economic Psychology*, 4 (September), 223–38.

Zelizer, Vivian A. (2000), "Monetisation and social life," *Etnofoor*, 13, 5-17.

STUDENT PERCEPTIONS OF AACSB ACCREDITED MBA PROGRAMS

Vedat Bal, Celal Bayar University
M. Meral Anitsal, Tennessee Tech University
Ismet Anitsal, Tennessee Tech University

ABSTRACT

The overall value and relevance of Master of Business Administration (MBA) programs have been frequently discussed in higher education and business circles (Bruce 2011). MBA graduates are in high demand and treated as future executives, making the degree attractive and the selection of the right program an overwhelming task for many candidates. This study focused on understanding student perceptions of MBA programs' characteristics. Results revealed that students made compromises to fit their lifestyles and program requirements. They also looked for and used activities outside of the classroom to become well-rounded business executives. The importance of these results for MBA program managers was also discussed.

INTRODUCTION

Deciding to pursue a Master of Business Administration (MBA) degree is a major step toward a management career. In preparing students for business markets, MBA programs have a common objective: "to develop managers who will run efficient, profitable enterprises in a competitive world for the creation of wealth in society" (Kempner, 1991, as cited by Nicholls et al., 1995).

An MBA degree is attractive because MBA graduates are in high demand and treated as future executives by being paid higher salaries than people without the degree (Sharkey & Beeman, 2008). When annualized for a ten-year period, average annual return on investment (ROI) for an MBA degree has been calculated as 17 percent for top 50 programs and 20 percent for other programs (Holton and Inderrieden, 2007). MBA programs generate many positive outcomes: human capital such as scholastic, social and cultural capital for graduates; resourceful employees in managerial positions providing superior business performance for employers; reputation and financial resources for degree granting universities; and "indirect positive effect" on nations (Baruch, 2009)

To be more competitive by creating value, schools have established centers for trading, entrepreneurship, business consulting, business ethics, and small business. Some schools push "soft skills," such as conflict management, mediation and arbitration, team building, and virtual management, while others try to be more progressive by establishing international partnership programs, organizing extensive international field trips and community service programs, and offering executive MBA programs and seminars (Peterson, 2006; Cavico and Mujtaba, 2010), and building alliances with businesses (Kanuka and Judgev, 2006) and green-MBA (Page and Collins, 2010). Still others emphasize ethics, corporate social responsibility, and cross-cultural understanding in a global market (Schlegelmilch and Thomas, 2011). Moreover, they utilize case studies, outdoor challenge training; creativity instruction (Peterson, 2006); experiential learning, and field exercises (Schlegelmilch and Thomas, 2011); as well as various online delivery tools, such as emails, videos, taped or live broadcasts, chat rooms, whiteboards, interactive web sites, (Zabriskie and McNabb, 2007) discussion boards, and simulations.

Principal determinants in selecting a graduate business school include net cost, quality, and distance of applicant's home from school (Punj and Staelin, 1978). Executive MBA programs are characterized by five themes: brand, format/time away from office, price, alumni network, and recruitment/admissions process. Those themes can be used in reinventing the brand positioning/repositioning MBA programs (Petit, 2009). In terms of branding strategies, business schools brand their programs "only with the University's name/logo/symbol," "only with the School's name/logo/symbol," or with a hybrid approach for dual branding with different degrees of emphasis between the University and the School (Gopalan, Stitts and Herring, 2006). According to Cavico and Mujtaba (2010), "A school, therefore, must be on the 'leading edge of change,' yet be very nimble, not full off the edge. Flexibility is important since nobody wants the 'leading edge' concept to be converted to a 'bleeding edge'" (p. 108).

There are more than 8,000 business schools worldwide (Trapnell, 2007 as cited in Naude, Henneberg and Jiang, 2010). Prospective students investigate schools to get insight into their education philosophy, class environment and physical facilities, curriculum, and faculty (Sapienza, 1959). Furthermore, they evaluate their MBA investments to justify fees they will pay, emotional costs of living away from their homes and even home countries, and loss of earnings during graduate studies, among other factors (Molinero and Potillo, 2010). Risks and rewards involved with getting an MBA are major decision points for potential students. Therefore, schools need to understand the concept of perceived risk and address different forms of risk in their interactions with potential students (Stone and Gronhaug, 1993; Beneke, 2011). Specifically, they have to contemplate certain variables to relieve students' tension related to perceived risks: quality for functional risk, campus safety for physical risk, tuition and fees for financial risk, program fit for social risk, moving away from friends or degree challenges for psychological risk, and transferability of accumulated credit hours to another program for time risk (Beneke, 2011). However, this is just a starting point.

Selecting the right MBA program is a complex and sometimes overwhelming process for potential MBA students. Of the 4,387 colleges and universities in the Unites States, 1,602 have business schools; 481 in the US and Canada are accredited by AACSB (AACSB, 2009). Furthermore, business programs' rankings appear in multiple business magazines and reports every year. Researchers of such rankings use selected attributes, including student satisfaction, quality assessment, and placement success (Fisher, Kiang, and Fisher 2007). These attributes are the factors students use to make program decisions.

Furthermore, throughout the MBA program experience, students go through a transformation to achieve the following five goals; "personal prestige, career exploration opportunities, developing and improving interpersonal skills, entrepreneurial aspirations, and increasing career mobility" (Brewer and Brewer, 2012, p. 28). This research focused not only on the criteria students used to make decisions, but also on the transformation they experienced during the program and outputs they expected to gain.

METHODOLOGY

There are multiple objectives of this study. First, an MBA degree is one of the most preferred professional degrees in today's global economy. In taking such an important decision in their careers, graduate students were asked to identify the factors they considered in selecting an MBA program. Second, assuming that MBA students are no exception to the "people face trade-offs" principle when they chose an MBA program, they were asked to identify compromises they made in selecting an MBA program. Third, students were asked to identify benefits they experienced apart from classroom activities during their MBA program. Besides understanding important factors in selecting an MBA program, compromises made in comparing potential MBA programs, and supplementary benefits accumulated outside of classroom experience in adding value to one's career profile, final goal was to understand how students compare key critical variables that they find important in selecting an MBA program.

MBA students in several classes at a public university in the Southeastern United States were invited to complete an anonymous on-line open-ended survey for extra credit. Responses were collected from 238 students over three and a half years. To encourage detailed responses, no word count or page limitations were established. The survey ended with demographics questions. ([1])

The sample was composed of 59.2% male and 40.8% female respondents. Of those respondents, 46.6% were single, 49.2% were married, and 4.2% were divorced or widowed. Age distribution was as follows: 49.6% 21-25, 22.3% 26-30, 11.3% 31-35, and 16.8% were above 35. Regarding students with jobs, 55.5% worked more than 40 hours per week, 11.8% worked 31-40 hours per week, 8.0% 21-30 worked hours per week, 13.0% worked 1-20 hours per week, and 11.8% worked 0-10 hours per week.

Three researchers content analyzed the responses independently. Then the researchers discussed and to come to a consensus in resolving differences in the classifications.

RESULTS

The research identified three main categories as students pass through the MBA program. The first category was inputs for selecting the best school to get an MBA. These inputs consisted of general factors students considered in analyzing an MBA program, specific factors they focused on in determining the best school for them, and sacrifices they made in selecting a specific program. The second category involved processes they went through during the educational experience. These processes include in-class and out-of class experiences. Questions specifically addressed what they learned besides book knowledge. The third category was students' expectations of future benefits from the MBA program (Table 1).

<table>
<tr><th colspan="5">Table 1: Students' Perspective on MBA Program Evaluation</th></tr>
<tr><th colspan="3">INPUTS</th><th rowspan="2">PROCESSES</th><th rowspan="2">EXPECTED OUTPUTS</th></tr>
<tr><th>General Choice Criteria</th><th>Choice Criteria Specific to Institution</th><th>Most Important Choice Factors</th></tr>
<tr><td rowspan="3">Online
Price
Time
CPA
Reputation
Flexibility
Location
Accreditation</td><td rowspan="3">Online
Price
Familiarity
Time
Flexibility
Accreditation
Location
Assistantship
CPA
Reputation</td><td>Online
Price
Location
Accreditation</td><td rowspan="3">Teamwork
Real World Applications
Network
Broader Perspective
Projects</td><td rowspan="3">Relationship Building
Job Opportunities
Better Future or Career
Feel More Confident</td></tr>
<tr><td>Sacrifice Factors</td></tr>
<tr><td>Higher Price
Better Reputation
Larger Schools</td></tr>
</table>

Inputs

The first question involved factors students considered in selecting an MBA program. Students were not asked to prioritize their answers in any order, but the results are reported with the most frequently mentioned factors in descending order. A major group of students (33.6%) mentioned opportunity to access courses online in order to accommodate their work and life requirements as shown in the following comments:

> *Student 22. "DMBA (Distance MBA) The most important factor was the ability to complete the degree online."*

> *Student 76. "The factors that I considered when looking into an MBA program were convenience as well as a great program. With a full time job, I didn't want to move to get*

my MBA, so I considered schools around where I lived or online courses. In the end, I chose a distance MBA program. This was the best option for me and it was affordable."

