

# INTERNATIONAL JOURNAL OF THE ACADEMIC BUSINESS WORLD

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# **PRODUCTION PROBLEMS FOLLOWING A STRIKE: A CASE STUDY**

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## **ABSTRACT**

*This case describes the dilemma faced by the CEO of a nationally known and highly respected heating and air conditioning corporation when he is confronted for the sixth month in a row with the fact that production figures for his southern plant are holding at a steady 30% below pre-strike figures. Intense domestic competition and directions from his board of directors are pressing for quick action on his part. He is aware that failure to solve this production problem in a short time frame could possibly lead to a decision to close the plant and move its operations offshore. This case is appropriate for classes in principles of management, public administration, industrial psychology, managerial communications, organizational behavior, and labor management relations. The accompanying teaching notes are intended to assist the instructor in leading discussion of the pertinent issues raised by the case.*

## **THE CASE**

Less than 2 years ago Ed Mann, the corporate CEO for a nationally known and highly respected heating and air conditioning plant, made the decision to promote Tom Statler from the position of Chief of Engineering to Plant Manager at the southern plant. Statler not only was one of the top engineers and managers in the entire corporation but had demonstrated on many occasions an unmatched ability to work with and sell the union on many new and innovative ideas that had brought improvements not only at the

southern plant but throughout the corporation. A very nasty and brutal strike was settled just 6 months ago. Now Mann has just finished reviewing the production figures for the past 6 months and is painfully aware that production is 30% below the level that corporate officials had come to take for granted prior to the strike. Before the strike, the southern plant's production was running 13 to 16% higher each month than any other location. At the present time production is lagging the other locations by 15% or more. Even though Tom Statler is one of his closest friends and is the godfather of his only son, Mann real-



izes that he cannot leave any stones unturned to get to the bottom of the problem.

Ed Mann calls his administrative assistant on the intercom and requests that she bring the “Lessons Learned Folder” which was developed as a result of the strike to hopefully head off future labor problems. As Mann nervously begins to re-read the folder he hopes to find clues that will lead to a solution for the continuing production problem. Mann begins to make a list of issues that he feels may bear on today’s production problem and his intuitive reaction to each issue.

1. Six months prior to the strike, the Chief Engineer (Tom Statler) was promoted to plant manager. Tom is probably Ed’s closest friend and is viewed by Ed as being a very positive people-oriented person who has always maintained very positive relationships with the union. Prior to his appointment as plant manager, Tom had always headed Management’s team to negotiate the Labor Contract. For the first time Ed wonders if the break down in negotiations is related to the fact that Tom was not heading Management’s negotiating team.
2. Ed reviews the reports that detail the extensive property damage suffered by the Company and non-striking workers as the result of the strike. Ed is aware that 27 workers were fired as a result of criminal activity and 2 are now serving time in prison. Since these former workers are no longer on the work site Ed does not view this as a contributing factor to the low production.
3. Ed reviews the Company’s decision to bring in replacement workers at the beginning of the fifth month and is convinced that if this decision had not been made and implemented, the workers would not have returned to their jobs and the plant would have most likely been closed. Since the decision to bring in replacement workers had been made at the national level Ed could not believe

that the local workers could be mad at Statler. As Ed moves on to the next issue he remembers that the replacement workers, the terminations, and the legal prosecutions had been at the direction of Tom Statler and wonders if this is the connection to the present production problem.

4. In reviewing the employee benefits package that came out of the strike, Ed is acutely aware that the workers received less than the final offer that the Company had made prior to the actual strike. Ed is convinced that this is not the cause of the present production problem since the package was ratified by over 75% of the Union members.

In last week’s board meeting, the Board of Directors had made it clear to Ed that he had until the next board meeting (6 months away) to get production turned around or the board would begin to look at closing the Southern Plant.

What recommendations would you make to Ed Mann that might improve production?

### DISCUSSION QUESTIONS

1. Is it probable that the promotion of Tom Statler from Chief Engineer to Plant Manager 18 months ago has a relationship to today’s lagging production?
2. Could resentment caused by the firing of 27 strikers (2 are in prison) influence the present lack of production?
3. The strike was settled after the company had brought in only 15 replacement workers. None of the replacement hires actually cost a worker their job because of retirements and the fact that 27 workers were fired for destroying Company and employee property, leaving the company with over 20 vacancies after everyone reported back to work. Could resentment toward the 15 replacement

workers be related to the production problem?

4. The Union actually settled for a smaller compensation package to settle the strike than was offered prior to the strike. Since over 75% of the Union members voted to ratify the offer, could this be a possible reason for the present production problem?
5. As plant manager, Tom Statler is ultimately responsible for any production problem. Should Ed Mann give primary consideration to removing Statler and replacing him with someone new who has not had adversarial relations with the present Union leadership?
6. If the decision is made to remove Tom Statler, what recommendations would you make to Ed Mann in handling this situation?

### TEACHING NOTES

#### General Discussion of the Case Elements

This case provides supplementary material for text and lectures on the issues of how managers of public or private firms deal with production problems, labor-management issues, the utilization of managerial power, and managerial decision making. Although many management and public administration courses deal with the above issues faced by managers, the same courses are woefully lacking in allocating proper attention to psychological undercurrents that often impact organizational decisions and issues. This case is appropriate for topics covered in undergraduate and graduate courses in principles of management, organizational behavior, public administration, industrial psychology, labor management relations, and managerial communications. It is also appropriate for continuing education for managers in all types of public and private organizations, and has particular application for middle and top management in-service training.

The case focuses on some of the problems of modern large organizations and has particular application for organizations that have a unionized work force. The case provides an opportunity for students to explore underlying causes of lagging production, managerial decision making, motivation and numerous other issues.

### Suggested Answers

1. It is unlikely that the promotion of Tom Statler from Chief Engineer to Plant Manager has a direct relationship to today’s production problem. If Statler had been in charge of Management’s negotiations on the labor contract prior to the strike it is conceivable that the strike may not have happened, but the question is whether or not this had an effect on today’s production problem. Had someone else been chosen as plant manager they would have most likely handled the situation just as Statler had handled it since many of the decisions were made at the corporate and not the local level in dealing with the strike.
2. The firing of 27 workers and the imprisonment of 2 workers would probably have only minimal influence on the present production problem. While each dismissed worker had their own circle of friends and acquaintances, the plant employees as a whole are law abiding citizens and the employees dismissed were dismissed because they were involved in the destruction of property and the violation of civil laws. The Union or none of their members can condone this type of behavior.
3. By hiring 15 replacement workers, the Company demonstrated the raw utilization of coercive and legitimate power. Numerous studies have consistently revealed that the utilization of this type of power will oftentimes gain immediate and desired results for a short time. Many of the same studies point out that



the utilization of these types of power will build resentment and bitterness and will help to foster an uncooperative, “get even” attitude on the part of employees. Bringing in outsiders to replace workers rather than settling the issues through the collective bargaining process is viewed by some as an unforgivable sin and deserving of retaliation. The fact that this decision was made at the corporate rather than the local level does not soften the blow to the workers. The management officials seen implementing the decisions are local and would be the targets of worker resentment.

4. While over 75% of the workers voted to receive a smaller compensation package than had been offered prior to the strike they did so because of the utilization of coercive power on the part of Management. This raw use of coercive power was not only resented by workers but was a humbling experience for both the workers and their Union at the local and national level. It was an unwise decision for Management to humiliate the workers in this manner and helped create a get even attitude on the part of employees which would definitely affect the lack of production.
5. Tom Statler should definitely be replaced as plant manager. Ed Mann might want to consider replacing any other management official who may have helped utilize coercive and legitimate power. Although the decisions to handle the strike situation in the manner that it was handled originated at the corporate level, Tom Statler was in the unfortunate position of having to implement and enforce the strike breaking and the settlement that occurred after the strike was broken. Failure to replace Statler will most likely cause the production problem to continue.
6. Tom Statler should not be fired outright but should be moved to a position in corporate headquarters or to another location where he does not directly interface with the Union. Statler has been an effective and productive employee and should not be viewed as the problem but rather as the symbol of the problem between Management and the Union. Removing Statler from the local situation will be a symbolic signal from Management to the Union that Management wants to heal the situation. The removal will not heal all of the distrust and anger brought about by the strike but will offer an olive branch to the Union which will enable them to regain some prestige and influence with the workers. Management should also immediately begin some type of program or programs to continue to heal the rift with their employees. Consideration should be given to developing some form of gain sharing or profit sharing whereby the psychological contract between employees and the company can be strengthened and a renewed sense of commitment gained from employees.

### **Suggestions for Further Study**

The instructor may ask the students what steps Ed Mann and the new plant manager should take to avoid further labor problems at the present time, with special attention to the time around contract negotiations.

# SEVEN-INGREDIENT MODEL FOR IMPLEMENTING CORPORATE SOCIAL RESPONSIBILITY

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## ABSTRACT

*Using six corporate social responsibility (CSR) sources, this paper makes an effort to develop a comprehensive definition of CSR and build up a seven-ingredient model for successfully implementing CSR program. Two case groupings, one including 45 secondary cases and the other comprised of four first-hand case studies from Alaska, testify the usefulness of the model in accommodating a broad range of key factors, issues, and perspectives related to CSR.*

## INTRODUCTION

Many have been written on corporate social responsibility (CSR). However, implementation of CSR has been regarded as common-sense policies (Werther and Chandler 2006) and there are not agreeable ingredients within the suite of common-sense policies. Taking into account globalization, increasing affluence, the rapid development of communication and information networks, the increase in consumer power, and the documented recognition of the finite environment, organizations are motivated to pursue CSR (Stephenson 2009, Smith and Langford 2009), but many go about it without knowing the ingredients for successful and lasting implementation.

This paper, by using six CSR sources, makes an effort to generate a comprehensive definition of CSR and outline the influencing key forces motivating CSR, as well as the key factors required for successful CSR program implementation. The paper is divided into the following sections. After this brief introduction, section two reviews relevant literature. First, it scrutinizes various definitions and different perspectives on CSR. Based on the common components, we define CSR as the combination of transparent internal

and external actions which are initiated by an organization voluntarily in response to stakeholder needs and expectations with respect to both the basic and necessary economic and legal conditions of business, as well as social, environmental, and ethical concerns. Then sources for driving CSR and successful factors were reviewed.

Section three develops a seven-ingredient model for enterprises to implement CSR, which includes leadership support, stakeholder involvement, corporate governance, communication & awareness, accountability & transparency (CSR audit, reports to stakeholders), CSR program infrastructure, and emphasis on ethics. It not only defines the seven ingredients, but also discusses the connotation of each ingredient.

Section four applies the seven-ingredient model in cases analysis. Two case groupings were used in this study. One group includes 45 secondary cases which covers a broad range globally. The other group is comprised of four first-hand cases selected in Fairbanks, Alaska. Two-round case studies not only test the seven-ingredient model, but also demonstrate the differences among two groups of cases.

The final section concludes the study. It suggests that there is no magic recipe for successful CSR

program implementation. However, knowing which ingredients to add to the mix allows each company to create the recipe for success with respect to its specific industry. Using the seven-ingredient model as a tool, CSR and its future variations can be better understood.

## LITERATURE REVIEW

### Definitions of CSR

Defining CSR has proven to be an elusive task. The resulting ambiguity is at the center of the CSR debate among scholars, companies, and society itself. Without a clear definition, CSR standards cannot be set and a company's CSR success or failure cannot easily be measured.

Definitions of CSR range across a broad spectrum. They extend from no definition at all to CSR entailing only the business' basic responsibility of creating profit to businesses going above and beyond the basic economic issues combining varying levels of legal, ethical, social, and discretionary issues. Definitions also range in how the voluntariness of actions is addressed. The following authors display this range through their definitions, which are listed from most basic to most encompassing. All of the authors agree that CSR entails an organization looking past the basic economic and legal requirements to considering the stakeholder. However, there is disagreement with respect to how stakeholder is defined, as well as whether the organization's actions must be voluntary.

Ruskton (2002) defined CSR as the positive actions that a company takes to help discharge its responsibilities to external stakeholders. Oketch (2005) defined CSR as a function that transcends but includes making profits, creating jobs and producing goods and services. Carroll (1979) stated that four-part conceptualization of CSR that included economic, legal, ethical and philanthropic elements. In their effort to best summarize CSR, Smith and Langford (2009) stated, "CSR could mean different things to different stakeholder groups...whilst a succinct single definition of CSR would be convenient, it is argued herein that an adequate conception of CSR needs to be developed in terms of each stakeholder group."

To present a well-rounded view, Devinney (2009) was critical of CSR. He argued that any position taken by a firm and its management, social, ethical, or otherwise, has trade-offs that cannot be avoided. Corporations can be made more 'virtuous' on some dimensions. But this will invariably involve a price on other dimensions—a trade-off of values and a 'judgment' about what is 'better' or 'worse.' CSR, like most aspects of life, has very few, if any, win/win outcomes. To truly define CSR, Devinney added that the definitions of "social" and "responsibility" must be included and understood, and "no such comprehensive definition of CSR will ever be possible as all interested parties will never be at the negotiating table and hence will not be able to contribute their definitions of 'social' and 'responsibility' to the debate."

Pedersen and Neergaard (2008), cited Dahlsrud's analysis of 37 definitions of the CSR construct, which identified five core CSR dimensions—stakeholder, social, economic, environmental, and voluntariness, suggested to adopt "the view of the European Commission (EC) that defines CSR as a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with stakeholders on a voluntary basis.

Many authors viewed CSR as an evolving and changing concept. Carroll (1979) reviewed founding CSR theories holistically. He demonstrated the changes of CSR definitions over time. In 1960s, researchers suggested that social responsibility refers to 'businessmen's decisions and actions taken for reasons at least partially beyond the firm's direct economic or technical interest. Therefore, the idea of social responsibilities supposes that the corporation has not only economic and legal obligations, but also certain responsibilities to society which extend beyond these obligations." In 1970s, researchers emphasized that the "behavior of the firms must be voluntary." Therefore, CSR becomes the objectives or motives that should be given weight by business in addition to those dealing with economic performance. Carroll defined CSR as encompassing the economic, legal, ethical, and discretionary expectations that society has of organizations at a given point in time. Carroll admits that his definition "does not 'nail down' the

degree of specific responsibility in each category," but he also adds that "it was not meant to."

Stephenson (2009) consolidated different definitions and identified several commonalities among CSR definitions. He argued that three commonalities are most obvious: (a) A combination of sustainable development and treating employees and the society within which companies operate with respect. The environmental impact of any economic activity should be weighed against the economic benefit and any measures that could mitigate the negative impact should be taken if they are at all economically feasible. (b) The way firms integrate social, environmental, and economic concerns into their values, culture, decision making, strategy, and operations in a transparent and accountable manner and thereby establish better practices within the firm, create wealth, and improve society which is going beyond legal and ethical frameworks. (c) The assumption of rights and obligations due to the economic, political, and social activity performed by organizations. In other words, this is to create and develop values, such as protection, sustainability, compromise, and acting responsibly and economically. Stephenson concluded that CSR "encompasses a wide range of issues for the organization, requiring the fair, equitable, ethical and legal treatment of all organizational stakeholders. Stakeholders include employees and the public as a whole—i.e. anyone that will in some way be impacted by the organization.