Student 223. "The distance MBA was the right choice for me in that it enabled me to work a full time job without having to drive to a traditional classroom setting."

Student 238. "I wanted a program that was 100% distance. I have children and I wanted to be home while studying."

Affordability of the program (30.7%) closely followed the distance/online characteristic as the most desirable factor. Students usually considered the program's cost along side-by-side with the online delivery method as revealed in the following comments:

Student 4. "In determining which school to pursue my MBA, many factors were taken into account. The primary two were price and school reputation"

Student 12. "I work a strange schedule so the distance format of this program was a major factor. This has allowed me to keep my job while pursuing my MBA. The second major factor was the cost."

Student 129. "Cost and quality were the main factors in my decision."

Student 155. "The factors I considered when selecting the right MBA for me include: 1. the cost of the MBA. 2. If the program was offered online. 3. If I could get my MBA in a year. 4. If the school has the top accreditation. 5. The reputation of the school."

Student 185. "Mostly Cost, I looked at other programs but none had graduate assistantships to offer."

Time to complete the program (13.9%) was the third frequently mentioned factor in students' choice criteria as reflected in the following comment:

Student 155. "The factors I considered when selecting the right MBA for me include: 1. The cost of the MBA. 2. If the program was offered online. 3. If I could get my MBA in a year. 4. If the school has the top accreditation. 5. The reputation of the school."

Help in preparing for the Certification of Public Accountant (CPA) examination (11.8%) and the business school's reputation (11.3%) were the next two factors Accounting majors wanted to be able to take the CPA as quickly as possible with minimal additional course work. This priority is illustrated in the following comments:

> *Student 92. "I selected the MBA because I have an accounting undergraduate degree with 120 course hours. In order to be able to sit for the CPA exam, I am required to have 150 course hours. The MBA is exactly 30 hours and I felt like a graduate degree would be more beneficial than a minor in something or just extra junk classes."*

> *Student 118. "I wanted a flexible program in the event I engaged in a job where I traveled 50% of the time. I also considered price since I am only interested in completing my 150 hours to sit for the CPA exam."*

The school's flexibility (7.9%), location (7.9%), and accreditation (7.6%) were factors closely following the emphasis on the MBA program's reputation as indicated in the following comments:

> *Student 171. "Online courses and reputation were the only determinants."*

> *Student 220. "Cost, accreditation, reputation, and convenience were the main factors I considered when making a decision regarding my MBA."*

> *Student 145. "I was looking for a flexible program that had a good reputation. I like being able to work at my own pace. The online option is so great for people who work full time and have families."*

> *Student 171. "Online courses and reputation were the only determinants."*

> *Student 220. "Cost, accreditation, reputation, and convenience were the main factors I considered when making a decision regarding my MBA."*

> *Student 101. "I needed a course that balanced many different factors. I needed a flexible schedule, effective courses, affordable prices and an accredited school. Specifically, because of my future goals I was looking for a school that had a risk management emphasis. Because I work full-time, an online or evening program was the only possibility for me."*

> *Student 2. "I considered the following: affordability, credibility (AACSB accreditation was VERY important.), flexibility, and specializations that were available."*

Student 9. "... it was very important to me for the program to have the highest accreditation. I want to make sure that my master's degree really means something and is not just a piece of paper."

Students believed that they made both the best choice in their MBA program and the best fit in terms of their criteria and the program's. An important influential variable not included in the general selection criteria but that students mentioned frequently was their familiarity with the MBA program they chose. They either received their bachelor's degree from that university or knew someone in their peer/friend group that had received an MBA from that school as indicated in the following comments:

Student 72. "I was impressed by the reputation of ...'s MBA program had in the Nashville area and especially with military personnel. Since I have numerous friends and family in the military, the reputation ... has with military personnel weighed heavily."

Student 32. "I chose the ... MBA program mainly because I did my undergraduate at Tech. I'm familiar with the University, the professors, and most of my friends here too. ...."

Student 37. "I choose ...'s MBA Program because I was already familiar with the business school program and professors from undergraduate studies. Additionally, the program seems to offer an affordable balance of tuition costs and benefits. Benefits include capable professors, instructional program, and pleasant and affordable living environment on and off campus."

Student 56. "In all honesty, ... is very convenient to my family. With saying that, however, I also feel ... has an outstanding program for students. I have been very satisfied with my experience at .... The professors for most part were great. The knowledge I have gained is massive."

Of the 238 students surveyed, 142 students mentioned they faced a trade off when choosing their MBA program; 47 mentioned having to make compromises. They mostly sacrificed the option of going to a large, prestigious metropolitan school. Convenience and flexibility of having an on-line education from a smaller school's high-quality accredited program were more important for their situation. Of the students mentioning tradeoffs, 95 focused on the advantages of keeping their job and family life intact while pursing the MBA. While taking MBA courses, 74.4% wanted to work full time. Price/cost of the program or affordability compared to prestigious programs (25.3%) was the second major driver in students' decision making as indicated below:

Student 1. I compromised the prestige that a top MBA program would offer (i.e. Vanderbilt, Wharton) for the convenience and cost of the ... program. As a senior level executive, I often see the benefit of having a prestigious MBA program listed on a resume. However, I believe that the combination of my experience, CPA, and an MBA will be sufficient to remain competitive in the job market.

Student 29. For me the purchase was simple, I saved from the time I graduated with an undergraduate degree. I looked at the costs of most Master's degrees. Private schools ranged in cost from $15k to $80k. I knew once I exceed $20k I would need loan assistance. This was never an option in undergrad. I decided I was not taking this route. ...'s program was well under this price range. They had the features and factors I was looking for at the right price. There was very little compromise. I also looked at payback. I knew an MBA would add about $10-$20k on to my salary. In order for me to obtain this same gain, I would need to stay in my field for about 5-10 years. A MBA would get me there in 2-5 years. This would give me a substantial payback on a $10k- $15k investment (1-2 year payback). This would help me achieve not only career goals but also financial goals. I realized I would not be able to use the $20k I had saved for anything else, but I know what I will learn can never be taken from me. I also know this knowledge can and would be used to pay back the money very quickly. I do not know where else I can double my money in as little as 3 years with high confidence. This has proven true thus far. In my last job search, I was able to use the fact I was working on my MBA to obtain a job with a company who agreed to pay for a large portion of my degree in addition to the $15k I was able to negotiate. I would not have been able to make this move without my PE licenses and, more importantly to them, my potential for success shown by my pursuit of a MBA..... For me, the only compromise I made was not being able to be on-campus.

Student 180. I needed a program that would let me take modules to get the necessary business background foundation instead of full blown graduate courses like UTC wanted me to take before entering the program. I needed the flexibility that ... offered because of my job. Some periods of the year cause us to change our work schedules which would be a problem in a traditional class.

The most important attributes these students considered in selecting their MBA program can be classified as follows: (1) service/program delivery format including online access (34.5%) and flexibility (15.8%) of getting as many courses as students want, (2) cost of the program (28.3%) versus other alternatives, and (3) assurance of quality provided by AACSB accreditation (7.6%) of both college of business and MBA program. These three categories ensure students they will be able not only to finish their MBA programs quickly and with minimum debt while maintaining their jobs and family lives but also to obtain the credits to sit for the CPA exam.

Processes

Students identified multiple activities outside the classroom that benefited them during their MBA program. These benefits could be considered the consequences of being in the graduate program of their choice. They described team work (22.5%), networking (21.3%), and real-world applications (21.9%) as the most beneficial aspects of their graduate program experience. The following are a sampling of those descriptions:

> *Student 57. The value of team work would be the most important lesson outside the classroom. The high intensity of the program made me realize the importance of building relationships and operating as a team in order to achieve a common goal. The pressure also forced us to deal head on with conflict resolution in order to get the job done.*

> *Student 64. Team work and networking. Most assignments required the work of teams to achieve all that needed to be done. This aspect forced team members to understand each person's abilities. Additionally, the MBA roundtables have allowed students to network with business people.*

> *Student 73. The application of many theories was actually applied to real world environments in the school. This made doing the actual course work more interesting and appealing. The team projects allowed me to build a network of professionals across the globe to interact with the rest of my career.*

> *Student 96. On line programs make interaction with other students difficult. However, several classes have included team activities which provide some involvement with other students. Networking and information sharing are important by-products of any MBA program, and should be emphasized whenever possible.*

> *Student 14. I really like how the professors are showing the practicality of the concepts. Every class I have taken so far has a large portion contributed to applying the concepts/skills to daily life. Many of these tasks have also been team projects. I believe that leaning how the topics you are studying apply to the "real world" is very beneficial. Others tend to solely focus on the ability to regurgitate what you have read or heard from the instructor; however, I have not had that in this program. While there are tests/quizzes over the textbooks, I have gained the most from being 'forced' to look beyond and see how the topics learned apply to the world I will face outside of the classroom. If I was closer to campus on the dates they were planned, the get-togethers for MBA students would be another benefit.*

Students worked on different projects in their courses and felt forced to think outside the box. They also applied their newly gained knowledge to their work-related problems and saw immediate results as noted in the following responses:

> *Student 48. The professors are one of the strongest parts of the MBA program. Everyone is so engaged in the program with several different teaching styles and backgrounds. This gives an excellent diverse perspective and learning system to the student . I also feel that you get more time interacting with other students through the chat rooms and discussion boards. You really don't miss anything because everything is posted right there to go back and review if needed. I thoroughly enjoy and prefer learning with the online method. Also, the program is flexible enough that you can learn pretty much on your own terms whether it's 2 in the morning or more focus on the weekend. It allows people to set down and focus when the time is right for them and I think you get more out of it this way because you are ready to be engaged.*

> *Student 62. One of the things I have enjoyed about the MBA program so far is learning about things that actually help me in my work. Since I work for a bank and perform credit analysis on client financial statements, it was very interesting to learn more about the financial ratios and what they can mean. It was also interesting to learn in the marketing class what successful companies have done in their marketing decisions that have either helped or hurt their companies and why. And to learn what companies need to think about when they develop their marketing plan.*

> *Student 71. Outside of my learning experience, I've been able to immediately apply the management principles I've learned in the MBA program. One of the most mind-opening experiences I've had can be summed up in one course. Organizational Behavior. The textbook overwhelmed my thinking process. It related intimately with the things I faced in my career. I gleaned so much more than I ever thought possible from that course. So, while reading and studying those chapters, I was able to apply those newly learned principles at work.*

Expected Outputs

Finally, students were asked about their expected outputs once they graduated from the MBA program. These outputs reflect higher level end states they wanted to achieve. Of the responses 38.7% included building networks, developing relationships, and learning and applying better communication skills. Students, especially distance MBA students who were already holding job positions in various organizations, improved their skills due to team work on multiple real-world projects as suggested in the following comments:

Student 11. Meeting people with differing backgrounds and job functions is nice. You get experience in working with others and gaining trust in others' work to excel in tasks. It seems as if multi-tasking is the norm now. Allocating enough time to complete projects is a must in business. The program helps to prioritize your time and balance different aspects of life.

Student 147. I've already experienced the benefits of the ... MBA program. I changed companies and jobs before starting the program to focus on my studies, dropping my salary by half. I've recovered 2/3's salary already, and three promotions. I have one more semester to go, and I expect to recover my salary fully with another promotion. It's been great fun. Last week I was sitting in a cost allocation meeting regarding grant research and lab costs. I was the only one wide awake besides the speaker in complete understanding of how we handle the interest on bonds taken out to build the research laboratories. Hmmm...I feel a job offer coming from that director because I was able to demonstrate interest and understanding. Ha!

Student 163. It will be to my benefit as I work with various people, perspectives, attitudes, and personalities. I will already know how to approach the situation and come up with a solution quicker.

Responses, such as the following, included references to job opportunities resulting from networks developed during the program (26.9%).

Student 116. The ... MBA program allows me to engage in teamwork, and over the course of the MBA program, I undoubtedly developed significant relationships that should and will serve me well throughout my business career. A network of alumni working at a wide range of companies is always at hand. This is useful for mentoring, job searches, and professional contacts....

Student 152. Both of these benefits (networking and immediate practical application of MBA knowledge to outside work) add value to my career profile by making the necessary business contacts as well as giving practical hands on learning to apply to my career.

As a result of networking, 10.9 % of the students felt more confident in approaching their business interactions and more capable of handling the work environment; hence, they expected to be successful in their future career as discussed below:

Student 45. Being able to communicate effectively through the internet and on the phone will allow me to excel in any future career, with these types of communication being used more frequently in business. Using less time with school allows me to spend more time at work. Scoring well on tests in the DMBA program has allowed me to be more confident in my work at my job.

Student 19. I think I will be better prepared to handle managerial situations in the future. I believe the habits I previously discussed will aid me as more and more responsibility comes my way. The relationships I have developed with other coworkers in the program will also aid me as we continue to work together on various work assignments.

Student 6. This MBA degree will open doors and lift the glass ceiling for my career with my current employer and future employer(s). From my experience, in order to advance to the director level in any organization, you first must have the credentials. Therefore, I feel that it is mandatory that I earn an MBA degree, not only for me, but for my family and welfare also.

Student 49. The ability to approach issues, projects, and decisions in a different way has allowed me a more objective view when searching for solutions. Sometimes just having a better set of questions to ask can make a huge difference in working for successful outcomes.

Student 71. I'm a manager; I'm in Administration. Those supplementary benefits have already added value to my career profile and will only continue to do so. As I was new to management, I was also being trained to be a manger by my MBA courses. At first, I didn't like making decisions, it would take me a while to mull things over, but now, I feel that I thrive at making decisions, I welcome those decisional challenges.

Student 83. Apart from the networks that I have formed, I also will be able to talk to other people more confidently about all aspects of business.

Student 204. I feel that these attributes that I have gained will allow me to be very desirable to employers. I am confident that I can handle many different challenges and accomplish them with ease.

DISCUSSION

We explored the decision-making process and emerging outcomes for both traditional and nontraditional MBA students via their narrative descriptions at various stages of their graduate program at a Southern university. This research revealed that these students used a complex criteria scheme to minimize risk in decision making. The emerging themes are summarized in Table 1.

Selection of an MBA program was a complex and risky decision for respondents. Since it was a once in a lifetime decision for them, they identified most important attributes of MBA programs first and formed their evoked set (consideration set) of schools based on their most relevant criteria. This approach provided evidence of lexicographic decision making approach (Schiffman and Kanuk, 2004). Then they seemed to follow a disjunctive decision rule by setting a minimally acceptable level as a cut-off point on major attributes also introduced school specific new criteria. During this transition, some attributes, such as reputation or time to finish the program, dropped in the rank order of importance, whereas the online format remained the highest-ranked attribute. Rydzewski, Eastman, and Bocchi (2010) found with distance MBA students similar selection criteria, including availability of online format, quality of program, length of program, cost and course in curriculum.

A major reason given for a program's success was the flexibility it provided through on-line courses, allowing students to plan the number of courses to take per semester. According to Herrington (2010), about 165 institutions offered a complete MBA degree via distance learning. Students did not want to make drastic changes in their family life and work situations. In contrast, a program's hands-on approach enhanced their work performance. According to Dailey's research (2011), flexibility construct was a major influence helping to reduce consumers' risk perceptions. As they advanced in their careers, their responsibilities grew as well as the demands on their time. Among the multiple dimensions of flexibility, the researcher identified the following dimensions of flexibility in program completion duration; entering the program at different times during the year; scheduling the sequence of courses; scheduling required courses; selecting the number of credit hours taken per term; and, most importantly, delivery methods.

A large majority of students mentioned their high levels of satisfaction with course work. Although they were enrolled in distance courses, they had to work in teams to accomplish certain tasks and finish projects in multiple courses. They quickly recognized that students with job experience had broadened perspectives and networking opportunities. As can be deduced from student comments, the ability to apply knowledge gained via each course enforced perception of high quality education and reduced potential cognitive dissonance.

Many researchers have emphasized the importance of quality in MBA programs (Guild 2011; Hinds et al., 2010; Safon, 2009). Students usually perceived a business school's reputation and position in media rankings as the indicators of quality. Safon (2009) found that quality of students was a major predictor of reputation in top business schools. Students in our research indicated that they co-created the program's quality while they were transforming themselves into better managers and more confident decision makers with the help of both the faculty and carefully designed real-world applications. This transformation might not have been as effective if these students had not kept their jobs while getting their MBA. Business schools can enrich their programs by involving the alumni of such programs with hands-on MBA learning activities and mentorships.