While the above efforts at defining CSR build off one another, not all scholars support CSR theory or terminology. Robert Ackerman and Raymond Bauer criticize the expression 'social responsibility,' holding that 'the connotation of 'responsibility' is that of the process of assuming an obligation.'" They argue that "social responsiveness" better describes the concept. Prakash Sethi believes that social responsibility is a part of the process of corporate behavior adapting to social needs, ultimately ending with social responsiveness. Sethi states that CSR implies bringing corporate behavior up to a level where it is congruent with the prevailing social norms, values, and expectations. Werther and Chandler (2006) acknowledged that CSR is an evolving and changing concept. They explained CSR as "both a means and an end. It is an integral ele-

ment of the firm's strategy: the way the firm goes about delivering its products or services to markets (means). It is also a way of maintaining the legitimacy of its actions in the larger society by bringing stakeholder concerns to the foreground (end). Simply put, CSR addresses a company's relationships with its stakeholders".

Based on the above definitions and perspectives, we believe that the definition of CSR must encompass the changing environment and be as descriptive as possible so that standards can be set, yet it must also be open-ended enough to allow for this change, as well as adaptation to differing industries and stakeholder groups. To guide our exploration on implementing CSR, we give a working definition as the following: "CSR is the combination of transparent internal and external actions which are initiated by an organization voluntarily in response to stakeholder needs and expectations with respect to both the basic and necessary economic and legal conditions of business, as well as social, environmental, and ethical concerns." By using this definition, the components of the CSR definition and key factors for implementation can be better combined.

Note, by this definition, that the actions taken by a company must be initiated by that company in order for the actions to be considered an expression of CSR. Companies who respond to bad publicity with good actions are not practicing CSR. These companies are acting for survival. Likewise, companies that are acting solely because of stakeholder pressure are not acting voluntarily. They may be acting in socially responsible ways by responding involuntarily to stakeholders; however, their actions do not constitute CSR. Additionally, political concerns are not addressed above as these types of concerns rest on governments to address.

### Key motivating factors to accept and implement CSR

Defining CSR is only one ingredient of many necessary for understanding the role and reason for CSR's existence and what is required for successful CSR program implementation. Several key forces have motivated business communities to accept CSR theory and make changes, sometimes drastic, to their strategy and organization. They

are, according to Werther and Chandler (2006), increasing affluence—CSR issues tend to gain a foothold in societies that are more affluent—societies where people have jobs, savings, and security and can afford the luxury of choosing between, for example, low-cost cars that pollute and those that do not; changing social expectations—differences in cultures across the globe lead to widely varying expectations of workers, customers, governments, and citizens. Actions that may be acceptable, even required, in one culture may be prohibited in another; globalization and the free flow of information—the growing influence of global media conglomerates makes sure that any CSR lapses by companies are brought rapidly to the attention of the public—often instantaneously—worldwide...the Internet fuels communication among activist groups, organizations and like-minded individuals, empowering them to spread their message while giving them the means to coordinate collective action; ecological sustainability—the Earth has ecological limits...firms that are seen as indifferent to their environmental responsibilities are likely to be criticized and penalized; and brands—the importance of brands influences businesses to act in ways that will either build or maintain positive brand images in the eyes of consumers.

Smith and Langford (2009) stated that a number of changes have contributed to a rise in the prominence of CSR. These include: the supposed increase in societal expectations of business; a reduction in the power and scope of government; globalisation; heightened media reach; the greater spread of democracy; and a series of corporate scandals that have undermined confidence in the integrity of corporations, financial institutions and markets.

Among those factors Jenkins listed society as a principle force in creating CSR. He argued that public outcry over specific practices of the organization has prompted companies to reconsider their actions and to re-evaluate business practices. Additionally, Jenkins listed external activists who monitor business practices and the call for accountability, transparency, and ethics as motivating forces behind the growth of CSR.

Summarizing the above discussions, the strongest motivating forces in highlighting the importance of CSR include globalization, increas-

ing affluence, development of communication & information networks, increasing consumer power/voice and recognition of the finite environment.

Through these external drivers, organizations often have no choice but to develop CSR programs (Stephenson 2009). But how to it, there is not an agreeable framework among authors. Werther and Chandler (2006) suggested that implementation is about common-sense policies that represent a means of integrating a stakeholder perspective into all aspects of operations, thus protecting the often huge investments corporations make in their public image, investor confidence, and brands. Ideally, stakeholder involvement will include all affected constituencies to as great a degree as possible. Differing from the wide spectrum provided by Werther and Chandler, Smith and Langford (2009) emphasized the importance of companies' high level awareness of their consumers in conducting their CSR activities in order to elicit more favourable attitudinal and behavioural responses. Furthermore, they demonstrated that CSR cannot be employed to the detriment of other traditional product attributes (e.g. quality, cost) which are needed irrespective of any CSR-derived benefit. Pedersen and Neergaard (2008) emphasized the particular important role of management and regarded management awareness and commitment as a precondition for implementing CSR. According to their logic, a company's overall mission and vision will have to be transformed into a number of specific policies and strategies in order to be operable. Policies and strategies are of little value if they are not communicated and shared by the people of the organization. Stephenson (2009) listed the importance of engrained ethical behavior, corporate governance, leadership support, and communication flow, and the development and implementation of infrastructure as key factors to successful CSR program implementation.

#### **WORKING FRAMEWORK: SEVEN-INGREDIENT MODEL FOR IMPLEMENTING CSR**

Based on our definition on CSR, i.e. CSR is the combination of transparent internal and external actions which are initiated by an organization voluntarily in response to stakeholder needs and

expectations with respect to both the basic and necessary economic and legal conditions of business, as well as social, environmental, and ethical concerns, we compile the most influential key factors to successful implementation of CSR programs into seven ingredients: leadership support, stakeholder involvement, corporate governance, communication & awareness, accountability & transparency (CSR audit, reports to stakeholders), CSR program infrastructure, and emphasis on ethics.

Leadership support is comprised of top-management encouraging and exemplifying CSR theory, program, and ideals. It includes business leadership allocating the necessary time and resources to the program, whether monetarily or through the allocation of personnel (i.e. dedicated CSR officer). Ideally, the CEO will consider himself or herself the chief CSR officer. Top-management support must be translated into tangible action. CSR needs both visibility and sponsorship within the organization. Leadership in the organization has not only set up policies for CSR, but also has acted on these policies as a means to set an example for all members of the organization. At the same time, a top-down approach to the development of corporate responsibility can be observed.

Stakeholders are those who have an effect on, or are affected by, a firm's actions. Three kinds of stakeholders as suggested by Werther and Chandler (2006) are existed: organizational stakeholders (internal to the firm), economic and societal stakeholders (external to the firm). Organizational stakeholders include employees, managers, stockholders, and unions. Economic stakeholders include customers, creditors, distributors, and suppliers. Societal stakeholders include communities, government and regulators, nonprofits and NGOs, and the environment. Members of one stakeholder group, listed above within their primary stakeholder group, can also be part of differing stakeholder groups. CSR calls for the involvement of the broadest range of stakeholder groups.

Corporate governance is defined as the structure and systems that officially allocate power within organizations and manage the relationships between the owners and managers of a business (Stephenson 2009). Corporate governance must set the tone for the development of CSR

both through providing access to resources and through the use of role modeling as a principle means to set a clear example for ethical behavior. This variable is one of the most important when it comes to the development and maintenance of a CSR program for competitive advantage. Through the application of good corporate governance, leaders in the organization become well connected to operations and understand the needs of stakeholders.

Communication and awareness are multi-dimensional. Communication is the process of sharing information and, with respect to CSR, entails the flow of messages between all stakeholder groups. Communication is comprised of the sending and receiving of a wide range of messages—from sharing with customers the intent of CSR actions and programs to informing employees of a company's expectations with regards to their behavior and support of CSR programs. As Pederson and Neergaard (2008) stated that policies and strategies are of little value if they are not communicated and shared by the people of the organization. While it is vital to ensure effective communication within an organization, it is equally vital to ensure effective communication with all stakeholders, be they organizational, economic, or societal. Over the medium to long term, the organization should communicate its perspective, while seeking feedback from stakeholder groups to make them feel both informed and involved. Communicating a company's CSR efforts to the outside world is a sensitive area. Often the perception of a company in the public mind, once created, is difficult to shift (Werther and Chandler 2006). Awareness is the end result of the process of internalizing the communication's message and becoming informed. The multi-dimensionality of awareness requires employees, company leadership, shareholders, surrounding society, and NGOs, to name a few, be made aware of a company's actions, intent, and processes. Collectively, top-management support, the creation of a senior executive CSR position, and the elaboration of a CSR position statement address a critical element in implementing CSR—awareness. A genuine organizationwide CSR audit, with published results, furthers awareness among internal and external stakeholders.

Transparency & accountability have become the watchwords of effective corporate governance, which has also become a vital aspect of an effective CSR policy (Werther and Chandler 2006). Whether in the format of an annual CSR audit or public reports published for shareholders, NGOs, and other interested stakeholders, transparency and accountability are being increasingly demanded by stakeholders. Transparency is the extent to which organizational decisions and operating procedures are open or visible to outsiders. If the company is serious about CSR they should also be serious about how they evaluate CSR. This evaluation process is not only based on CSR program implementation, but also in how transparent it is and how accountable it holds a company to its actions. It has been suggested that a company wanting to be transparent and accountable with respect to all of its stakeholders should seek to expand the scope of its annual report to incorporate the 'triple bottom line'—in equal parts, a consideration of a company's financial, environmental, and social performance—all centered on a CSR-focused strategic perspective (Werther and Chandler 2006).

CSR program infrastructure is an essential factor for a company's long-term viability and sustainability. Program infrastructure overlaps with all of the other key factors—corporate governance, leadership support, emphasis on ethics, communication and awareness, stakeholder involvement, and accountability and transparency. Leadership support is necessary to obtain the resources needed to create an infrastructure. Policies, a well-defined CSR position statement, strategies, CSR officers and CSR personnel, CSR audits, and reporting structures are all pieces of CSR program infrastructure. Business ethics can be widely supported in theory. However, if the right infrastructure is not developed to implement this paradigm, the organization will fall short in its efforts to create ethical behavior among employees (Stephenson 2008). CSR program infrastructure must be far-reaching and affect all aspects of an organization. As mentioned, CSR program infrastructure influences other key factors of successful CSR program implementation, specifically communication and awareness. CSR needs both visibility and sponsorship within the organization. The creation of a CSR officer posi-

tion staffed by a company executive creates visibility.

Ethics is a guide to moral behavior based on culturally embedded definitions of right and wrong. With the on-going examples of corporate ethical lapses, stakeholders have put a greater emphasis on ethical behavior. Ethical responsibilities are more likely to stand on a par with economic and legal responsibilities as foundational for business success. In the context of corporate social responsibility, business ethics becomes a formal means by which the organization can evaluate its social relationships with stakeholders. Corporate social responsibility recognizes the application of business ethics to larger relationships that exist between the organization and its stakeholders (Stephenson 2008). Now, more than ever, ethical behavior is shaping and molding the business environment.

Without these factors being present in a company implementing a CSR program, the company is simply going through the motions with no chance of long-term viability, sustainability, and bottom-line benefits. The listed factors are not independent of each other. Rather, elements of factors can be found within other factors. For example, creating a CSR position statement involves the support of leadership. These factors, while not mutually exclusive, best map out the road to successful CSR program implementation.

### CASE ANALYSIS

This section applies the seven ingredients framework into cases analysis. It involves two case groupings: one including 45 secondary cases and the other comprised of four first-hand case studies from Fairbanks, Alaska.

Werther and Chandler's (2006) work offer a case pool of 45 cases presenting the range and implications of CSR, and the lack thereof. Using a content study method and the seven ingredients model presented in last section, we scrutinized all 45 cases. In reading the cases, the most noticeable key factors were annotated in the order of significance based on our understanding of the information presented. While a key factor may have been an underlying factor, if it was not specifically mentioned within the case, it was not

annotated. Conclusions are drawn as to the key factors of most importance, or at the very least, the factors most noticed and reported. Table 1 summarizes the cases and associated key factors. In total, 109 key factors were noted with relation to the 45 cases. Stakeholder involvement was recognized as being involved in 26 cases. Accountability and transparency appears 21 times, leadership support—17 times, communication/awareness—13 times, corporate governance and emphasis on ethics—11 times each, and CSR program infrastructure—10 times.

When looking at the primary key factor, stakeholder involvement occurred 13 times, leadership support—9 times, accountability and transparency—7 times, communication/awareness—6 times, and corporate governance and emphasis on ethics—5 times each. CSR program infrastructure did not occur as the primary key factor in any of the cases.

These results are not conclusive in that the frequency of occurrence does not directly indicate the importance. However, it must be noted that stakeholder involvement was clearly above the other factors in both overall frequency and frequency as the primary key factor. This highlights the impact of stakeholders on the CSR process and the true importance their role plays in the long-term viability and success of an organization. The factors with little representation in Table 1, like CSR program infrastructure, corporate governance, and emphasis on ethics, are not any less important than the other factors. Rather, they are often not recognized and play more of a background role. Ethics is often considered a prerequisite for CSR, which is one reason why it is not singled out as a key factor and easily identified within case studies. However, without ethics, a CSR program cannot be successful. What this analysis shows is that stakeholder involvement is of utmost importance in successful CSR program implementation. It also shows that key factors are not always obvious, even when they are significantly influencing CSR program implementation and success.

Another application of the seven ingredients model is to analyze four businesses in Fairbanks, Alaska, which gives additional insight to key factors necessary for CSR program implementation. The following mini-cases include two small, pri-

vately owned local businesses and two publicly traded national chains. Data used in the analysis is collected from personal interviews and various sources.

### Lu Lu's Bread & Bagels

Known for their fresh bagels and artisan-style breads, Lu Lu's also features quiche, salads, and Kaladi Brothers Coffee. On the weekends, locals flock to Lu Lu's for its cinnamon rolls and sour-dough sticky buns. Lu Lu's works hard not only to provide great tasting food, but also to do its part to help the environment and the local community. During the summer months, Lu Lu's buys produce locally from Rosie Creek Farm, a certified organic farm. Additionally, Lu Lu's recycles aluminum and cardboard through the Fairbanks Rescue Mission's recycling program, donates leftover food to the Fairbanks Community Food Bank, donates coffee and bagels during local food drives for volunteers, uses organic specialty flour in some of their products, and offers a discount to people bringing in their own mug when they purchase drinks. Lu Lu's is also experimenting with biodegradable to-go containers. One of the two female owners is an avid marathon runner and uses her sport as a way to raise money in support of non-profit organizations, specifically breast cancer research. The Kaladi Brothers Coffee featured by Lu Lu's is roasted in Anchorage, Alaska, and offers both organic and fair trade coffees. Lu Lu's uses Kaladi Brothers' Trieste Caffè, a mild French roast that is not organic or fair trade.