This research's purpose was to identify antecedents and consequences of students' decisions in selecting an MBA program. This study is not intended to be generalized beyond students of the Southeastern university's program examined here. Future research avenues include investigating the phenomenon of choosing an MBA program from the supply side, i.e. colleges of business offering MBA programs. Another research study may help to quantify the relative importance of the inputs, processes and outputs.

ENDNOTES

[1] Authors would like to thank Parthiban Periyaswamy for his contributions in data collection.

REFERENCES

AACSB (The Association to Advance Collegiate Schools of Business) (2009), *Business School Data Trends and 2009 List of Accredited Schools*, AACSB International.

Baruch, Yehuda (2009), "To MBA or not to MBA," *Career Development International*, Vol. 14, No. 4, 388-406.

Beneke, J. H. (2011), "Marketing the Institution to Prospective Students - A Review of Brand (Reputation) Management in Higher Education," *International Journal of Business and Management*, Vol. 6, No. 1, January, 29-44.

Brewer, K. L. and P. D. Brewer (2012), "Influencing Variables and Perceptions Regarding MBA Degree Programs", Academy of Educational Leadership Journal, Vol.16, No.4, 27-38.

Cavico, Frank J. and Bahaudin G. Mujtaba (2010), "An Assessment of Business Schools' Student Retention, Accreditation, and Faculty Scholarship Challenges," *Contemporary Issues in Education Research*, Vol. 3, No. 1, 107-118.

Dailey, Lynn C. (2011) "Marketing Part-Time MBA Programs: Understanding the Need for and Dimensions of Flexibility", *Journal of Marketing Development and Competitiveness*, Vol. 5(2), 122-129.

Fisher, Dorothy M., Melody Kiang, and Steven A. Fisher (2007), "A Value-Added Approach to Selecting the Best Master of Business Administration (MBA) Program", *Journal of Education for Business*, November/December, 72-76.

Gopalan, Suresh; Kathy Stitts and Robert Herring III (2006), "An Exploratory Investigation of the Branding Strategies of the Top 50 Global MBA Programs," *Proceedings of the Academy of Marketing Studies*, Vol. 11, No. 1, 9-13.

Gulid N., " Student Loyalty Toward Master's Degree Business Administration Curriculum At Srinakharinwirot University", American Journal of Business Education, Aug 2011, Vol 4, Number 8, 49.

Herrington, Duncan J. (2010), "MBA: Past, Present and Future", Academy of Educational Leadership Journal, Vol. 14, No.1, 63-76.

Hinds, Timothee, Dexter Falgoust, Kerry Thomas, Michael C. Budden (2010) "Examining The Perceptions Of Brand Images Regarding Competing MBA Programs", *American Journal of Business Education*, Vol 3, No. 12, 7-18.

Kanuka, Heather and Kam Jugdev (2006), "Distance Education MBA Students: An Investigation into the Use of an Orientation Course to Address Academic and Social Integration Issues," *Open Learning*, Vol. 21, No. 2, June, 153-166.

Kempner, T. (1991), "What is an MBA?" National Westminster Bank Quarterly Review, August, 65-70.

Molinero, Cecilio Mar and Fabiola Portillo (2010) "Analyzing the Success of MBA Programmes," *Journal of Strategic Management Education*, Vol. 6, No. 2, 119-134.

Naude, P.; S. Henneberg and Z. Jiang (2010), "Varying Routes to the Top: Identifying Different Strategies in the MBA Marketplace," *Journal of Operational Research Society*, Vol. 61, 1193-1206.

Page, Robert A. and Kirsten A. Collins (2010), "The Green MBA: A Competing Values Matrix," *Competitiveness Review: An International Business Journal*, Vol. 20, No. 1, 62-71.

Peterson, Robin T. and Las Cruces (2006), "Futurism: Its Potential and Actual Role in Master of Business Administration (MBA) Education," *Journal of Education for Business*, July/August, 334-343.

Safon, Vicente (2009), "Measuring the Reputation of Top US Business Schools: A MIMIC Modeling Approach," *Corporation Reputation Review*, Vol. 12, No. 3, 204-228.

Rydzewski, Denielle N., Jacqueline K. Eastman, Joseph Bocchi, “Important Characteristics in an MBA Program: The Perceptions of Online MBA Students,” American Journal of Business Education- April 2010 Vol 3 Number 4 p 33-41.

Sapienza, Samuel R. (1959), "Admission to Graduate Business School," *The Accounting Review*, Vol. 34, No. 1, 30-35.

Schiffman, Leon G. and Leslie Lazar Kanuk (2004), *Consumer Behavior*, eight edition, Pearson Education Inc., Upper Saddle River, New Jersey.

Schlegelmilch, Bodo B. and Howard Thomas (2011), "The MBA in 2020: Will There Still Be One?" *Journal of Management Development*, Vol. 30, No. 5, 474-482.

Sharkey, Thomas W. and Don R. Beeman (2008), "On the Edge of Hypercompetition in Higher Education: The Case of the MBA," *On the Horizon*, Vol. 16, No. 3, 143-151.

Stone, R. and K. Gronhaug (1993), "Perceived Risk: Further Considerations for the Marketing Discipline," *European Journal of Marketing*, Vol. 27, 39-50.

Trapnell J. (2007), "AACSB International Accreditation," *Journal of Management Development*, Vol. 26, No. 1, 67-72.

Zabriskie, Fern H. and David E. McNabb (2007), "E-hancing the Master of Business Administration (MBA) Managerial Accounting Course," *Journal of Education For Business*, March/April, 226-233.

SHKF PAPER COMPANY: AN ANALYSIS IN STRATEGIC PLANNING COST OPTIMIZATION

J. S. Sutterfield, Florida A&M University
Roscoe Hightower, Jr., Florida A&M University
Shannon A. Kirk, Florida A&M University
Shawnta S. Friday-Stroud, Florida A&M University

ABSTRACT

Purpose

This paper is aimed at demonstrating how operations analysis may be utilized to minimize supply chain costs for a firm faced with declining sales. This was done by first devising a forecasting method for the sales timeframes of interest to minimize forecasting error. Next, using the sales forecasts, a strategy is devised to optimize the firm's existing supply chain network to minimize the cost of operations. The paper contributes to the existing literature by demonstrating how dynamic programming may be used to select the forecasting method that minimizes mean squared forecasting error. The paper further illustrates how linear optimization may be applied to develop a corporate strategic plan over a desired planning horizon.

Design/Methodology/Approach

The case begins with an analysis of the changing circumstances confronting the mass-market paper and wood pulp industries in general, and the SHKF Company in particular. It then moves on to performing a forecast of the probable mass-market paperback sales for the three subsequent years, and to estimating the SHKF market share. From this, a baseline analysis is performed as to cost to be incurred by the current supply chain system in responding the forecasts. Next, cost analyses are performed to determine the cost of operating the supply chain for the next three years after it was reconfigured to reflect the decreasing demand for mass-market paperbacks. This, in turn, permitted the formulation of a plan for reconfiguring the supply chain to save money by closing facilities.

Findings

The two-stage optimization process led to a rapid an inexpensive means of reconstituting the supply chain to conform with changing marketing realities. With this approach is was found possible to reconfigure the entire operation by using facilities, without the requirement for any additional capital expenditures and without the loss of any personnel.

Practical Implications

This case illustrates a structured management approach to deal with the common problem reconfiguring a supply chain to conform with changing market requirements. In doing so, it provides an approach that may be generalized to solve many types of decision problems confronting operations and supply chain managers. In addition, it sets forth an approach to the use of dynamic programming to determine which of several forecasting methods is preferred for a given set of historical data.

Originality/Value

The foregoing case analysis contributes to the existing literature by demonstrating how two different optimization methods might be used together in the revise the strategic plan of a company. The first was a seldom used optimization approach, viz, an adaptation of dynamic programming especially for this case. Dynamic programming was used to obtain the most accurate forecasting method for a given set of historical data. The second was the use of linear optimization to reconfigure a supply chain network so as to minimize operating costs. The case demonstrates how optimization techniques may be employed to revise and refocus the corporate strategy to address a changing business environment.

Keywords

Strategy, operations analysis, logistics, forecasting, dynamic programming, supply chain and linear optimization

Paper type

Case study

INTRODUCTION

Confronted with the prospect of declining sales, and the need to reduce operating costs, it became evident to senior management at SHKF Paper Company (fictitious name for purposes of this paper) that a thorough analysis of company operations was imperative. After consideration of the various options for securing the desired analysis, it was decided that a disinterested, objective voice would provide the most objective analysis and results. Consequently, SHKF elected to contact a logistics consulting firm by the name of STAR Consulting. The charge from SHKF to the consulting firm was to perform a complete analysis of the SHKF's operations, to develop recommendations for addressing the challenges confronting the Company, and to present the results to the SHKF's senior management team.

INDUSTRY BACKGROUND

The paper production industry in which SHKF competed was cyclical and very capital intensive. Companies in that industry historically had made a variety of paper grades that were used for newspapers, magazines, books, copy machines, advertising, and labels. Many paper grades were considered commodities. Thus, price was elastic, and heavily affected by demand. The decline in demand was due in large part to growing eco-consciousness and an increasing availability of alternative communications and Internet usage. Production of several paper grades had been reduced over the past several years due to overcapacity. According to Standard & Poors Net Advantage (Benway, 2010), further production cutbacks were necessary to maintain the current operating rates, especially in lieu of rising pulp prices. Thus, all producers in the paper industry, and in particular SHKF, found themselves in a declining market.

COMPANY BACKGROUND

SHKF Paper Company was founded by Rob Webster in the early 1970s as a newspaper company covering stories within Indiana. After several years in the newspaper industry, Mr. Webster saw an opportunity to leverage the strong business experience acquired in the newspaper sector, and reinvented the company into a paper production business. As a result SHKF became a niche player in the paper production business serving the mass-market paperback industry.

SHKF's business concerns involved the production, storage, and transportation of paper. SHKF only distributes paper to the mass-market paperback industry. Consequently, the business fortunes of SHKF were directly related to those of the mass-market paperback industry. Although SHKF was itself still profitable, it found itself in a declining industry. SHKF purchased mechanical pulp for production, and did not produce or handle recycled paper. The company operated three distribution centers (DCs): one in Indianapolis, IN; one in Pittsburgh, PA; and one in Rochester, NY. These three DCs had supported a total paper output of 610 tons for 2008. Individual DCs had capacities totaling 740 tons per year. This represented an excess capacity of more than 17%.

CASE ANALYSIS

As STAR formulated its plan of analysis for SHKF, it concluded that a complete examination was in order of the current state of the paper market, as well as its future prospects. This initial phase of the study disclosed the following considerations for the paper market based on Porter's Five Forces Model:

- Barriers to entry: The cost of entering the market is low, but protecting intellectual property rights can get costly.

- Supplier power: With abundant materials such as ink, paper and glue, the availability of alternative suppliers is high.

- Threat of substitutes: Thousands of books, covering similar, if not identical subject matter, are priced competitively. There is also the possibly of consumers choosing other activities, such as watching television, listening to the radio, or surfing the internet, instead of choosing to read paperback books.

- Buyer power: Due to online book retailers, such as amazon.com and half.com, buyers are more informed and can negotiate and make more informed decisions. As a result, publishing companies do not enjoy a monopoly position. Therefore, in most cases, customers will not be brand loyal.

- Competitive strategy: SHKF competed on the basis of delivering low prices with exceptional service.
-

STAR went on to perform a SWOT analysis of the firm, which yielded the results as shown in Figure 1.

Figure 1: SWOT analysis

Strengths - Manages cash and inventory effectively - Low pricing - Customer service - Several distribution centers, which increases accessibility - Revenue stream is not reliant on a single customer	**Weaknesses** - Non-optimized logistics, specifically outbound - Less than complete utilization of DC's
Opportunities - Growing use of recycled materials - Rising demand in higher education and adult paperbound book categories - China's publishing market will be more open to penetration due to recent World Trade Organization rulings	**Threats** - Rising fuel prices - Trend towards digitized communication, services, and leisure - Industry consolidation - Stricter environmental regulations - Used book sales

In evaluating the book publishing market, several trends were apparent. The major trends were the growing use of e-books and a move toward becoming more environmentally conscious. The effect of the e-books trend was that it increased the amount of piracy occurring within the industry. On the other hand, e-books were reducing distribution costs because distribution could be done less expensively and more quickly online than in hard copy. There had also been a 15% job loss in the industry as overall readership dropped and publishers became victims of piracy due to increases in the online availability of books. As stated previously, a prominent trend in the book publishing industry was the slow movement towards becoming more ecologically friendly. Publishers nationwide had a goal to cut carbon emissions by 15% by 2020 and by 80% in 2050. This encouraged publishers to start making small changes to position themselves for the major reduction in carbon emissions to be imposed over the next forty years. Based on the analysis using Porter's Five Forces and analyzing the major trends in the publishing industry, it became evident that SHKF would need to make some fundamental changes to its business strategy to successfully position the company for long-term success.

FORECASTING METHODOLOGY

In view of the declining prospects for the whole paperback book industry, STAR decided that a three year forecast should be prepared for the entire industry. In order to obtain the most accurate forecasting method STAR elected to perform a literature review of the latest forecasting methods. These methods are discussed in the following section.

LITERATURE REVIEW

Armstrong and Fildes (1995) compared two methods for measuring the accuracy of forecasting methods, the classical mean-squared error (MSE) approach with an approach called the generalized forecast error second moment (GFESM). It should be pointed out that in order to employ GFESM it is necessary to have a distribution of the errors, and then to compute the second moment. Since such distributions are difficult to come by, this method is difficult to employ in practice. The purpose of this study was to determine which of these approaches might be used to select the best forecasting method. This paper concluded that neither of these two error measures was adequate for drawing general conclusions about forecasting methods. This paper extended previous work by Armstrong, Collopy and Yokum (1992) and Fildes (1992) which had drawn similar conclusions regarding just the MSE method. These papers only criticized the use of MSE and GFESM as measures for determining forecasting accuracy, but neither recommended any better measures.

In a grant study funded by the National Oceanic and Atmospheric Administration (NOAA), Mason and Mimmack (2002) evaluated several methods for attempting to forecast the occurrences of El Niño Southern Oscillation (ENSO). This paper employed historical data to validate models, retroactive forecasting, and used several methods to evaluate the quality of forecasts. The paper concluded that, in general, probabilistic forecasting methods are superior to multi-regression methods, but did not recommend any specific method.

In a study aimed at using predictive modeling to generate potential habitat distribution maps, Muñoz and Felicísimo (2004) compare the use of statistical methods commonly used in predictive modeling. Here the authors point out the deficiencies in most predictive modeling as applied to ecological studies, and seek to find a suitable for such applications. The authors point out that most models are incapable of taking into account the details of specific applications, and end up generalizing them away. An interesting reference in this paper (Guisan and Zimmerman, 2000) notes up to that time had made a comprehensive review of predictive modeling and noticed the lack of comparative studies in which more than two statistical techniques were applied to the same data set.

Syntetos and Boylan (2001) attack the problem of logistical forecasting and inventory control when demand is intermittent, pointing out that this has been a major problem in the manufacturing and supply environment. This work seeks to extend and improve upon an earlier paper by Croston (1972). Croston proposed a method in which intermittent demand estimates might be constructed from constituent events.

Haywood and Wilson (2009) examine whether a general test for a time series model, with parameters estimated by minimizing the single-step forecast error sum of squares, is robust with respect to multi-step prediction, for some specified lead-time. With this approach, when the result is significant, the test statistic provides an estimate of the reduction in multi-step forecast error variance, for a specified lead time, that might be obtained by re-estimating the model parameters so as to minimize the sum of squares of multi-step errors. It is important to point out that notwithstanding the conclusions of Armstrong and Fildes (1995), this paper uses error variance as a measure of the quality of the estimating method.

Quite a number of other papers were considered in selecting a satisfactory method for forecasting book sales. For purposes of documentation, these papers are listed in the Other Forecasting Works Examined section, along with those cited above. Ultimately the forecasting method deemed best suited for the Webster application was that devised by STAR. This method began with the hypothesis that for any forecasting method applied to a given set of data there is a set of model parameters that will minimize the MSE. For example, with weighted moving average, there is a set of weights, w_n, that will minimize the MSE when the method is applied to the dataset; again, if exponential smoothing were used, there is a smoothing constant, α, that will minimize MSE. This approach has the advantage that the optimal parameter value can be obtained for the entire dataset. Then, in principle, if one can obtain the optimal parameter(s) for a given forecasting method, that method will yield minimum MSE for a given dataset. Then if several different forecasting methods are compared, each with the optimal parameter(s) to minimize MSE, that method yielding the least MSE for the given dataset will be obtained. It must be emphasized that with this approach it is not necessary to be concerned about the best error measure. This is because the forecasting methods are compared as to the best that each can possibly do, and would presumably yield the same results no matter which error measure might be used. Thus, this approach avoids the problems raised by Armstrong and Fildes (1995).