### Alaska Coffee Roasting Company

Founded in 1992, Alaska Coffee Roasting Company was opened to share the owner's joy of coffee. Alaska Coffee Roasting Company specializes in organic, estate, and cooperative varietal coffee beans. Whenever possible, the beans are organic or wild. Alaska Coffee Roasting Company carries fair trade coffee and it purposely purchases single-origin coffee, meaning that it comes directly from the farmer. The store donates leftover food to the Fairbanks Community Food Bank, purchases produce locally from Basically Basil in the summer, and gives its used coffee grounds to Calypso Farm and Ecology Center, a local non-

TABLE 1 SECONDARY CASE ANALYSIS				
Case	Key Factor1	Key Factor 2	Key Factor 3	Key Factor 4
1 - Enron	LS	E	PI	
2 - Sweatshops	A & T			
3 - Ethic officers	LS	CG	E	A & T
4 - Voluntary versus mandatory	A & T	SI		
5 - Federalization	CG			
6 - Sarbanes-Oxley Act (2002)	CG	LS	A & T	PI
7 - Corporate boards	LS	PI	CG	
8 - The U.S. Corporation	CG			
9 - Ohio Employee Ownership Center	SI	C & A	PI	
10 - The Body Shop	SI	C & A	E	
11 - Expensing stock options	SI	C & A	LS	PI
12 - Asbestos	A & T			
13 - GlaxoSmithKline	SI	A & T		
14 - Ben & Jerry's	SI	LS	CG	
15 - Timberland	SI	C & A	PI	
16 - Benetton	C & A	SI		
17 - BP	C & A	SI	LS	
18 - SUVs	SI			
19 - Nike	SI	A & T	C & A	
20 - U.S. Masters	LS	SI		
21 - Goodwill Industries	SI	PI		
22 - Ford	LS	C & A		
23 - Starbucks	LS	PI		
24 - Citigroup	A & T	SI		
25 - SRI Funds	SI	A & T		
26 - Microloans	LS	SI		
27 - Greenfreeze	C & A	A & T	SI	
28 - Merck	LS	C & A		
29 - Hewlett-Packard	CG	E	LS	
30 - McDonald's	SI	LS	CG	
31 - Fannie Mae	SI			
32 - Legislation	E	CG	PI	
33 - Conflict diamonds	A & T	E		
34 - Teaching ethics	E	LS	PI	
35 - U.S. judicial activism	E	A & T		
36 - Union Carbide	C & A	E	A & T	CG
37 - NGO activism	C & A	SI	A & T	
38 - Company Responsibilities Bill	CG	SI	A & T	
39 - Chiquita Brands	A & T			
40 - CNN	C & A	A & T		
41 - Generic drugs	LS	SI		
42 - Tyco	E	A & T	SI	
43 - Cloning	E	A & T	SI	
44 - Abercrombie & Fitch	A & T	SI	LS	
45 - West Coconut Grove	SI	A & T		
A&T: Accountability and transparency C&A: Communication/awareness CG: Corporate governance E: Emphasis on ethics		LS: Leadership support PI: CSR program infrastructure SI: Stakeholder involvement		

profit, educational farm whose mission is to encourage local food production and environmental awareness. Alaska Coffee Roasting Company has looked into using biodegradable containers, but the expense that would have to be passed on to customers is too great.

Walmart

Walmart was founded in 1962 and opened its first store in Rogers, Arkansas. Walmart was incorporated in Delaware on October 31, 1969 and is currently headquartered in Arkansas. Globally, Walmart employs more than 2.1 million associates in more than 8,159 retail stores in 15 different countries. With more than 1.4 million employees in the United States, Walmart is not only one of the largest private employers in the U.S., but the largest in Mexico and one of the largest in Canada as well. Walmart's 3 Basic Beliefs are Respect for the Individual, Service to the Customer, and Striving for Excellence. Based on them, Walmart sets eleven guiding principles with respect to ethics that include: always act with integrity; lead with integrity, and expect others to work with integrity; follow the law at all times; be honest and fair; respect and encourage diversity, and never discriminate against anyone; work, actions, and relationships outside of your position with the company should be free of any conflicts of interest; ask your manager or the Global Ethics office for help if you have any questions about our Statement of Ethics, or if you face an ethical problem; inform the Global Ethics office about any suspected violations of the Statement of Ethics; reveal and report all information truthfully, without manipulation or misrepresentation; cooperate with and maintain the private nature of any investigation of a possible ethics violation; when involved in an ethics investigation, should reveal and report all information truthfully.

While Walmart instituted a Global Ethics Office which promotes Walmart's ethical culture to all stakeholders globally, it also instituted its Ethical Standards Program. The vision of this program is sourcing ethically through a socially responsible program. The program exists to strengthen the implementation of positive labor and environmental practices in factories, to bring opportunities for a better life in the countries where

merchandise for sale by Walmart is sourced, and to verify factory compliance with its Standards for Suppliers (code of conduct). In 2007, 14,400 audits were conducted in 9,175 factories of Walmart suppliers, making Walmart the largest factory auditor of any company worldwide. These audits were conducted by Ethical Standards and approved third party service providers. Walmart's responsibility extends to its view of sustainability. It regards sustainability as one of the most important opportunities for both the future of its business and the future of the world. Its opportunity is to become a better company by looking at every facet of the business—from the products it offers to the energy it uses—through the lens of sustainability.

Globally, it is clear that Walmart has the program infrastructure in place to be considered corporately socially responsible. However, the company takes it further. It practices a philosophy of operating globally and giving back locally. In Alaska, Walmart employs 3,245 associates. In 2008, Walmart, the Walmart Foundation, and Sam's Club gave \$970,355.00 in cash and in-kind donations to local organizations in the communities they serve in the state of Alaska. Through additional funds donated by customers, and Walmart and Sam's Club associates throughout the state, the retailer's contributions in Alaska totaled more than \$1.1 million. When the Fairbanks Walmart held its grand opening as a Supercenter, the store employees presented eight local organizations with a total of \$18,000 in grants from the Walmart Foundation, including the Boys and Girls Clubs of Greater Anchorage, the Fairbanks North Star Public Library, the Fairbanks Community Food Bank, the Fairbanks Rescue Mission, the Interior Alaska Center for Non-Violent Living, the Literacy Council of Alaska, the North Star Volunteer Fire Department, and the Northwest Resource Associates.

Walmart ensures that while giving the to the community, it also supports and cares for its eligible full- and part-time associates. Additionally, Walmart helps employees give to their favorite charities. Through the Volunteerism Always Pays (VAP) programs, associates may request charitable contributions on behalf of eligible organizations where they volunteer. According to Timbo Erickson, Fairbanks Walmart Store



Manager, for every 25 hours of volunteer time, the Walmart Foundation donates up to \$250 to the organization where the employee volunteers. Since VAP's start in 1995, Walmart associates have "volunteered more than 7 million hours. In 2008, the more than 1 million volunteer hours reported by Walmart associates translated to more than \$8 million in contributions.

Walmart also supports its local stakeholders by taking steps to promote sustainability through environmentally friendly store features. The Fairbanks store was built with features to reduce energy consumption and minimize waste. The freezer cases and non-sales areas of the store have LED lights and sensors that automatically shut off the lights when those areas are unoccupied or customers are not present. LED lighting throughout the store operates 70 percent more efficiently than traditional fluorescent lighting. Water flow is regulated in the store's bathrooms through the use of sensor-activated faucets in the sinks and high-efficiency toilets and urinals that regulate water flow and reduce consumption. Turbines in the faucets actually generate the electricity that powers those sensors.

While Walmart works with local schools, hospitals, and military bases to create recycling programs, the Fairbanks Walmart's most notable local recycling contribution was its \$35,000 grant to the Fairbanks Rescue Mission to help start a local recycling program accepting newspaper, cardboard, and aluminum. With this money, the Fairbanks Rescue Mission was able to purchase a baler, scale, and other necessary startup items. According to the Fairbanks Rescue Mission, the benefits of this project are far reaching. Rodney Gaskins, Fairbanks Rescue Mission Executive Director summarized these other benefits as "Rescue Mission clients will be involved in the day-to-day operation of the recycling center, learning job skills and fulfilling case management requirements for those who live at the Mission for more than 30 days. The project will earn funds from selling recyclables and for tonnage diverted from the borough landfill. Local businesses pay \$60 per ton to dump waste at the landfill. By using the Mission's recycling center, they can cut their costs in half, thus sharing their savings to help the homeless, sustain the recycle program, protect the environment and save tax-

payers money by diverting trash from the landfill which extends the life of the landfill.

In addition to recycling, donating gift cards to local victims of house fires, and raising money for families affected by a caregiver's death, the Fairbanks Walmart donates food and volunteer time daily to the Fairbanks Community Food Bank. According to Samantha Kirstein, Executive Director of the Fairbanks Community Food Bank, the food bank collects 2 to 5 tons of food a day and the truckload of several hundred pounds of food that Walmart donates daily makes a "significant impact." This past Thanksgiving, the Fairbanks Community Food Bank approached Walmart requesting a donation of turkeys, agreeing to match their donation one-for-one. Not only did Walmart agree to donate turkeys, the store also worked diligently to get all 1,200 turkeys to the food bank in time for the holiday. Walmart's support goes beyond giving food. The Fairbanks Walmart Store Manager, Timbo Erickson, helps his bosses align changing policies so that they are more favorable to the community. As observed by Kirstein, unless Walmart's corporate policy is interpreted and followed by the store manager, the partnership between the store and its community does not work. Kirstein attributes Walmart's successful support of the local community to the leading example set by the store manager himself.

**The Home Depot**

As the world's largest home improvement specialty retailer, the Home Depot has more than 2,200 retail stores in worldwide. The Home Depot opened its first two stores in Atlanta, Georgia, on June 22, 1979. It was incorporated in Delaware on June 29, 1978. The Home Depot strives to be the employer, retailer, investment, and neighbor of choice in the home improvement industry. It claims that corporate governance is part of its culture and is founded on its daily commitment to living values and principles that recognize its ethical obligations to its shareholders, associates (employees), customers, suppliers, and the communities in which it operates. During 2002 and 2003, the Company built upon its strong corporate governance foundation by implementing a number of new significant procedures, including:

- A Disclosure Committee tasked with ensuring that the Company's disclosures to its stockholders and the investment community are accurate and complete;
- A Corporate Compliance Council, now known as the Enterprise Risk Council, to regularly review the Company's compliance policies and monitor its compliance performance;
- A Policy and detailed procedures for the retention of the Company's independent auditors; and
- New independence standards for Board members, which meet or exceed the standards proposed by the New York Stock Exchange.
- A substantial majority of the Directors on the Board are independent and each Director serving on the Audit, Leadership Development and Compensation, and Nominating and Corporate Governance Committees is independent." Currently 8 of the 9 board members are independent, with Frank Blake being the Chairman and CEO.

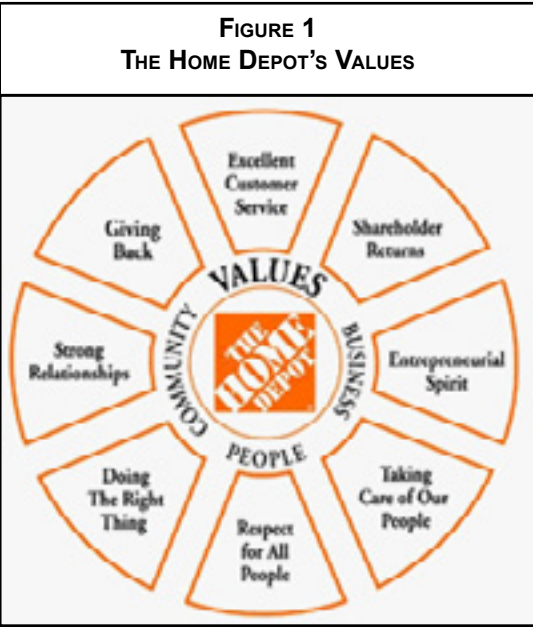
The Home Depot defines itself as a values-driven company with the following eight core values, as displayed in Figure 1, excellent customer service,

taking care of employees, giving back, doing the right thing, shareholder returns, respect for all people, entrepreneurial spirit, and strong relationships.

The Home Depot insists that its values do not change over time. Its values are the resources it draws on when asked to make decisions. They form the groundwork for its ethical behavior. The Home Depot also broadly defines its stakeholders as including its associates, customers, vendors and suppliers, communities, and shareholders. This broad view influences the programs and events that The Home Depot supports. From natural disasters to the environment to supporting the military, The Home Depot makes positive changes where it can. In response to Hurricanes Katrina, Rita, and Wilma, a total of more than \$11 million to support Environmentally, The Home Depot won the ENERGY STAR Partner of the Year Award for our leadership in reducing greenhouse gas emissions through marketing and promotion of energy-efficient solutions. Additionally, the store nationally offers a 10 percent discount to military personnel.

In addition to responding to large-scale issues, The Home Depot created a company-wide program of offering free Kids Workshops. Kids Workshop is an award-winning program that has been offered at The Home Depot since 1997. The workshops are free how-to clinics designed for children ages 5-12 available on the first Saturday of each month between 9 a.m. and noon at all The Home Depot stores. Since its inception, 17.5 million projects have been completed at a Kids Workshop. On average, 75 children per store attend one of these workshops, with some stores having 200 children regularly attend. The Fairbanks Home Depot offers Ladies Night Out workshops, it offers local organizations, like the Boy Scouts, specific workshops, and it offers regular how-to workshops open to anyone wanting to learn.

Giving back is a fundamental value of The Home Depot and a passion for its associates. The Home Depot donates millions of hours, tools and supplies each year to community service projects. Each Home Depot store has a group of employees who form Team Depot, The Home Depot's associate-led volunteer program. Team Depot is recognized nationally as having developed





and implemented best practices for corporate volunteer programming. Formalized in 1992, Team Depot brings together volunteerism, do-it-yourself expertise, product donations and monetary grants as a way to support the communities where the associates live and work. The volunteer work that Home Depot associates do is the company’s way of supporting the employees giving back to their community. Community efforts focus on four key areas: building and refurbishing playgrounds; ensuring the safety and accessibility of community gathering spaces; building and refurbishing affordable and transitional housing; preparing communities for emergencies. A regular sight in the break room is a sign-up sheet for volunteer opportunities. Volunteers from the Fairbanks Home Depot and its Team Depot have helped to rebuild schools and homes in Eagle, Alaska, this past spring after flooding, have installed a kitchen in the North Pole Fire Department, have manned the Christmas tree lighting at the J.P. Jones Community Development Center, have handed out school supplies at the community center, have adopted a family in need, and donated to the Homer Fund to help fellow employees in need. A nonprofit charity, the Homer Fund gives up to \$7,500 to associates to help them get back on their feet.