In order to obtain the optimal parameters for each of several forecasting methods, a dynamic programming approach was devised. With this approach, six different forecasting methods were compared as to which yielded the minimum MSE. The top three methods, compound annual growth rate, exponential smoothing, and linear trend, are discussed in the following section.

Compound Annual Growth Rate

The first step in forecasting sales was to collect historical data on paperback book sales. In order to obtain adequate data for the forecast, it was necessary to consult several sources (Jordan, 2007; Platt, 2007; Jordan 2008). This data is shown for the years 2002 – 2008 in Table 1.

Table 1: Comparison of mass-market paperback demand estimates

	Demand forecasting results		
Year	CAGR	Expon. Smooth.	Regression
2002	1,216,710	1,217,000	1,189,000
2003	1,196,026*	1,217,000	1,171,000
2004	1,089,580*	1,196,000	1,152,000
2005	1,091,759*	1,090,000	1,134,000
2006	1,141,980*	1,092,000	1,115,000
2007	1,119,140*	1,142,000	1,096,000
2008	1,085,566*	1,119,000	1,078,000
2009	1,064,373	1,086,000	1,059,000
2010	1,047,686	1,053,000	1,041,000
2011	1,031,261	-------	1,022,000

In order to obtain the most accurate method of forecasting future mass-market paperback sales, three methods were evaluated to obtain that method yielding the least mean squared error (MSE). The first approach evaluated for forecasting was the Compounded Annual Growth Rate, or CAGR method. This equation for CAGR is shown below:

$$CAGR = \left[\frac{Ending\ sales}{Beginning\ sales} \right]^{\frac{1}{no.\,of\ years}} - 1$$

The equation above was solved to obtain a form suitable for estimating future sales. The resulting equation was as follows:

$$End.sales = Beg.sales * (1 + CAGR)^{no.\ of\ years}$$

In order to forecast with this equation, it was first necessary to obtain an estimate for the CAGR that would provide a function to best fit the historical data. STAR employed the previously mentioned dynamic programming routine to determine that CAGR which would minimize the mean-squared error (MSE) for the historical data. This optimized CAGR proved to be a value of -1.57%, yielding an MSE of 0.0012. This optimized CAGR was then used to estimate sales from 2009 through 2011.

Exponential Smoothing

The next method to be evaluated was exponential smoothing. Again, as with the CAGR, this was done with the dynamic programming routine, which determined that exponential smoothing constant which minimized MSE for the data from 2001 through 2008. This analysis disclosed that the smoothing constant minimizing MSE was a value of 1.00, and the MSE for this optimized smoothing constant was 0.0024. This, of course indicated that future forecasts would depend strongly upon previous demand and not upon previous forecasts. Further, since the MSE for this method was twice that for the CAGR method, STAR Consulting was led next to the method of linear trend analysis for forecasting demand. The results of the exponential smoothing forecast are shown in Table 1, along with those for the CAGR method. It should also be observed that the exponential smoothing method does not permit estimates more than one year beyond the current year. Thus, no exponential smoothing demand estimate could be obtained for the year 2011.

Linear trend

A third approach considered for forecasting demand was that of linear trend. Although such estimates may be based upon non-linear functions, a linear trend was employed initially for the SHKF application. The equation for a linear trend line is represented as follows:

$$y = mx + b$$

As with the previous two forecasting methods, dynamic programming was employed for this method to obtain the equation parameters to minimize MSE. For the SHKF application, the form of the linear trend equation was as follows:

$$S = -18,564 * t + 1.208 * 10^6$$

where "***S***" represents paperback sales, and "***t***" is the time in years from the base year of 2001. Of the three forecasting approaches attempted, the linear trend analysis yielded the least MSE, a value of 0.0010. Consequently, the results from this forecasting method were used for the next phase of the analysis, viz, which included optimizing SHKF's supply chain network so as to minimize logistics costs for the years 2009 through 2011. A comparison of the results obtained from each of the three forecasting methods is shown in Table 1.

REDESIGN OF SUPPLY CHAIN NETWORK

As STAR undertook this phase of the analysis, it realized that any network optimization must account for the declining mass-market paperback industry. Based upon the 2011 estimate for paperback sales, it was estimated that by 2011 sales would decline by approximately 5%. Thus, what was required for SHKF was an optimized plan for a three-year horizon that would take into account the declining demand for paper. STAR learned that the outbound portion of SHKF's existing supply chain network consisted of three distribution centers (DCs): one in Indianapolis, IN; one in Pittsburg, PA; and one in Rochester, NY. These three DCs had a total capacity of 740 tons/yr. These distribution centers served four publishers: one each in Boston, MA; New York, NY; Chicago, IL; and St. Louis, MO. As of 2008, the demand from these four publishers was a total of 610 tons. This publisher demand as originally distributed among the three DCs for 2008 is shown in Table 2, along with the utilization for each DC.

Table 2: Distribution center demand and capacity for 2008

Distribution Center	2008 actual demand (tons)	Facility capacity (tons)	Utilization (%)
Indianapolis, IN	250	280	89
Pittsburgh, PA	130	150	87
Rochester, NY	230	310	74
Total Output	610	740	

*The Association of American Publishers Industry Statistics

At the onset of this phase of the analysis, STAR found that for 2008, SHKF Paper Company had reported an outbound shipping cost of $127,500, which had not resulted from an optimized network. STAR further discovered that even though SHKF had been in operation for nearly 40 years, outbound shipping expenses had never been optimized. Thus, the first step in developing an optimized three-year plan was to establish a baseline with which to compare results for years 2009 through 2011. Next, STAR established a baseline for SHKF's supply chain by optimizing the network to determine what those costs would have been had the supply chain been optimized in 2008.

Baseline Analysis

In order to develop a baseline for comparison, STAR first examined the actual cost for the 2008 shipping distribution. This was done by first developing the shipping costs from each DC to each publisher. These costs are shown in Table 3.

Table 3: Outbound shipping costs to publishers				
From/To	Boston	New York	Chicago	**St. Louis**
Indianapolis	$475	$350	$100	$170
Pittsburgh	$250	$185	$230	$305
Rochester	$215	$170	$220	$420

These costs were then used in a linear optimization model, along the actual quantities shipped, to determine the actual distribution cost for 2008. This yielded a value of $127,500. These results are shown in Table 4.

Table 4: Actual demand allocation for 2008 compared to current output						
	Boston	New York	Chicago	St. Louis	Total (tons)	Utilization (%)
Indianapolis	30	40	150	30	250	89
Pittsburgh	-----	75	55	-----	130	87
Rochester	45	115	30	40	230	74
Total	75	230	235	70	610	
Actual 2008 Distribution Cost = $127,500						

For 2008, the utilization rates for the distribution centers were calculated using the following formula:

$$\textit{Utilization} = \frac{\textit{Actual output}}{\textit{Total capacity}}$$

This resulted in an average utilization for the three distribution centers of 83% for 2008. The detailed results for this stage are also shown in Table 2, and disclosed considerable under-utilization of the DCs, and therefore much room for improvement.

Optimized Shipping Cost

The next step in having a baseline for comparison was to optimize the existing supply chain in order to minimize shipping costs. For this purpose, the shipping costs shown Table 3 were again used, and this time the supply chain was optimized. These results are shown in Table 5.

Table 5: Optimal demand allocation for 2008 compared to current output						
	Boston	New York	Chicago	St. Louis	Total (tons)	Utilization (%)
Indianapolis	-----	-----	210	70	280	100
Pittsburgh	-----	-----	20	-----	20	13
Rochester	75	230	5	-----	310	100
Total	75	230	235	70	610	
Optimized 2008 Distribution Cost = $93,825						

These results yielded a substantially reduced cost of $93,825. Thus, without any other changes, the optimized supply chain would have resulted in a savings of $33,675, or approximately 26% lower than 2008 costs.

Based upon the forecast reduction in sales, it was assumed that a proportional reduction of 1.67% in the total paperback sales would come about for each of the years 2009 through 2011. Using this assumption, the reduced shipping tonnage of paper for the years 2009 through 2011 was estimated. These reduced shipping volumes were then apportioned over the four shipping destinations to yield the tonnages shown in Table 6.