The Fairbanks Home Depot receives its merchandise via shipment from the lower 48 states. The store does purchase items locally if it runs out of the items prior to receiving a shipment. Initially, this may be seen as an example contrary to CSR. However, a simple example may show this to not be the case. If a customer wants to buy a 12-inch square red stepping stone in southern California,

the customer would pay \$1.07 per stepping stone. If a customer in Fairbanks wants to buy this same stepping stone, the customer would pay \$3.58 per stepping stone. The marked difference in price begs the question—wouldn’t it be cheaper to buy the stepping stone locally instead of having to pay the shipping fees? According to Fairbanks Materials Inc., a subsidiary of Alaska Basic Industries, to purchase the stepping stone from this Alaskan company would cost \$5.00. By shipping products to Alaskan Home Depot stores, The Home Depot may actually be saving consumers’ money than if the store worked to purchase merchandise from local vendors.

The above mini-cases display a range of factors that were keys to CSR implementation. Applying the same analysis technique as used with the content study method above, the local examples of CSR will be analyzed to see if similar results occurred as with the 45 cases above. The most noticeable key factors based on the interviews and other information gathered are listed in Table 2 in their order of significance.

In total, 14 key factors were noted with relation to the 4 cases. CSR program infrastructure appears 4 times, leadership support—3 times, accountability and transparency—2 times, and corporate governance, emphasis on ethics, and communication/awareness—1 time each. Stakeholder involvement was recognized as being involved in 2 cases. It is important to note that stakeholder involvement is defined a bit differently for the local companies than for large companies, especially those publicly traded. Since both Lu Lu’s Bread & Bagels and Alaska Coffee Roasting

TABLE 2 MINI-CASE ANALYSIS				
MINI-CASE	KEY FACTOR 1	KEY FACTOR 2	KEY FACTOR 3	KEY FACTOR 4
Lu Lu’s Bread & Bagels	LS	PI	SI*	
Alaska Coffee Roasting Company	LS	PI	SI*	
Walmart	PI	LS	E	A&T
The Home Depot	PI	CG	A&T	C&A
A&T: Accountability and transparency C&A: Communication/awareness CG: Corporate governance E: Emphasis on ethics		LS: Leadership support PI: CSR program infrastructure SI: Stakeholder involvement		

Company are small, privately owned businesses, stakeholder involvement has been redefined to include the company’s purposeful involvement of local stakeholders in their business practices, for example, using local farms for produce, buying coffee products from Alaskan companies, donating leftover food to the local food bank, and utilizing local recycling programs.

When looking at the primary key factor, leadership support and CSR program infrastructure occurred 2 times each. These results do not closely match that of the 45 cases previously summarized. Where stakeholder involvement was clearly above the other factors in both overall frequency and frequency as the primary key factor, it appeared in small proportion and in a redefined manner in the mini-cases. In the small, privately owned businesses, the primary key factor for successful CSR implementation is leadership support. Without the business owners pushing for ways to align with CSR, the businesses would not be acting as they are. From the local perspective of the national companies, CSR program infrastructure is the primary key factor for successful CSR implementation. Without the parent company creating the infrastructure for the individual stores to use, the local examples of CSR would not be as vivid as they are.

When looking at both overall key factor and primary key factor ratings, CSR program infrastructure and leadership support are number one and two, respectively, in both categories. Leadership support was one of the more represented key factors in the initial 45-case content study, but CSR program infrastructure was not. One explanation for this variation is that the local cases were presented looking at the companies from a local perspective with no NGO interaction. While two of the mini-cases dealt with national chains that are publicly traded, the details of the mini-case focused on local actions and effects of the stores in Fairbanks. This different viewpoint altered the influencing key factors. What should be noted from this disparity between the two studies is that the key factors are a matter of perspective and that each key factor plays a role, whether it is obvious or not.

The above cases show areas of possible improvement. Lu Lu’s can move towards carrying fair trade and/or organic coffee offered by Kaladi

Brothers Coffee. Alaska Coffee Roasting Company can continue to experiment with bio-degradable or otherwise more Earth-friendly to-go containers. Walmart and The Home Depot incorporated in Delaware prior to any of their stores being located within the state. This was done because corporations don’t have to incorporate where a firm is headquartered, or even where it employs the most people. Managers can go jurisdiction shopping, looking for the most advantageous set of laws. As a result, some 60 percent of the Fortune 500 is incorporated in Delaware, which is most protective of managerial interests. Delaware is perceived as having the most advantageous system of regulation for companies, which translates as having the least regulation. In terms of oversight, liability, responsibility, and regulation, Delaware has ‘long been reluctant to disturb the decisions of corporate boards (Werther and Chandler 2006). This enables Walmart and The Home Depot to do business with little oversight, which equates to less accountability and transparency. With the Sarbanes-Oxley Act of 2002 and other federal legislation, increases in accountability and transparency are occurring regardless of where a company is incorporated. However, this lack of state oversight means that both Walmart and The Home Depot must police themselves more diligently and make stakeholders aware of their actions. The responsibility of CSR, accountability and transparency, and communication/awareness rests on the company themselves.

CONCLUSION

This research suggested a useful CSR definition and a seven-ingredient framework for implementing CSR based on literature review. Two rounds case studies are conducted by deploying this framework. Clearly, there is no magic recipe for successful CSR program implementation. However, knowing which ingredients to add to the mix allows each company to create the recipe for success with respect to its specific industry.

Taking into account globalization, increasing affluence, the rapid development of communication and information networks, the increase in consumer power, and the documented recognition of the finite environment, organizations are motivated to pursue CSR. But many go about it

without knowing the ingredients for successful and lasting implementation. Through the sources used and cases reviewed, the necessary ingredients for successful CSR program implementation include stakeholder involvement, CSR program infrastructure, leadership support, emphasis on ethics, accountability and transparency, corporate governance, and communication/awareness. These ingredients differ given an organization's specific situation, but they will always be present whether noticeably or engrained and enabling another ingredient, or key factor, to work.

When evaluating CSR, it is vital to recognize that CSR is an ever-evolving concept. As companies and the world's population and its needs change, so will the CSR requirements placed on businesses. Using the tools provided here, CSR and its future variations should be easier to understand and its programs easier to implement, creating long-term viability, sustainability, and bottom-line benefits for the user.

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## THE IMPACT OF ERP INVESTMENTS ON ORGANIZATIONAL PERFORMANCE

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### ABSTRACT

*Enterprise resource planning (ERP) systems affect organizations and are implemented to enhance organizational effectiveness. However, ERP implementation is complex, costly and the research to date on the results of ERP investments on organizational performance have been inconclusive. This study examined the impact of ERP systems implementation on financial performance of public companies over a period of four years. Data analysis showed that ERP implementation did not affect significantly financial performance of the firms that had implemented ERP. This study adds to the existing research and its results can contribute to improved decision-making and setting ERP expectations at the time of ERP purchase.*

### INTRODUCTION AND BACKGROUND

In order to remain viable and competitive in today's business environment, it is necessary to invest in information technology (IT). Investment in information technology is an expensive and ongoing process. IT is more than a tool for automating existing processes. The main role IT plays is as an enabler for organizational change that can result in productivity (Dedrick, Gurbaxani, & Kraemer, 2003) or other gains, such as service enhancements.

Enterprise resource planning (ERP) systems affect organizations and are implemented to enhance organizational effectiveness. ERP systems are information systems packages that are configurable and integrate information and information-based processes within and across functional areas in organizations (Allen, Kern, & Havenhand, 2002; Gattiker & Goodhue, 2004). ERP systems automate and structure an organization's business processes by furnishing reference models and process templates across the enterprise (Allen et al.). Hanseth, Ciborra, and Braa (2001) stated that the main purpose for deploying ERP systems is to improve control over organizational processes. However, ERP implementation is complex, costly and the research to date on the results of ERP investments on organizational performance have been inconclusive.

ERP systems improve decision-making speed, enhance control of operations and costs, reduce costs, and boost enterprise-wide information dissemination. The complexity of ERP systems implementations; the drastic organizational, cultural, and human changes; the typical high customization expenses; and implementation problems all contribute to new customers' reconsidering their ERP implementation plans (Allen et al., 2002). As Hossain, Patrick, and Rashid (2002) noted, since ERP systems replace other systems, an economic rationale should be available to justify ERP deployment. Willcocks and Sykes (2000) noted that an ERP is competitively and technically necessary for many organizations. However, they stated that there is contradictory evidence in justifying an ERP economically and there is difficulty in rationalizing the associated costs and implementation complexity for achieving lasting business advantage.

Even though mature ERP systems have been used for over a decade, there remains dearth of research on the impact of ERP on organizational performance. The empirical research (as opposed to user perception) on the impact of ERP systems on organizational performance includes studies by Poston and Grabski (2000); Hunton, Lippincott, and Reck (2003); and Nicolaou (2004). The reviewed research on the impact of ERPs on organizational performance has produced contradictory results. Furthermore, no studies

have been performed on the financial impact of ERPs on organizational performance using a well-established methodology for firms that have adopted ERP after 1998.

This study was the first that measured the long-term financial impact of ERP on performance for firms that have adopted an ERP after 1998. Various critical success factors have been identified for ERP systems in the ERP implementation literature. Some of these factors include the choice of ERP vendor, anticipated benefits and justification for ERP implementation, scope or degree of ERP implementation, and the extent of business process change (Nicolaou, 2004). However, the primary objective for this study was to investigate the effects of ERP adoption on the bottom line of a firm using financial measures. This study also investigated the effects of the scope of ERP implementation on firms' performances. As Nicolaou (2004) noted there are no empirical results on the effects of ERP implementation scope on a firm's performance. Using a well-established methodology, this study contributed to better understanding the effects that ERP systems have on organizations and will potentially enhance the decision making process for purchasing these systems.

## LITERATURE REVIEW

ERP systems, similar to other business solutions, should be implemented to address specific needs and conform to the business characteristics of an organization (Gefen & Ragowsky, 2005). ERP systems might be suitable under many situations but less so under others. Benefits of ERP systems could include better coordination among sub-units and administrative efficiencies. The more interdependent the sub-units in an organization are, the more benefits will accumulate (Gefen & Ragowsky).

Benefits from ERP implementation generally could be categorized into tangible and intangible benefits (Nicolaou, 2004). Important intangible benefits are associated with internal integration, improved information and processes, enhanced customer service (Nicolaou), better knowledge processing, decision reliability, decisional substantiation, competitiveness, decision-making speed, and treatment of large scale and complex

problems (Holsapple & Sena, 2005). Examples of tangible benefits include reduced inventory, reduced personnel, and increased profitability. In general, ERP systems contribute to organizational efficiency, improved management, and inter-organizational integration (Sacco, Pedron, Cazella, Macadar, and Neto (2003).

As Holland and Light (2001) noted, ERP systems started to have substantial presence in organizations in the 1990s, and that a decade of practice was necessary to provide an insight into the usage of ERP systems. A sufficient usage period is especially important when considering the maturity of usage in contrast to implementation success. The reason is that organizations take time to shift in their perspectives and utilize new ideas and technologies (Holland & Light). As Holland and Light observed, ERP systems have the potential of either supporting high-level decision making in organizations or just being utilized as simple transaction processing systems.

Some studies on the impact of an ERP on organizational performance were exploratory in nature and based on users' perceptions. Hitt, Wu, and Zhou (2002) noted that the majority of the studies on the impact of ERP systems are interviews, case studies, a collection of case studies, or industry surveys. Empirical research on the impact of ERP systems on organizational performance, which was not based on user perception, included the studies by Poston and Grabski (2000), Hunton et al. (2003), and Nicolaou (2004). These three studies compared the performance of public firms that adopted ERP with a matching group of non-adopting firms. Various financial indicators available through Compustat were used to measure organizational performance.

ERP systems have been widely used for over a decade now and there was a dearth of research on the impact of ERP on organizational performance. The three major studies by Nicolaou (2004), Poston and Grabski (2000), and Hunton et al. (2003), although using the same general methodology, have resulted in contradictory conclusions. The studies by Poston and Grabski and Hunton et al. used three years of post-adoption financial data, while the study by Nicolaou used four years of post-adoption data. As Poston and Grabski noted, the three-year longitudinal study might not have been enough to capture the im-

act of ERP on firm performance. A four-to-five year study might have demonstrated return for ERP implementation. This study employed the methodology used by the above three studies. In order to investigate the full impact of ERP adoption, four years of post-adoption data was used.

## METHODOLOGY

The methodology used in this study has already been employed in the studies of firm performance by Balakrishnan, Linsmeier, and Venkatachalam (1996); Barber and Lyon (1996); Hayes, Hunton, and Reck (2001); Poston and Grabski (2001); Hunton et al. (2003); and Nicolaou (2004). They all performed their studies on public companies with financial data available through Compustat. The studies by Poston and Grabski, Hunton et al., and Nicolaou focused on the impact of ERP implementation on financial performance of firms.

First, LexisNexis Academic Universe newswires was searched for locating a sample of ERP-adopting firms from the ERP implementation announcements after 1998 with four years of post-ERP implementation financial data. After extracting data about firms from LexisNexis that had adopted ERP systems after 1998, each firm was matched by industry and size at the year preceding the ERP adoption year with a company that had not adopted ERP. Compustat was used for the matching process. The four-digit Standard Industrial Classification (SIC) code was used primarily for matching industry types. The three-digit SIC code was used when a four-digit SIC code match could not be found. Total assets were used to match company size.

Various factors are involved in the success of an organization. Although it is not possible to control all the success factors, this study, following prior research (Bharadwaj, 2000; Balakrishnan et al., 1996; Barber & Lyon, 1996; Poston & Grabski, 2001; Hunton et al., 2003; and Nicolaou, 2004), used differential return to control industry and economic factors and the effects of management practices. Differential return includes both relative return and controls for industry and economic effects via matching with a non-adopting ERP firm. Relative return expresses a firm's performance after adoption of ERP rel-

ative to its pre-adoption performance (Nicolaou). Relative return addresses the effects of management practices on a firm. Having a group of ERP adopters and a group of non-adopters (control group) allows comparisons of differential returns of ERP adopting firms with those of competing non-adopting firms.

In order to measure the impact of ERP systems on firm performance, each firm that had deployed an ERP system was compared to a comparable firm (by size) that had not deployed an ERP system from the same industry. The performances of each ERP adopting firm and the matched non-adopting firm from the same industry were compared prior to implementing an ERP system and in every year, up to four years, after the deployment of the ERP system. The overall differential performance then also was compared in various years. Financial performance data for the ERP-adopting and non-adopting firms was extracted from Compustat for the year before adoption and up to four years after adoption. Results were discussed and conclusions were written up.

## PERFORMANCE MEASURES

The variables selected for measuring the impact of an ERP on organizational performance for this study was based on the review of prior research. Organizational performance was of primary interest and is represented by four dependent variables. The dependent variables are affected by two independent variables, which represent ERP implementation and ERP implementation scope.

### Independent Variables

The first independent variable separates institutions that have deployed an ERP system from the ones that have not and are still using their legacy systems. This variable was termed "ERP implementation status" and has two levels. One level corresponds to the institutions that have implemented an ERP system and the other level is associated with the institutions that have not implemented an ERP system. Firms that have implemented components of an ERP system were included in the ERP adopters group. The second independent variable, "scope," differentiates ERP adopters based on the installed ERP components.

For this study, ERP systems were classified into two categories of primary and support modules (Porter and Millar, 1985; Brown and Vessey, 1999; Hitt et al., 2002; and Nicolaou, 2004). Primary activities were defined as activities that deal with physical creation of products, marketing and delivery of products to buyers, and their support and servicing after sale. Support activities were defined as activities that are associated with the inputs and infrastructure that permit primary activities. Support modules included the financial and human resource management modules. Primary modules were defined as support supply chain activities and include all other modules except financials and human resources. Degree or scope of implementation for this study depends on whether primary or support modules were implemented. Scope will have three levels. The three levels of scope are implementation of primary modules, implementation of support modules, and implementation of both primary and support modules.

Dependent Variables

As Hu and Plant (2001) noted, in the corporate world, chief executive officers and chief financial officers with their eyes on the balance sheet are demanding to see the expected payback in financial terms before approving funds for major IT projects. Therefore, measuring organizational performance in economic terms might help various firms justify investment in ERP systems. As pointed out in the literature review, reducing costs and increasing revenues are among the motivating factors for deploying ERP systems (Allen et al., 2002; Poston & Grabski, 2000; Sacco et al., 2003).

This study employed accounting measures that represent profitability and cost. These measures are based on relationships of financial statement items. Four measures of financial performance are used to examine the impact of ERP systems on firm financial performance. Nicolaou (2004) and Hunton et al. (2003) used three of the financial performance measures, which include return on assets (ROA), return on investment (ROI), and return on sales (ROS). Nicolaou and Poston and Grabski (2000) used the fourth measure, which is Cost of Goods Sold over Sales (CGSS). ROA and ROI measured return on invested capi-

tal. ROS measured profitability; CGSS measured cost.

The definition for each financial measure is shown below (Nicolaou, 2004; Compustat):

- 1. Return on asset is income before extraordinary items - available for common, divided by total assets, multiplied by 100.
- 2. Return on investment is income before extraordinary items - available for common, divided by total invested capital, multiplied by 100. Total invested capital is the sum of total long-term debt, preferred stock, minority interest, and total common equity.
- 3. Return on sales is income before extraordinary items - available for common, divided by net sales, multiplied by 100.
- 4. Cost of goods sold over sales is all costs directly allocated by the company to production, such as material, labor and overhead, divided by net sales, multiplied by 100.

Compustat defined “income before extraordinary items—available for common” as income after preferred dividend requirements, but before adding savings due to common stock equivalents and before extraordinary items and discontinued operations.

THEORETICAL FRAMEWORK

As Kudyba and Diwan (2002) reported, investment in various forms of IT has made important contributions to productivity and gross revenue. Hitt et al. (2002) noted that firms that implemented ERP showed higher performance than firms that did not implement ERP across a wide array of financial metrics. Therefore, based on previous research, ERP implementation should contribute positively to organizational performance.

Previous research also indicates that ERP scope has a clear impact on firm performance. One study indicated that deploying the human resources and financials modules had more im-

pact on performance than deploying either all modules or just the primary modules (Nicolaou, 2004). The other study by Hitt et al. (2002) indicated that implementing financials, human resources, manufacturing, and data warehousing/ mining had more impact on firm performance than any other combination. When all ERP modules (financials, human resources, manufacturing, data warehousing/mining, and project management) were deployed, the firm performance was less than other ERP module combinations. Both studies (Hitt et al. and Nicolaou) agree that deploying the financials and human resources modules have the most impact on firm performance when compared to implementing all ERP modules. Based on prior research, ERP implementation status and ERP scope both affect organizational performance.

HYPOTHESES

- H1: ERP implementation affects organizational performance positively when measured by financial performance ratios.
- H2: For institutions that have implemented ERP, varying scope of ERP implementation has varying effects on organizational performance.

RESULTS

Data Analysis

Distribution of ERP adopters was not clustered around a particular industry type. The business services industry type had the highest number of ERP adopters. As table 1 shows the distribution of ERP implementations by year for firms with ERP announcements from 1999 to 2001. As shown, years 1999 and 2001 have the most number of ERP implementations. Table 2 shows the distribution of ERP adopters by ERP vendor. Oracle and SAP had the largest number of ERP implementations followed by PeopleSoft and Lawson. Among ERP adopters, there were 15 with primary, 27 with support, and 37 with primary and support scopes. Many of the ERP vendors consolidated in post-2001 years. The major ERP acquisitions occurred from 2003 to 2007.

For example, Oracle acquired PeopleSoft in December 2004, Siebel in 2005, and Hyperion in March 2007. SSA Global Technologies acquired BAAN in July 2003. PeopleSoft acquired JD Edwards in July 2003. Finally, Lawson acquired Intentia in April 2006.

TABLE 1 DISTRIBUTION OF ERP IMPLEMENTATION BY YEAR	
Implementation Year	No. of ERP Firms
1999	23
2000	14
2001	24
2002	18
Total:	79

TABLE 2 DISTRIBUTION OF ERP COMPANIES BY ERP VENDOR	
ERP VENDOR	NO. OF ERP ADOPTERS
Baan	1
Epicor	1
Intentia	2
JD Edwards	2
Lawson	7
Oracle	29
PeopleSoft	10
QAD	1
SAP	25
SCT	1
Total	79

FINDINGS

The first research question for this study was:

How do ERP implementation and use affect the long-term financial performance of an organization?

Data Analysis indicated that ERP adoption does not affect a firm’s financial performance significantly when measured over a four-year post-adoption period.

The second research question for this study was:

How does the scope of ERP implementation affect financial performance of an organization?

Data analysis showed that ERP scope does not have a significant effect on financial performance for ERP adopters over a four-year post adoption period. It was also shown that that pre-adoption differential performance is a better predictor of post-adoption performance than ERP scope.

## CONCLUSIONS

This study investigated the effect of ERP deployment on financial performance of organizations over a four-year post-adoption period. 79 firms that adopted ERP in the post-1998 period were compared with 79 non-adopters. The results achieved from analysis of data showed that deployment of ERP systems do not affect financial performance of organizations significantly when measured over a four-year post-adoption period. Moreover, ERP scope did not affect financial performance of the firms that had implemented ERP significantly.

The results of this study contribute to the understanding of the long-term financial impact of ERP systems on organizations. The results of this study are significant from the academic research point of view as well as the administrative and business point of view. From the academic research perspective, this study adds to the body of knowledge in the area of information technology and ERPs. Consequently, the results of this study contribute to research on the topic. From the administrative and business point of view, the results of this study can contribute to improved decision-making and setting ERP expectations at the time of ERP purchase.

The results of examining the impact of ERP scope on organizational performance helps to further understanding of how ERP scope affects organizational performance. Knowing how ERP scope affects organizational performance provides for better decision making on the purchase and implementation of ERP modules. This study has generated results based on empirical data and conclusions that can provide business leaders with research based information for making ERP related decisions. Future researchers can use the financial performance measures used in this

study to develop formal measures to assess the financial performance of future adopters of ERP systems.

In light of the findings from this study and the high costs involved with major IT projects, it might be beneficial for organizations to analyze and evaluate their IT investments before proceeding with their IT projects. One way to analyze an IT project investment and to evaluate its merit in real world business setting is by using options pricing analysis (Benaroch & Kauffman, 1999). IT projects embed a real option when offering management the opportunity to take some future action such as abandoning, deferring, or scaling up the project in response to events occurring within the firm and its business environment. IT projects, such as ERP deployments, that entail infrastructure development and wait-and-see deployment opportunities are most suitable for options pricing analysis. Options pricing models can assist in getting the timing right, scaling up, or even abandonment of the IT project as the organization learns about its business environment with the passage of time (Benaroch & Kauffman).

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# STRATEGIES IN HIRING AND DEVELOPMENT PROCESSES IN SMALL AND LARGE COMPANIES

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## ABSTRACT

*A company's workforce is the number one key to success regardless of the size of the organization. It's a cliché, but it's a truth: People are the one asset a company absolutely and categorically can't do without (Goldfield, 2009). In small businesses and large businesses alike, the process of establishing an effective workforce begins with the hiring process. There is no generally accepted "best" way to recruit prospective employees. However, research suggests that the type and nature of information used in recruiting has a direct affect on who will apply and accept a particular position (Bretz, Judge 1994). Although many of the tools used for the hiring and development of employees are utilized by both small and large businesses, there are significant differences that exist between the two. In addition, employee development is crucial to the success of any business (Weber, 2009). The process of enhancing the effectiveness of an organization and the well-being of its members through planned interventions; a set of systematic and planned activities designed by an organization to provide its members with the necessary skills to meet current and future job demands; coaching and training; succession planning; and other aspects of leadership and skills development (Managing Human Resources in Small Organizations, 2010). The critical question is how recruitment, training and development can most efficiently be done in order for firms to produce a profit. The purpose of this research will be to identify and elaborate on the following three notable differences in the hiring and development processes utilized by small and large businesses:*

- 1. Fewer resources available for smaller businesses in recruitment and developmental programs as opposed to larger businesses.*
- 2. Larger applicant pools for large businesses in contrast to that available to smaller businesses.*
- 3. Limited advancement opportunities available in smaller businesses compared to those of larger businesses.*

*These three differences significantly impact the organizational structure of both small and large businesses alike and can make the difference between a positive or a negative bottom-line.*

INTRODUCTION

A company’s workforce is the number one key to success regardless of the size of the organization. It’s a cliché, but it’s a truth: People are the one asset a company absolutely and categorically can’t do without (Goldfield, 2009). In small businesses and large businesses alike, the process of establishing an effective workforce begins with the hiring process. There is no generally accepted “best” way to recruit prospective employees. However, research suggests that the type and nature of information used in recruiting has a direct affect on who will apply and accept a particular position (Bretz, Judge, 1994). Table 1 illustrates the types of job applicants likely to be recruited by different recruitment sources for large and small businesses.

Although many of the tools used for the hiring and development of employees are utilized by both small and large businesses, there are significant differences that exist between the two. The purpose of this research will be to identify and elaborate on the following three notable differences in the hiring and development processes utilized by small and large businesses:

1. Fewer resources available for smaller businesses in recruitment and developmental programs as opposed to larger businesses.
2. Larger applicant pools for large businesses in contrast to that available to smaller businesses.
3. Limited advancement opportunities available in smaller businesses compared to those of larger businesses.

These three differences significantly impact the organizational structure of both small and large businesses alike and can make the difference between a positive and a negative bottom-line.

FEWER RESOURCES AVAILABLE FOR SMALLER BUSINESSES IN RECRUITMENT AND DEVELOPMENTAL PROGRAMS AS OPPOSED TO LARGER BUSINESSES

There are about 30 million small businesses in the United States (Manalastas, 2010). These small businesses are an integral part of the U.S. economy, with nearly fifty percent of its gross domestic product being made up of small businesses. Many of these small businesses face challenges when attempting to hire skilled and qualified employees as well as when trying to create programs designed to develop employees. Many of these challenges are not experienced by larger businesses, or are experienced on a much smaller scale.

The capacity to identify, attract, and retain quality employees remains a key problem of small businesses because they do not have the resources to devote to it, unlike their bigger counterparts (Manalastas, 2010). Managing turnover costs, while important to all firms, is especially important to local and smaller regional firms (Cory, Ward, Schultz, 2007). Key issues small business experience includes:

Smaller companies may not have sufficient staff to cover an open position, so they rush through the hiring process and make a poor hiring decision. In addition, smaller companies are more apt to keep poor performers because of the need to have at least some productivity in the job.

Smaller companies often do not have as much skill at recruiting and hiring as do larger companies. Hiring is done less frequently, and managers are often not given skill training in interviewing. Good hires often become a matter of chance not choice.

Smaller companies don’t have access to the wide variety of recruiting options open to larger organizations. Large organizations that hire frequently or hire several people at once for openings are likely to have relationships with third

parties such as recruiting firms and staffing agencies, and are more likely to have well-developed electronic recruiting tools in place.

(Matthews, Hartman, 2006)

In smaller firms, each hire plays a critical, if not vital role, in shaping the future of the company (FamilyBusinessStrategies.com). Smaller firms often use alternate human resource management techniques aimed at developing talent to benefit employees, according to Cory, Ward, and Schultz (2007). More specifically, as a direct result of an abundant supply of resources available to larger businesses, larger enterprises often:

Offer unique benefit programs and benefits not available to small businesses in terms of medical, retirement, deferred compensation, and other sophisticated and costly programs.

Offer defined and disciplined compensation programs with market-driven mid points to salary ranges and ongoing programs for compensation adjustments.

Offer career path counseling, structured and funded development and training programs.

Offer defined policy and procedures embedded with flexibility for the ever-growing demand for free time (leave policies, flexible vacation scheduling, personal days, etc)

Offer a broader arena for socialization with people who do the same things and think the same way having the opportunity to meet and expand relationships in a social setting.

Offer access to the latest and greatest in technology, or state-of-the-art equipment related to an individual’s vocation.

(Beilin, DelFino, 2003)

Hewlett-Packard for example, has put its resources to good use, essentially creating a competitive advantage over rival firms as well as illustrating

how more resources can result in a competitive advantage over smaller businesses as well.

Developed in-house by HP’s engineers, working with the company’s human resources executives, the tool is called the HP HR Optimization Model, or the HROM. The model marries proprietary software with an almost philosophical viewpoint of integrated HR strategies. Some of those strategies are based on industry standard definitions of what entails workforce-planning concepts, such as learning and development. (Gallagher, 2010)

However, this does not mean that smaller businesses that do not have the resources as readily available to them that larger businesses do, cannot compete effectively when hiring and developing its workforce. There are various benefits packages available to smaller businesses such as supplemental life policies, high deductible health plans, and flexible spending accounts. Smaller businesses that operate on thinner profit margins must work diligently to ensure their valuable and often limited resources are used efficiently and effectively when implementing programs designed to recruit and develop workers. One potential advantage smaller companies may have in this area is the ability to more accurately assess which combinations of benefits and working arrangements are most attractive to their workers. (Car- don, Stephens, 2004).