Table 6: Estimated publisher demand volumes for 2008 – 2011				
Publisher Location	2008 Demand actual (tons)	2009 Demand estimate (tons)	2010 Demand estimate (tons)	2011 Demand estimate (tons)
Boston, MA	75	74	73	71
New York, NY	230	226	222	219
Chicago, IL	235	231	227	223
St. Louis, MO	70	69	68	67
Total Order Amount	610	600	590	580

Using these estimated shipping volumes, the supply chain network was optimized for 2009 through 2011 to obtain the minimized costs, which formed the basis for a strategic plan for SHKF for these years. This resulted in shipping distributions as shown in Tables 7 through 9.

Table 7: Optimal demand allocation for 2009						
	Boston	New York	Chicago	St. Louis	Total (tons)	Utilization (%)
Indianapolis	-----	-----	211	69	280	100
Pittsburgh	-----	-----	10	-----	10	7
Rochester	74	226	10	-----	310	100
Total	74	226	231	69	600	
Optimized 2009 Distribution Cost = $91,660						

Table 8: Optimal demand allocation for 2010						
	Boston	New York	Chicago	St. Louis	Total (tons)	Utilization (%)
Indianapolis	-----	-----	212	68	280	100
Pittsburgh	-----	-----	-----	-----	0	0.00
Rochester	73	222	11	-----	310	100
Total	73	222	227	68	590	
Optimized 2010 Distribution Cost = $89,495						

Table 9: Optimal demand allocation for 2011 with Pittsburg DC						
	Boston	New York	Chicago	St. Louis	Total (tons)	Utilization (%)
Indianapolis	-----	-----	213	67	280	100
Pittsburgh	-----	-----	-----	-----	0	0.00
Rochester	71	219	10	-----	300	97
Totals	71	219	223	67	580	
Optimized 2011 Distribution Cost = $87,385						

OPTIMAL NUMBER OF DISTRIBUTION CENTERS

During the process of supply chain optimization for 2008, STAR found that the annual demand for the Pittsburg facility was only 20 tons with a 13% utilization. Further, for 2009, the annual demand for the Pittsburg facility declined to 10 tons with only a 7% utilization. In addition, the optimized supply chain network for 2010 indicated that the Pittsburg facility was not even required. These results indicated that closing the Pittsburgh DC after 2009 was the best alternative to reduce shipping costs. Savings would not be as substantial if any other DC were closed, nor would it be possible to satisfy customer demand by closing either of the remaining DCs. Thus, the final results for the optimized supply chain were as shown in Table 10.

Table 10: 2011 optimized shipping costs without Pittsburgh DC						
	Boston	New York	Chicago	St. Louis	Total (tons)	Utilization (%)
Indianapolis	-----	-----	213	67	280	100
Rochester	71	219	10	-----	300	97
Totals	71	219	223	67	580	
Optimized 2011 Distribution Cost = $87,385						

RECOMMENDATION AND STRATEGIC PLAN

Having completed the analysis requested by SHKF, STAR Consulting presented a comprehensive strategy aimed at maximizing profits. The first recommendation was aimed at revising SHKF's forecasting procedures. It was recommended that SHKF not settle upon a single forecasting method, but instead compare several methods to determine, for a given set of data, which of the various methods might provide the least MSE. It was pointed out to SHKF that, although a given method yield the least MSE for a given set of data, that another method might prove more accurate as the size of that data set grows. For the present set of data, the linear trend method appeared best in that it yielded the least MSE, and was therefore used for sales paperback book forecasts for the years 2009 – 2011. Star went on to note that the linear trend analysis indicated a probable decline in paperback book sales of approximately 1.67% per year over these years, for a total decline of 5% by 2011. It was further emphasized that this would almost certainly indicate a corresponding decline in demand for paper. Thus, the first recommendation for SHKF's three year strategic plan was to base paper demand upon the declining estimates for the years 2009 – 2011.

Having made its recommendations concerning forecasting results, STAR turned next to the implications of those results for SHKF's 2009 – 2011 supply chain strategy. STAR began by noting that even for the year 2008 that SHKF had not employed an optimized strategy, which resulted in greater than necessary costs. Along with this, the inequity among and large underutilization of DCs was emphasized. This was because the optimized supply chain network for 2008 had shown a saving of nearly $34,000. Thus, substantial savings might accrue to SHKF from supply chain optimization. In addition, STAR noted from the 2008 optimization that utilization of the Pittsburg facility declined to 13%.

Next, STAR moved on to the optimized results for the years 2009 through 2011. These indicated that, for 2009, the Pittsburg facility would be operating at only a 7% utilization. Further, that because of declining paper demand, the Pittsburg facility would not be required subsequent to 2009. However, STAR was careful to note that the Pittsburg facility could not be closed prior to 2010 because the remaining DCs lacked the capacity to adequately serve the four markets. Thus, STAR's second recommendation for the three year strategic plan was closure of the Pittsburg facility after 2009. This recommendation was estimated to save approximately $114,000 for the years 2009 – 2011.

STAR's third recommendation was closely related to its second: Since the Indianapolis and Rochester DCs would realize increasing demand due to the declining role and eventual closure of the Pittsburg facility, that beginning in 2009, Pittsburg staff be relocated to the remaining two DCs to service this increasing demand. In this way, all personnel would have continuing employment even though the Pittsburg DC was to be closed.

Having satisfied its original charge, STAR went on to investigate some further areas for improvement (Eco-Libris, 2009). This led to the insight that it would be far less expensive to reprocess used paper than to produce it initially. Thus, it was recommended that SHKF transition its production operation to a reprocessing one. With this approach SHKF would repurchase bulk quantities of paper for reprocessing, and convert its paper production process from the use of mechanical pulp to a de-linked or re-cycled pulp. Further, with this approach, SHKF might turn the Pittsburgh distribution center into a recycling and sorting center where scrap paper could be sorted, packaged, and prepared for shipment to the SHKF Production facility. STAR hastened to point out that before this latter recommendation should be implemented, that a thorough economic analysis be performed to determine the cost benefit to be obtained from making these operational changes.

CONCLUSIONS

The foregoing case analysis contributes to the existing literature by demonstrating how two different optimization methods might be used together in the development of a strategic plan for a company. The first involved the use of a dynamic programming approach developed especially for this case - dynamic programming. Dynamic programming was used to obtain the most accurate forecasting method for a given set of historical data. The second was the use of linear optimization to reconfigure a supply chain network so as to minimize operating costs. This case analysis has underscored the importance of basing far reaching and costly business decisions upon sound optimization techniques. Such techniques enable the analyst to vary the parameters in a given application to determine the optimal configuration for minimizing operational expenses.

ACKNOWLEDGEMENTS

The authors wish to thank Ms. Shannon Kirk, Tiffany Williams, Audreen Robinson, and Ravyn Julian, all of the School of Business and Industry, Florida A&M University, who performed the initial analysis on a case somewhat similar to the one presented in this manuscript. Also, credit is due the Supply Management Institute which developed the original case from which this one was adapted.

REFERENCES

Armstrong, J.S., & Fildes, R. (1995). On the selection of error measures for comparisons among forecasting methods. *Journal of Forecasting*, 14(1), 67-71.

Armstrong, J. S., Fred Collopy, and J. Thomas Yokum (1992). Error measures for generalizing about forecasting methods: Empirical comparisons. *International Journal of Forecasting*, 8, 69-80.

Croston, J. D. (1972). Forecasting and stock control for intermittent demands, *Operational Research Quarterly 23*, 289-304.

Fildes, R. (1992). The evaluation of extrapolative forecasting methods. *International Journal of Forecasting*, 8, 88-98.

Guisan, A. & Zimmermann, N.E. (2000). Predictive habitat distribution models in ecology. *Ecological Modeling*, 135: 147-186.

Haywood, John and Granville Tunnicliffe Wilson (2009). A test for improved multi-step forecasting, Journal of Time Series Analysis, 30(6), 682-707

Mason, S.J, & Mimmack, G.M. (2002). Comparison of some statistical methods of probabilistic forecasting of ENSO. *Journal of Climate*, *15*, 8-29.

Muñoz, Jesús & Ángel M. Felicísimo (2004). Comparison of statistical methods commonly used in predictive modeling, *Journal of Vegetation Science*, 15: 285-292

Syntetos, A.A., & Boylan, J.E. (2001). On the bias of intermittent demand estimates. *International Journal of Production Economics*, *71*, 457-466.

Other Forecasting Resources Examined

Benway, Stuart J. (2010). Paper Products: Standard and Poor's: Net Advantage. *Standard and Poor's*, 20 Jan. 2010. <http://www.netadvantage.standardpoor.com>.