Although the amount of resources available to large businesses and those available to smaller businesses are on opposite sides of the continuum, expectations of their hiring and development programs are very similar. Both expect to recruit high quality applicants to solidify a dynamic and competitive workforce, and both have the expectation for their employees to develop into valuable and productive members of their respective businesses.

### LARGER APPLICANT POOLS FOR LARGE BUSINESSES IN CONTRAST TO THAT AVAILABLE TO SMALLER BUSINESSES

Small and large businesses alike have similar expectations when recruiting for vacant or newly established positions; to hire the best candidate that will provide a positive return-on-investment and will develop into a valuable asset, enhancing the core competencies of the businesses labor force. The defining difference that impacts whether or not businesses are able to hire these types of applicants is the applicable labor pool that small and large businesses recruit from. Many larger businesses enjoy a competitive advantage over smaller businesses in terms of the recruitment of applicants. These large businesses command somewhat of a "brand name" image in respect to recruiting and hiring applicants. Firms such as Microsoft, Hewlett-Packard, John Deere, etc, all have the luxury of being able to recruit from hundreds of thousands of applicants with a variety of skill sets on a national level. This is possible because these businesses have names that are recognized in many cases on a global level. People aspire to work for these companies and routinely submit applications and/or resumes on a daily basis. These businesses spend little in comparison to smaller businesses on recruiting efforts. Many larger businesses have Websites that attract numerous candidates from all over the world.

In contrast, small businesses often find it difficult to recruit the talent needed to fill their skilled and professional positions. In many cases, small businesses are limited to recruiting in local geographic areas using traditional recruiting methods such as local ads in the newspaper, word-of-mouth recruiting, and job postings. The applicants available in these limited recruiting areas may not be sufficiently skilled or may lack the necessary knowledge needed to perform the duties of the position. Smaller, less-recognized businesses also do not benefit much from advertising on national search engines such as Monster.com or CareerBuilder.com because applicants that use these search engines are generally seeking well-known organizations and in many cases command higher salaries which a smaller business may not be able to afford.

However, this does not mean that small businesses cannot find ways to recruit skill-full and competent applicants. There are many ways a small business can improve upon its recruitment process. They can partner with local community colleges or tech schools to identify potential candidates and begin talking with these candidates early on to inform them of the opportunities their business has to offer. Small businesses can actively participate in local events such as charity events or festivals, in order to promote the image and name of the business. Joining community organizations such as the Chamber of Commerce or Kiwanis can also improve the recruiting efforts of small businesses. Finally, small businesses can create an employment niche. An employment niche is the condition that exists when employees perceive they work in a unique environment, and have opportunities to develop professionally and personally. This strategy may be particularly effective when recruiting older workers, who may prefer working in a more intimate atmosphere of a smaller organization (Ackerman, 2009).

### LIMITED ADVANCEMENT OPPORTUNITIES AVAILABLE IN SMALLER BUSINESSES COMPARED TO THOSE OF LARGER BUSINESSES

Many larger businesses have extensive developmental programs designed to enhance an employee's skill base and knowledge and provide the employee with the opportunity to advance within the organization. Many of these larger businesses routinely hire professional consultants to conduct learning seminars for their employees or send employees to off-site developmental events to provide further training for the employees. In many cases, larger businesses encourage employees to obtain higher-level degrees such as a Master's degree or other types of professional degrees or certificates, sometimes even paying the tuition for the employees.

Often larger businesses have many layers within their structures that allow employees more advancement opportunities. Small businesses by their very natures do not have the same level of

opportunities for advancement available. In most cases, smaller businesses consist of an owner, or group of owners, one or two managers and the rank-and-file employee. Tuition assistance may not benefit the employee in terms of advancement within small businesses such as these, as the employee will not be able to use the knowledge to better him or herself within the business. In fact, this is often a poor investment by the small business because the business may well be providing educational opportunities for an employee who will then leave the company to take advantage of his newly acquired education.

These obstacles do not mean that the expectations of smaller businesses are not similar to those of larger businesses when it comes to the development of their employees. Most businesses, small and large aspire to see their workforce mature and grow within their organizations. Even though smaller businesses may not have the same advancement opportunities as those of larger businesses, they can still reward their employees for a job well done, perhaps in less traditional ways. Knowledge-based pay could be implemented for additional education obtained that will be beneficial to the employee as well as the organization. As the organization grows, current employees will be better prepared to assume greater responsibility within it (Sveiby, 1997).

Solid developmental programs could be offered in-house to grow the employee. A solid development program can mean the difference between a successful company and one that struggles. Indeed, a company's chances for growth are closely aligned with its commitment toward fostering employee development. More and more workers are looking for employers who can help them increase their knowledge and skills (Levine, 2009).

Small businesses and large businesses have similar expectations when recruiting and developing employees. However, the ability to meet these expectations differs greatly. While both small and large organizations must exercise careful decision-making skills when developing recruiting and development programs, these decisions are particularly important to smaller businesses with fewer resources.

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# AN ANALYSIS OF HOW COMPANIES IN DIVERSE INDUSTRIES USE SOCIAL MEDIA IN E-COMMERCE

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## ABSTRACT

*This study examines the web sites of 96 e-commerce companies and explores their use of social media tools as part of their marketing strategies. With the explosive growth of Twitter, Facebook and YouTube, companies are rethinking their policies regarding how social networking can fit into their web initiatives. The results from the analysis showed mixed results in that certain industries are more open to the use of social media than others.*

## INTRODUCTION

Ever since social media came on the scene, companies have been faced with a dilemma—are these innovations a phenomenon simply for younger generations that will fade or, at best, be limited in scope or do they have the potential to be transformative in the way business is conducted? With any innovation there are early adopters and those that follow when it is deemed safe (Owyang, 2009). The purpose of this study was to answer the key questions—are social media tools being used and who is using them? In order to be able to answer these questions a site visit was made to e-commerce companies doing business in sixteen different industries. The organization of this paper is as follows: The first section of the paper discusses how social media has affected companies' marketing strategies. This is followed by a review of the demographics of social media usage and some of the risks for organizations that employ social networking. Next, some background and interesting applications of Twitter and Facebook are presented. Finally, the analytical results of the study are presented and evaluated. How Social Media Has Changed the Marketing Landscape

The profession of business has experienced many disrupting technologies since computers became a mainstay of its operations. Perhaps, none have

been as dramatic and revolutionary as the advent of social media. In this section, we will discuss the underpinnings of social media as it has permeated e-commerce activities of businesses.

A good starting point is to look at social media in an innovative analytical manner.

“There is a struggle over what the word ‘social’ really means. ...To a conservative management, the word ‘social’ sounds like fun and games... playing Scrabble on Facebook...stuff like that she said. But social just means people....It is not about games and leisure; it’s about bringing the human perspective back into our work world” (Moore, 2009). Without question, social media is immersive in nature. It gets people involved. In the e-commerce world where impersonalization can be problematical, social media allows the consumer to get very personal. A critical component of attracting people to e-commerce is to engender trust in the business transaction. “Social Marketplaces are developed to gain trust from customers, prospects and partners. As on-line relationships bloom into a new phase of on-line interactivity, customers and prospects will share information, seek feedback and create content pertinent to the business cycle” (McKinnon, 2009). McKinnon goes on to describe the four components of the new social marketplace. The following citation lists those features:

1. Optimize customer service
2. Enable channels and partnership networks
3. Spot Opportunities in Unexpected Places
4. Cultivate Brand engagement and loyalty”(McKinnon, 2009).

In the typical pre-e-commerce business transaction, the educated consumer might have consulted reviews or magazines such as Consumer's Reports. The advent of the Internet expanded the availability of information and data. The rise of social media has accelerated this abundance of information now available. “The social web is revolutionizing how customers interact with each other and with businesses. At the heart of this transformation is a power shift in which customers now own the conversation” (SAP, 2010). “Customers no longer rely on company controlled messages and a limited community of friends and colleagues to make buying decisions; now, they count on the opinions of millions of other people like themselves. Direct marketing is no longer the main influence on purchasing decisions. Crowd intelligence is increasingly driving customer opinion” (SAP, 2010).

With the new media, it is entirely possible that the consumer becomes adept at viral marketing which changes the entire landscape of marketing. Customer relationship marketing (CRM) must evolve to include social media into its repertoire. There are many recommendations on how to proceed. “The simple way to approach this is to go where your customers and prospects are. Do they blog? Do they ask peers for advice on Twitter, share views on Facebook, build their professional profile on LinkedIn? Different consumer and business groups often show different adoption and usage patterns” (Pivotal, 2010). “Once you determine which social tools your customers use, develop a prioritized list of which ones to include as part of your CRM strategy.....Consider also your company's CRM user groups and business processes, and the extent to which each social tool offers a logical fit and identifiable opportunities for value-generation” (Pivotal, 2010).

### Some Demographics of Social Media

There are numerous outlets for the implementation of social media in e-commerce businesses. They can use blogs, Twitter, Facebook and YouTube to reach out to their customers in ways both familiar and comfortable to them. When blogs first appeared on the scene few realized the enormous potential they had to engage the consumer. “A few years ago, you visited the popular site www.blogspot.com, registered and started blogging right away. Today's corporate blog, however, should be hosted on the company's website and is thus referred to as an “internal” blog” (Gissen, 2011). Later in this paper, we will discuss the importance of monitoring these social networking tools so that the company is not blindsided by its ever-changing content.

“Much of the growth in social networks today comes from people older than 34,” writes Sean Corcoran of Forrester Research. More than half of adults age 35 to 44 belong to social networks. Seventy percent of adults 55 and older use “social tools” at least once a month” (Montalbano, 2010). “People in the 35 to 54 age group are increasingly joiners and creators, while adults over 55 are more likely to be spectators” (Montalbano, 2010).

From the aforementioned quotations, it is clear that all e-commerce must pay attention to the ubiquitous nature of social media.

Another look at the main user groups is insightful. “Nearly half of Internet users, ages 50 to 64 now use social networking sites like Facebook and LinkedIn, and about one in four ages 65 and older now use social networking sites. That compares to 86% of Internet users under the age of 30”(Soule, 2010). This hyper-activity, however, is not uniform across all age groups. This fact must be understood and exploited by organizations.

“Comparatively few seniors are using Twitter, however, with just 11 percent of those age 50 to 64 using the service, and just 6 percent of those age 65 and older tweeting” (Soule, 2010).

### Risks of Social Media to the Organization

As with all rapidly expanding technologies there are definite risks associated with an organization's plunge into the world of social media. It is

not surprising that companies encounter a wide variety of challenges along with the many opportunities that social media presents. In this section, we will explore several of these challenges to an organization that chooses to engage their customers via the world of social networking. Arnette, in his article, identifies several questions that should be asked by all e-commerce companies before they commit to social media.

The key questions are as follows:

1. How does the company use social media?
2. Do company employees using social media on a personal level create risk to the company?
3. Do company managers create risk through social media usage?
4. How can the company create policies and develop strategies to avoid potential risks?
5. Is a company representative reading through blogs that mention or discuss the company?
6. Is there a way to influence the online conversation on various social media platforms so that a company is participating in social media instead of avoiding it? (Arnette, 2010)

An interesting finding regarding the acceptance of social media by small businesses was reported by Needleman in an article from The Wall Street Journal. “Last year (2009), social media adoption by businesses with fewer than 100 employees doubled to 24% from 12%, says a survey released in January of 2010 U.S. entrepreneurs from the University of Maryland” (Needleman, 2010a). “Meanwhile, a separate survey of 500 U.S. small business owners from the same sponsors found that just 22% made a profit last year from promoting their firms on social media, while 55% said they broke even. What's more, 19% said they actually lost money due to their social media initiatives” (Needleman, 2010a). Irrespective of the financial benefits of using various social media tools is the management of the plethora of vari-

ous social networks that a company may consider as part of its marketing strategy. Sitzer has identified several management tools that provide an organization options to manage their social media activities.

Six Tools for managing your many social networks:

1. Tweetdeck
2. Ping.fm and HelloTxt
3. Seesmic
4. SocailOomph
5. 8hands
6. Chi.mp (Sitzer, 2010)

With every new technology there is always a hue and cry for the requisite metric to ensure that it is performing as designed. It should come as no surprise, therefore, that

according to a report by the Aberdeen group “one –third of all companies say they don't engage in social media marketing because they lack suitable metrics” (Tsai, 2009). Often, the term ROI is proffered as the key performance indicator for measuring the effectiveness of business decisions. However, it is very difficult to apply it to social media. Measuring both the cost side as well as indentifying the tangible benefits have been met with many obstacles. “For e-commerce via social media to work, “You've got to spend money on advertising to make people aware that [your fan page] exists,” says Larry Chiagouris, a Pace University marketing professor” (Needleman, 2010b). Surely, the advertising costs can be quantified. However, a “potential downside is that disgruntled buyers could also quickly blast their network of friends, adds Michael Trusov a professor at University of Maryland” (Needleman, 2010b). The effects of this blast can be a problem to quantify and so any “hard” metric must be looked at with skepticism.

Another risk to the adopting organization is the reaction of the IT area. “In many enterprises, employee use of Facebook, MySpace, and other social networking sites is the subject of a vigorous, ongoing debate” (Hodge, 2009). Hodge



identifies some of these concerns. “IT managers typically regard such sites as a source of headaches and as portals for identity theft via phishing, site spoofing, and the distribution of malware and spam. The openness these sites need to attract and keep users is the very thing that allows vandals and criminals to exploit them” (Hodge, 2009).

“Last year (2009), a French hacker named Hacker Croll broke into Twitter through fairly simple means-no special code or software, just clever searching (for items such as personal details of high-ranking Twitter employees) and persistence-and accessed internal company documents as well as high-level company email accounts. Additionally, social networking sites have third-party applications that may have vulnerabilities that cyber criminals can exploit with malware” (Colaner, 2010b).

There is a very real concern that social media and its benefits of accessibility to customers bring with it the double-edged sword of lack of security. “Social networking sites have third-party applications that may have vulnerabilities that cyber criminals can exploit with malware” (Colaner, 2010b).

Twitter and Facebook

One of the most intriguing social networking phenomena for businesses has been Twitter. Originally, used by “tweeners” it has evolved into a powerful social force in its own right. “Twitter asks only one question: “What are you doing?” Answers must be 140 characters in length and can be sent via mobile phone, instant message, or the web” (Hauser, 2010). Just think of the power of a marketing communications tool that can be implemented over the cell phone without the need for a bulky computer. Hauser brought up a fascinating feature that must be understood by any business that seeks to use Twitter as part of its marketing approach. “Social networking is a scrapbook of your life with people, photos, and memories that have made you what you are today” (Hauser, 2010). How companies recognize this capability and exploit it for commercial success will prove to be a real challenge. Those doing this successfully could see new possibilities open up for their products and services. Hodge

provides some suggestions to harness the power of social networks for organizations.

- 1. Awareness is key. Be familiar with all the sites that are out there.
- 2. Monitor these sites for mentions of your company name or brand.
- 3. Make sure employees understand the ways in which what they post could hurt the company and their jobs (Hodge, 09).

An interesting example shows how the Skittles brand of Mars candy used social media in its marketing strategy. “The traditional homepage was gone, replaced by something that looked eerily like a Twitter search-results screen-which, in fact, it was: Skittles.com was forwarding to a dynamic view of search.twitter.com. Any Twitter user who mentioned “Skittles” in a tweet would wind up on the Skittles home page. All of them-even the ones containing expletives. ...The next day, Skittles.com was the brand’s Facebook page” (McKay, 2009). This example shows how creative use of social media dynamically adapts to its environment.

eGain has developed an interesting way for companies to look at the terrain of social networking and place proper emphasis on their efforts in this area. In their analysis they state that a company must know the nature of the business that they are in. They provide a graphic to help in this regard.

	High Complexity	Low Complexity
B2C	LOW	HIGH
B2B	LOW	Moderate
(Diagnostic & advice Informational & Queries) transactional queries). These more likely resolved through social knowledge (eGain, 2010).		

By dividing business into B2C and B2B and by categorizing them by complexity, you are able to identify the appropriate type of social media tool to employ for best results.

The rise of social media initiatives has dramatically altered the availability of customer’s personal information. This abundance of relevant

consumer data has not escaped the interest and reach of e-commerce companies. “Those companies (Facebook and Twitter) have gotten people to publicly and privately share information on the Web, including their favorite articles, videos, personal interests and whereabouts, and redefine how people discover news articles or get advice on where to shop or travel” (Efrati,2011). “[Facebook]....with more than 600 million users worldwide, has amassed a wealth of personal information about members and now has a multi-billion dollar advertising business that lets marketers pinpoint specific demographic groups” (Efrati,2011). “Social media represents a new mode of communication in which companies need to be conversant and proficient. .If you are not communicating with [customers] the way that they’re communicating with each other, you’re pretty behind the curve” (VonWinkle, 2010).

The following is a good example of how social media, in particular Facebook, is being used creatively in today’s marketplace. “Mountain Dew Facebook page had 710,000 fans. These are those who said they “liked” MD” (Colaner, 2010a). “... it would be foolish to disregard the old standby of simply creating an ad on Facebook. The task is simple enough; creating a Facebook ad is a matter of a few simple steps....You can target certain groups, ages, educational backgrounds, occupations, and more, and your ads will filter to certain individuals based on what they and their friends trend toward. If you want to track the ads, Facebook provides demographic feedback so you can see who is seeing your ads (Colaner, 2010a). For e-commerce companies this data is priceless. Greg Smith, global CIO of McCann Worldgroup, comments “We’re relying on employees to use their best judgment in noting those interactions in client files” (Nash, 2011). Social media needs to permeate throughout the company, from the top down. You have to have a whole new way of thinking when you adopt it. You can’t just add it on as a stepchild” (Curtis, 2010). “Social media tools that mimic Twitter and Facebook promise to bring team collaboration to corporate users. Getting users and applications connected in a secure, reliable stream can mean the difference between leading and being left behind” (Sturdivant, 2011).

METHODOLOGY

This research study is part of an eight-year research project that has investigated over one thousand e-commerce web sites (Moscato, 2003);(Moscato and Moscato, 2004, 2005, 2006,2007,2007b,2009,2010). The focus of the ongoing project has been on the areas of security, privacy, e-business models, web design and social networking.

For this phase of the research, almost 100 web sites were reviewed across sixteen various industries to gain a preliminary understanding of which social networking tools were being utilized. Table 1 lists the industries included. For each site visited, a survey questionnaire was completed by one of the authors. The research took place during the month of November, 2010. Since this research paper focuses on social networking activities, only those five specific questions pertaining to that area are listed in Table 2 and labeled with the original question number.

TABLE 1 INDUSTRIES’ E-COMMERCE WEB SITES SURVEYED	
Home Shopping	Women’s Clothing
Retail Banking	Sports Apparel
Travel	Retail Clothing
Online Brokerage	Computer Electronics
Swimwear	Consumer Goods
Books	Textbook Rentals
E-Classifieds	Digital Photography
Fine Jewelry	Home Shopping

TABLE 2 QUESTIONS ON THE SURVEY	
Question Number	Question
7	Does Site have a live chat or live help feature?
10	Is there a link for Twitter on the home page?
11	Is there a link for Facebook on the homepage?
12	Is there a link for YouTube on the homepage?
16	Are there any links to videos on the site?

RESULTS

Table 3 presents the aggregate results, in percentages, for each of the five questions reported in the survey. Once the overall results are given, the paper proceeds to analyze each question and attempts to interpret the patterns discovered across specific industries.

TABLE 3 AGGREGATE PERCENTAGE RESPONDING YES OR NO TO EACH QUESTION		
Question Number	Percentage Yes	Percentage No
7	27%	73%
10	52%	48%
11	58%	42%
12	25%	75%
16	43%	57%

Specific Results for Each Question

Question #7  
Is There a Live Chat or Live Help Feature?

In order to improve customer service and to gain valuable feedback from customers, a company can initiate “live” human interaction with them. In a typical telephone setup, the company utilizes a call center and handles any customer inquiries. In an e-commerce environment, the survey wanted to see if organizations followed similar interaction methods with its customers via live chat or help.

Overwhelmingly, the companies reviewed did not use this feature to build customer trust or understanding. In point of fact, the number of “yes” responses was the second lowest with only 27% indicating that they used this feature on their web sites. The strongest industry group was computer electronics whereas the poorest users were online brokerage, e-classifieds, women’s clothing, textbook rental, travel, sports apparel and fine jewelry. One reason for this result could be that this feature requires a 24/7 support capability or, at the very least, support during business hours.

Question #10  
Is there a link to Twitter on the homepage?

For this question, the results when considered in the aggregate are almost evenly divided between “yes” responses (52%) and “no” responses (48%). However, when the data are analyzed by industry, swimming sites, women’s clothing and retail clothing along with textbooks rentals show the highest use of Twitter. Among the lowest users of Twitter are the following e-commerce industries: consumer goods, e-classifieds, retail banking and fine jewelry.

Question #11  
Is there a link to Facebook on the homepage?

The results for this question show that almost 60% of the e-commerce sites offer a link to Facebook on their homepages. This shows that Facebook is more popular than Twitter in the industries surveyed in this study. Once again, clothing retailers and textbook sellers were the biggest users of Facebook as well as Twitter discussed under question 10. Among the lowest users of Facebook were e-classifieds and retail banking. Results are similar to the use of Twitter. Apparently, for whatever reason, companies in selected industries seem to believe that both technologies are either important or not important to their marketing strategies as evidenced by their behaviors of adoption.

Question #12  
Is there a YouTube link on the homepage?

The results obtained for this question without doubt illustrate that the use of YouTube while powerful in its own right, has not permeated commercial e-commerce web sites. Only 25% of the sites reported using YouTube as part of their marketing strategy. The only industry segment to be strong users of this technology was the sports apparel firms. All of the visited companies used this technology. On the opposite end of the spectrum, no companies in consumer goods, e-classifieds, digital photography online banking, bookstores, women’s clothing and fine jewelry made use of YouTube in their promotions. Perhaps, future research could shed some light on this pattern.

Question #16  
Are there any links to videos on site?

The results for this question demonstrate that most of the e-businesses do not make use of videos to show their products or services to customers as part of their marketing efforts. Almost 60% do not use videos. The biggest users of videos were sports apparel companies where all of those surveyed used videos. Those industries not using videos were travel, e-classifieds, online brokerage and women’s clothing. The results to this question are surprising when you consider all the possible benefits of illustrating your product’s features via video. Perhaps, bandwidth issues dominated the decision not to use videos on the companies’ web sites.

SUMMARY AND CONCLUSIONS

This research study was conducted to shed light on how companies engaging in e-commerce embraced social networking tools such as Twitter, Facebook and YouTube. From the results, it was clear that the use of these social media tools was uneven at best. Some industries are definitely adopting the technologies while others are clearly not so inclined. An important question to ask is why and perhaps even when? Why are some companies in an industry using a tool while others reject it? The results show that in some industries a tool was used universally by the companies reviewed. The opposite is true in others while in some cases the results were mixed within a given industry. Perhaps, this is due to the presence of forward-looking marketing strategies. If this is indeed the case, then the next question to be asked is “when will the late adopters come aboard?” It is conceivable that in some industries, by their very nature, those companies will never embrace social networking tools as part of their marketing strategies. One thing is certain. These social networking tools have consumed the public and have become integrated into people’s communication behavior. It is as if we are wired 24/7 today...always connected. In order to achieve this interconnectedness, we have provided vendors with unparalleled access to our personal information. For the benefits of using these technologies, companies engaged in e-commerce are able to learn all about our preferences and behaviors in the shopping experi-

ence. Perhaps, it is good to reflect on something a great jurist observed many decades ago. “In the late 19th century, Louis Brandeis objected to the new media of the era, such as photography and mass newspapers, and proposed a “right to be left alone.” Laws including libel and consumer protection were intended to protect reputations and anonymity”(Crovitz,2010). Today, it seems that we have traded convenience and access for whatever privacy we once possessed. If given the opportunity to use social networking applications in marketing and if they are measurably successful, it is not unreasonable to see even more use of them in the future by entrepreneurial companies.

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# MANDATORY EMPLOYMENT ARBITRATION: PERCEPTIONS OF EMPLOYEES

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## ABSTRACT

*Mandatory arbitration has been a crucial part of employment law for many years. Employers utilizing arbitration clauses in employment documents have been upheld by the federal judicial system when the employees' right to seek relief in the courts was denied. Employees are forced to sign these arbitration agreements without any representation of their interests. Employees view this as a binding agreement imposed by the stronger party on the weaker party in an economic relationship. Little, if anything, is done to ensure that employees fully understand what they are signing. Survey results of 204 college students indicate only eight percent felt their claims in a dispute would be handled equally under arbitration as compared to a judge and jury. Fifty-five percent prefer to work for a company that does not require arbitration and 28% would not seek a long-term employment relationship with such a company. Eighty-two percent felt forced to give up valuable legal rights in arbitration while thirty-six percent erroneously believed litigation was still an option.*

## INTRODUCTION

Mandatory employment arbitration has become part of the business landscape for many US companies. Arbitration has been used as an alternative to litigation in open court since the United States Arbitration Act was passed in 1925. This legislation was intended to be employer friendly, making arbitration agreements binding and enforceable. The purpose of the legislation was to provide an efficient and cost-effective means of settling disputes between parties of reasonably equal stature. Arbitration was never intended to replace the right to a jury trial where civil rights are involved (Engen, 1996).

Since 1925, the practice of arbitration has grown beyond its original purpose, and some would say, beyond the bounds of the law. For example, procedures are not based on due process, rules of evi-

dence, and other rules commonly found in open court, or even labor grievance arbitration. Arbitrators have been found unfamiliar with employment law and the context in which the dispute arises (Rudolph, 2002).

Even if the employee has access to all the facts and can financially afford to pursue arbitration, there is always the possibility of bias on the part of the arbitration service provider. The major providers of arbitration services are large and influential. Some are invested financially in the very corporations that seek their services (Holding, 2010; LeRoy and Feuille, 2009). The American Arbitration Association (AAA) (largest provider of arbitration services nationwide) is known to have invested millions of dollars in the securities of its corporate members (Holding, 2010). Most employees would not be privy to information about arbitration in general and specifically not the in-

vestment practices of arbitration service providers. The issue would not necessarily be of interest to them until a dispute occurs. It is at that time the employee becomes familiar with legal precedent that might be beneficial to their cause.

With the introduction of legislation such as Title VII, the Family Medical Leave Act, the Americans with Disabilities Act, the Age Discrimination in Employment Act, the Fair Labor Standards Act, and the Equal Pay Act, employees are more sensitive toward discrimination issues within the workplace. Employees no longer have to feel helpless or tolerate discriminatory behavior. With the introduction of law comes the opportunity for redress under the law.

Employment law accounts for up to 25 percent of the entire federal docket. Since the Civil Rights Act of 1991, employees have won nearly fifty percent of federal employment discrimination cases tried in open court (Hafets and Boyd, 2003). Employment discrimination claims grew 2,200 percent between 1969 and 1994. The typical employment dispute case has been estimated to cost at least \$50,000 and take at least two and one half years to complete, leaving employers with huge legal fees (Morris, 2000). The Civil Rights Act of 1991 encouraged more cases to go to arbitration to lessen the Court load and long waiting period. This cost in time and money was not lost on employers who turned more forcefully to mandatory arbitration.

Mandatory arbitration agreements typically appear either as a clause in or an addendum to the employment contract itself or merely as a document within the routine employment packet along with general benefit and employee handbook information. Employees are usually required to sign arbitration agreements before they begin work for the employer. However, in some instances, employers will impose arbitration agreements on current employees. Accordingly, employers may refuse to hire those prospective employees who do not sign a mandatory employment agreement or, the employer may condition continued employment of an existing employee on the signing of such an agreement (Rheuban & Gresen, 2009).

Although the Senate Judiciary Committee closely examined the practice of dispute-related

employment arbitration in 2009-2010, the fact remains that this practice is still prevalent in our workplace and is a source of frustration and concern for employees across the country. The Arbitration Fairness Act of 2009 would eliminate mandatory dispute arbitration including employment, consumer, franchise and civil rights disputes, unless required by a collective bargaining agreement. During the Judiciary Committee's hearing on the bill, Chairman Patrick Leahy noted estimates that "at least 30 million workers have unknowingly waived their constitutionally guaranteed right to have their civil rights claims resolved by a jury" by signing mandatory arbitration agreements. Opponents countered by saying that labor organizations and employers have long embraced arbitration to resolve employment disputes but that such legislation currently being reviewed would "effectively end arbitration in the non-union sector". (SHRM, 2009) If enacted, however, there will be a significant impact on the resources of the judicial system since virtually all employment disputes of whatever nature would be covered by this proposed legislation, and all pre-dispute agreements to arbitrate employment disputes (other than CBA arbitration provisions) would be unenforceable. Clearly, this proposed legislation, if enacted, will produce a tremendous drain on judicial resources, in terms of capacity, time, and money, due to the resulting upsurge in court-filed employment cases (Zackin, 2009). At the time of this writing, the act had not left committee and with a Republican controlled House of Representatives; there will probably be less incentive to see this legislation succeed.