Billah, Baki, Maxwell L. King, Ralph D. Snyder and Anne B. Koehler (2006). Exponential smoothing model selection for forecasting. *International Journal of Forecasting*, vol. 22, iss. 2, pgs. 239-247.

Billah, Baki, Maxwell L. King, Ralph D. Snyder, Anne B. Koehler (2005). Exponential smoothing model selection for forecasting. *International Journal of Forecasting*, vol. 21, iss. 4, pgs. 651-662.

Boutahar, Mohamed (2007). Optimal prediction with non-stationary ARFIMA model. *Journal of Forecasting*, vol. 26, iss. 2, pgs. 95-111.

Brabec, Marek, Ondřej Konár, Emil Pelikán and Marek Malý (2008). A nonlinear mixed effects model for the prediction of natural gas consumption by individual customers. *International Journal of Forecasting*, vol. 24, iss. 4, pgs. 659-678.

Charemza, Wojciech W. (2002). Guesstimation. *Journal of Forecasting*, vol. 21, iss. 6, pgs. 417-433.

Chuang, Ming-De and Gwo-Hsing Yu (2007). Order series method for forecasting non-Gaussian time series. *Journal of Forecasting*, vol. 26, iss. 4, pgs. 239-250.

De Gooijer, Jan G., and Rob J. Hyndman (2006). 25 years of time series forecasting. *International Journal of Forecasting*, vol. 22, iss. 3, pgs. 443-473.

Dordonnat, V., S.J. Koopman, M. Ooms, A. Dessertaine and J. Collet (2008). An hourly periodic state space model for modeling French national electricity load. *International Journal of Forecasting*, vol. 24, iss. 4, pgs. 566-587.

Eco-Libris (2010). Plant a tree for every book you read. *Book publishing industry*, 28 Jan. 2010. <http://www.ecolibris.net/bookpublish.asp>.

Falk, Barry and Anindya Roy (2005). Forecasting using the trend model with autoregressive errors. *International Journal of Forecasting*, vol. 21, iss. 2, pgs. 291-302.

Flores, Benito E., and Dean W. Wichern (2005). Evaluating forecasts: a look at aggregate bias and accuracy measures. *Journal of Forecasting*, vol. 24, iss. 6, pgs. 433-451.

Gardner, Everette S., Jr. and Joaquin Diaz-Saiz (2008). Exponential smoothing in the telecommunications data. *International Journal of Forecasting*, vol. 24, iss. 4, pgs. 170-174.

Gelper, Sarah, Roland Fried and Christophe Croux (2010). Robust forecasting with exponential and Holt–Winters smoothing. *Journal of Forecasting*, vol. 29, iss. 3, pgs. 285-300.

Gorr, Wilpen L. (2009). Forecast accuracy measures for exception reporting using receiver operating characteristic curves. *International Journal of Forecasting*, vol. 25, iss. 1, pgs. 48-61.

Harrison, Richard, George Kapetaniosand Tony Yates (2005). Forecasting with measurement errors in dynamic models. *International Journal of Forecasting*, vol. 21, iss. 3, pgs. 595-607.

He, Changzheng and Xiaozhan Xu (2005). Combination of forecasts using self-organizing algorithms. *Journal of Forecasting*, vol. 24, iss. 4, pgs. 269-278.

Hibon, Michèle and Theodoros Evgeniou (2005). To combine or not to combine: selecting among forecasts and their combinations. *International Journal of Forecasting*, vol. 21, iss. 1, pgs. 15-24.

Holt, Charles C. (2004). Forecasting seasonals and trends by exponentially weighted moving averages. *International Journal of Forecasting*, vol. 20, iss. 1, pgs. 5-10.

Hyndman, Rob J., and Anne B. Koehler (2006). Another look at measures of forecast accuracy. *International Journal of Forecasting*, vol. 22, iss. 4, pgs. 679-688.

Jordan, Tina (2008). Association of American Publishers 2008 S1 Report: Estimated Book Publishing Industry Net Sales 2002- 2008. *Association of American Publishers*, 13 Jan. 2010. <http://www.publishers.org>.

Jordan, Tina (2007). More Gains in Book Sales for November. *Association of American Publishers*, 13 Jan. 2010. <http://www.publishers.org>.

Katayama, Naoya (2008). Asymptotic prediction of mean squared error for long-memory processes with estimated parameters. *Journal of Forecasting*, vol. 27, iss. 8, pgs. 690-720.

Kolassa, Stephan (2011). Combining exponential smoothing forecasts using akaike weights. *International Journal of Forecasting,* vol. 27, iss. 2, pgs. 238-251.

Kumar, V., Anish Nagpal and Rajkumar Venkatesan (2002). Forecasting category sales and market share for wireless telephone subscribers: a combined approach, *International Journal of Forecasting*. vol. 18, iss. 4, pgs. 583-603.

Makridakis, Spyros, Robin M. Hogarth, and Anil Gaba (2009). Forecasting and uncertainty in the economic and business world. *International Journal of Forecasting*, vol. 25, iss. 1, pgs. 794-812.

Makridakis, Spyros, and Nassim Taleb (2009). Living in a world of low levels of predictability. *International Journal of Forecasting*, vol. 25, iss. 1, Pages 840-844.

Makridakis, Spyros (2006). Twenty five years of forecasting: An interview with the International Journal of Forecasting. *International Journal of Forecasting*, vol. 22, iss. 3, pgs. 625-636.

Man, K.S. (2004). Linear prediction of temporal aggregates under model misspecification. *International Journal of Forecasting*, vol. 20, iss. 4, pgs. 659-670.

McKibbin, Warwick J., David Pearce, and Alison Stegman (2007). Long term projections of carbon emissions. *International Journal of Forecasting*, vol. 23, iss. 3, pgs. 637-653.

Nolte, Ingmar Winfried Pohlmeier (2007). Using forecasts of forecasters to forecast. *International Journal of Forecasting*, vol. 23, iss. 1, pgs. 15-28.

Pankratz, Alan (1991). *Forecasting with Dynamic Regression Models*. John Wiley and Sons, New York. pgs. 47-50 ISBN O-471-61528-5

Peters, Georg (2001). A linear forecasting model and its application to economic data. *Journal of Forecasting*. vol. 20, iss. 5, pgs. 315-328.

Platt, Judith (2007). AAP Unveils Handbook on Book Paper and Environment. *Association of American Publishers*, 13 Jan. 2010. <http://www.publishers.org>.

Queen, Catriona M., Ben J. Wright and Casper J. Albers (2008). Forecast covariances in the linear multiregression dynamic model. *Journal of Forecasting*, vol. 27, iss. 2, pgs. 175-191.

Sani, B., & Kingsman, B.G. (1997). Selecting the best periodic inventory control demand: Forecasting methods for low demand items. *Journal of the Operational Research Society*, *48*(7), 700-713.

Snyder, Ralph D. and Roland G. Shami (2001). Exponential smoothing of seasonal data: a comparison. *Journal of Forecasting*, vol. 20, iss. 3, pgs. 197-202.

Syntetos, A. A., J.E. Boylan (2001). On the bias of intermittent demand estimates. *International Journal of Production Economics, 71*, 457-466

Taleb, Nassim Nicholas (2009). Errors, robustness, and the fourth quadrant. *International Journal of Forecasting*, vol. 25, iss. 1, Pages 744-759.

Taylor, James W. (2010). Exponentially weighted methods for forecasting intraday time series with multiple seasonal cycles. *International Journal of Forecasting*, vol. 26, iss. 4, pgs. 627-646.

Taylor, James W. (2009). Exponentially weighted information criteria for selecting among forecasting models. *International Journal of Forecasting*, vol. 24, iss. 4, pgs. 659-678.

Taylor, James W. (2003). Exponential smoothing with a damped multiplicative trend. *International Journal of Forecasting*, vol. 19, iss. 4, pgs. 715-725.

Vijverberg, Chu-Ping C. and Henry L. Gray (2009). Discrete Euler processes and their applications. *Journal of Forecasting*, vol. 28, iss. 4, pgs. 293-315.

Yalta, A. Talha, and Olaf Jenal (2009). On the importance of verifying forecasting results. *International Journal of Forecasting*, vol. 25, iss. 1, pgs. 62-73.

Yang, Minxian and Ronald Bewley (2006). A hybrid forecasting approach for piece-wise stationary time series. *Journal of Forecasting*, vol. 25, iss. 7, pgs. 513-527.

Zou, Hui and Yuhong Yang (2004). Combining time series models for forecasting. *International Journal of Forecasting*, vol. 20, iss. 1, pgs. 69-84.