In a related development, the Senate approved an arbitration-related amendment on October 6, 2009 to the fiscal year 2010 Department of Defense appropriations bill offered by Senator Al Franken. Later in 2009, President Barack Obama signed this legislation entitled the Department of Defense Appropriations Act, otherwise known as the "Franken Amendment." This amendment significantly restricts the use of mandatory arbitration clauses in employment contracts between defense contractors and their employees or independent contractors. While currently limited to certain federal defense contractors, the likelihood of other legislation and amendments like the Franken Amendment is inevitable (Woods, 2010). Several associations,

including SHRM, sent letters to all Senators urging them to oppose the Franken amendment on the basis that "eliminating arbitration will have serious negative implications for employees, because many cannot afford to bring their claims in court and therefore will abandon their claims altogether." Currently, and until the effective date of such legislation as the Arbitration Fairness Act, employees are signing away their constitutional rights with almost every new job (SHRM, 2009).

## BACKGROUND AND HISTORY

Congress enacted the United States Arbitration Act in 1925 and the Federal Arbitration Act (FAA) in 1947, which were intended to end a tradition of judicial hostility toward arbitration. The Acts placed arbitration agreements on equal ground with contracts (Fitz, 1999). In 1955, the Uniform Arbitration Act (UAA) introduced the framework for States to adopt their own laws. Over time, arbitration has grown into a robust dispute resolution mechanism.

In 1991, Roger Gilmer was hired at the age of 56 by Interstate/Johnson Lane Corporation as a financial manager. He signed an agreement to arbitrate any dispute. Six years later, when he was terminated and replaced with a 28-year old employee, Gilmer filed an age discrimination complaint with the EEOC (Lewis, 2003). The case made it to the Supreme Court which held in *Gilmer v Interstate / Johnson Lane Corporation* that the courts may compel arbitration when a pre-dispute agreement was signed (Eastman and Rothenstein, 1995).

The Supreme Court ruled that even though a federal statute (ADEA) was involved in *Gilmer*, an employee could be forced to arbitrate claims (Cole, 2000). The Supreme Court found nothing in ADEA that prevented resolution by arbitration. The Court's position was that "by agreeing to arbitrate a statutory claim, a party does not forgo the substantive rights afforded by the statute; it only submits to their resolution in an arbitral, rather than a judicial, forum" (Spognardi and Ketay, 2002). This began a tidal wave of litigation between employers and employees over the enforcement of pre-dispute clauses in employment contracts and handbooks.

After *Gilmer*, the Civil Rights Act of 1991 was passed, expanding potential remedies available to plaintiffs which including the right to a jury trial and compensatory and punitive damages (Reilly, 2002). Within the language of the law, Congress recognized arbitration agreements as a means of resolving disputes "to the extent authorized by law" (Sevilla, 2005).

In 2001, the Supreme Court ruled in favor of mandatory employment arbitration in *Circuit City Stores, Inc. v. Adams*. Saint Clair Adams signed an agreement as part of an employment application with Circuit City where Adams was required to submit all claims to arbitration as a condition of employment. Two years later Adams filed an employment discrimination suit against Circuit City in California State Court (Reilly, 2002). The Court found that the exclusion of employment contracts applied only to workers directly engaged in the interstate transportation of commerce, and that Adams must submit to arbitration (Feingold, 2002).

The massive amount of litigation following *Gilmer* and *Circuit City* still continues. Employees still argue that basic contractual principles, such as assent, are questionable in mandatory arbitration agreements. Assent is referred to as "meeting of the minds." If an employer imposes arbitration on an employee and fails to disclose the potential effect, then there was no assent. Employees should be required to assent in writing by signing the policy, acknowledging they understand the policy (Starkman, 2002).

## MANDATORY EMPLOYMENT ARBITRATION LAW

The presumption in contract law is that contracts are between two willing individuals who both benefit from the transaction. Both parties have access to perfect information regarding the contract, can weigh the costs and benefits of the exchange, and have the freedom to sign, if it is in their best interest. In mandatory employment arbitration clauses, that is not the case. The employee is not a willing participant, and cannot make a judgment (pre-dispute) as to what would be in their best interest. There is no way to gauge what their probability of success will be until the dispute has occurred. This reasoning has been

used to argue that these contracts are, therefore, unenforceable (Bodie, 2004).

Employers benefit from the contract without perfect information. They know that with litigation comes uncertainty about the chance of winning, damages awarded, and legal fees. Pre-dispute clauses are clearly in their best interest. In summary, there are basically four reasons why employers have chosen to implement mandatory arbitration agreements as an alternative to litigation. First, and foremost, in today's increasing volume of work place disputes, there is time and money to be saved when utilizing arbitration over litigation. One study on employment arbitration found "that over 75% of the employers surveyed adopted arbitration agreements to reduce litigation costs." A second reason for arbitration is the unpredictability of jury awards, along with the obvious fact that juries tend to be biased against employers, especially big corporations with the proverbial "deep pockets." A third reason why employers have implemented mandatory arbitration agreements is the recognition that it may be difficult for employees to pay costs associated with traditional litigation. And, a fourth reason for arbitration, assuming that the process is carried out in a perceived fair and objective manner, is that employment arbitration can be a means of preserving a more amicable relationship between the employer and employee when compared to the feelings following lengthy litigation. This fourth reason may be a bit of a stretch of the imagination when the above study indicated that "only 15% of employers implemented arbitration agreements to improve employee relations or give employees a voice". Whatever the reason may be, it is clear that the overall use of arbitration agreements by employers have rapidly risen in recent years. (Shenk, 2002)

The use of mandatory arbitration agreements and the evolving legal trends continually bring new issues to the forefront. A recent of those issues is unconscionability. An unconscionable contract is "one which is so grossly unreasonable or unconscionable in the light of the mores and business practices of the time and place as to be unenforceable according to its literal terms" (Panaro, 2002). This basically states that there would be an absence of a reasonable choice for one of the parties, coupled with contract terms that favor

the other party. Charges of unconscionability have made courts skeptical about enforcing arbitration agreements (LeRoy, Feuille, 2009).

To determine whether a contract is unconscionable, Courts now look more closely at procedural and substantive elements. Procedural unconscionability exists where oppression and surprise are present. Oppression is present when there is no real negotiating power. Surprise means the degree to which the contract terms are hidden from the employee in the "fine print" composed by the employer. Substantive unconscionability indicates that the terms of the contract are "so one-sided that they shock the conscience." No reasonable, honest person would offer it or accept it. Even if an employee signs an agreement, it can be determined later to be unconscionable if it imposes oppressive terms (Shenk, 2002).

In *Graham v. Scissor-Tail, Inc.*, the Supreme Court of California offers a two-part test for determining if an arbitration agreement is unconscionable and unenforceable: (1) The Court must determine if the employee had an opportunity to negotiate the terms of the agreement (an adhesive contract), and (2) If the contract does not meet the reasonable expectations of the weaker party, it will not be enforced against him (Shenk, 2002).

**ADVANTAGES AND DISADVANTAGES FOR EMPLOYER AND EMPLOYEE**

Depending on your perspective, arbitration can be a positive or negative experience, for either the employer or the employee. Both the employer and employee benefit from a more timely resolution of disputes with less financial cost. The employee benefits from the reduced financial advantage by the employer during court litigation. The employer benefits by avoiding unpredictable jury awards and punitive damages (Burton, 2004). However, the employee is at a disadvantage when they must relinquish the right to jury trial. This reduces the potential generosity of the remedy (Reilly, 2002). Also, since the proceeding is kept confidential, there is no deterrent for the employer to change their behavior. If the arbitration agreement does not allow for legal counsel, the employee is at a disadvantage because the employer has "free" in-house counsel and their

human resource department can work on the case for them (Burton, 2004). Since employees may not be repeat participants in the arbitration process, they will not have knowledge of how particular arbitrators rule. Employers are repeat players in the arbitration process and can hire arbitrators that have a history of ruling in their favor. Arbitrators then have an economic incentive to find for the employer (McCarthy, 2000) (Holding, 2010).

Without judicial review, there is no way to know if the arbitrator has applied the law correctly (Berul, 2003). Arbitrators are less experienced than are federal judges in interpreting and applying employment discrimination statutes. Many arbitrators have no legal background. Another potential problem is the absence of the Federal Rules of Evidence. This makes the process less predictable and less comprehensive. (Hafets and Boyd, 2003).

With so much being at stake for both the employer and employees, we wanted to investigate employee perceptions and understanding of mandatory employment arbitration. We were interested in perceptions concerning the potential impact this brand of private justice has on the employee's civil rights.

**EMPLOYEE PERCEPTIONS OF MANDATORY ARBITRATION**

Given there is a proliferation of mandatory arbitration agreements being entered into by uninformed employees eliminating their rights to a trial by jury and decreasing employer accountability and liability and there are varying opinions concerning the rights of employees and employers, we wanted to investigate employees' perceptions of mandatory employment arbitration as well as their perceptions of their rights once they have signed an arbitration agreement. We wanted to

determine employees' level of understanding (or lack thereof) regarding mandatory arbitration agreements and the impact they have on employment. For purposes of this research, arbitration was defined as a process in which an employment dispute (i.e., sexual harassment/discrimination, termination, wrongful discharge, age/gender discrimination) is presented to a neutral third party (the arbitrator), for a final and binding decision. We added on our survey that neither a judge, nor a jury, nor the EEOC would be present.

The sample comprised graduate and undergraduate college students at a southeastern university. The students represented a significant group of people who will be entering or have entered the workforce. The survey was developed based on the literature review. This study was an exploratory one as few studies have specifically investigated employee perceptions of mandatory employment arbitration.

**Demographics**

Frequency distributions were obtained on the demographic data to ascertain the characteristics of the sample. The students represented in our sample were predominantly Caucasian-American and African-American and were between the ages of 20 and 60; the number of respondents was 204. As seen in Table 1, 51% (104) of the sample was male. Approximately 38% (77) had completed college and had some graduate work or held a Master's degree; and 61% (123) were working on their first Bachelor's degree. Approximately 80% (161) were employed either full time or part time, and 20% (40) were unemployed. Eighty-nine percent (171) were under 35 years old; 5% (10) were 36-45 years old; and 6% (12) were 46 and older. The respondents are employed in various fields which included 51% (97) in the professional field, 6% (12) in the technical field, 9% (17) in the educational field, and 32%

TABLE 1 CHARACTERISTICS OF RESPONDENTS								
Gender	#	%	Age	#	%	Race	#	%
Female	99	49	Under 25	116	60	African-American	43	21
Male	104	51	26-35	55	29	Caucasian-American	142	70
			36-55	19	10	Other Minorities	18	9
			Over 56	3	1			



(62) in the clerical and retail fields. Of those employed full time, 87% have been working up to 5 years; and 13% have been working over five years. Sixty-four percent (131) planned to begin a job search within the next year.

Sample statements included: "It is legal for a company to require employees to sign arbitration agreements;" "I was required to sign an arbitration agreement to get a job;" "By signing an arbitration agreement, I believe that I am giving up my right to sue for an employment dispute;" "If I am not satisfied with an arbitration ruling, I can use a court of law;" "Companies that require employees to agree to arbitration do so to promote its own interest without concern for the employee" and "I believe that arbitrators favor employers."

### Analysis

Thirty-seven percent (78) believed that it is not legal for a company to require employees to sign arbitration agreements. Twenty-two percent (45) had been required to sign an arbitration agreement to get a job. Eleven percent (23) did not know if they had signed an arbitration agreement and 30% (51) did not know if their place of employment had an "At Will" policy. Sixty-five percent (133) thought that by signing an arbitration agreement, they had given up their right to sue in an employment dispute, and 56% (103) felt that arbitration forces them to give up valuable legal rights.

However, 37% (76) believed that if they were not satisfied with an arbitration ruling, they could use a court of law. Seventy-three percent (148) of respondents felt that a company requiring employees to agree to arbitration does so to promote its own interest without concern for the employee. Sixty-five percent (132) believed that their interests were not protected by arbitration, and 51% (103) believed that arbitrators favor employers. Forty-three percent (88) felt that they understood arbitration, but 45% (93) were unsure how arbitration would affect them. Fifty-five percent (113) of the respondents would prefer to work for a company that did not require mandatory arbitration and 28% would not seek a long-term employment relationship with a company requiring the contract.

When asked if they would expect companies that require mandatory arbitration to have above average salaries and benefit packages, 42% (85) agreed. Eighty-one percent believe that companies should clearly indicate the mandatory arbitration requirement on employment applications. Only 13% of the sample indicated that their employers had informed them of this policy. Forty-three percent believe mandatory arbitration to be legal. Sixty-six percent believe that they give up their right to sue when they sign an arbitration agreement. However, 38% of the same sample erroneously believes that they still have recourse if they are not satisfied with the arbitration ruling, indicating a lack of understanding of arbitration agreements in general.

Seventy-three percent of those surveyed believe that companies require agreements to arbitrate because they have been sued in the past, while 53% feel companies use arbitration to promote their own interest without concern for the employee.

Forty-six percent believe that arbitration will result in a smaller amount of money recovered by the employee, and 74% believe they would have a better chance to win a dispute against an employer if the claim was heard by a Judge and jury. Thirty-one percent believe that arbitrators are highly qualified, but 51% believe that those arbitrators favor the employer over the employee.

Fifty-seven percent had complaint resolution systems in their work place, while 23% did not have grievance systems. Twenty percent of those surveyed did not know if their employer had a complaint resolution system in place.

### Discussion

Based on the statistics reported above, over half of the participants appeared to understand the purpose of mandatory employment arbitration, but did not necessarily understand how it would impact them. Roughly the same percent believed the company forces them to sign away their legal rights to sue and the company does this out of their own self interest. Most would prefer not to work for a company with this policy in place. Employees distrust a company requiring mandatory arbitration, resulting in employees looking for other job opportunities. This leaves an un-

certain workforce which believes the company is pursuing this policy for its own advantages. The respondents felt that they would suffer in monetary awards through arbitration. Most interestingly, 37% believed that if they were not satisfied with an arbitration ruling, they could use a court of law. Employers should be aware of the negative impressions held towards arbitration.

### LIMITATIONS AND DIRECTION FOR FUTURE RESEARCH

Several limitations associated with this study exist that suggest restraint should be used when considering the findings and implications. The study did use a convenience sample composed of students at one university. The results generated may not be reflective of the population as a whole. Future research would be of interest on the conflict of mandatory arbitration and morale in the workplace. Another issue is what policies would be best to ensure that employees' perspectives are taken into account when drafting or revising employment arbitration agreements.

### CONCLUSIONS

If the adage that employees are a company's greatest asset rings true, then a company should aspire to have an employment relationship built on mutual trust. A comprehensive orientation containing a thorough explanation of all policies should be offered. However, in today's litigious society, a company's greatest asset can also be their greatest potential liability. It is necessary for employers to be prudent and avail themselves of reasonable legal protection under the law. Seeking this protection from litigation can be a win-win for both the employer and employee if employers will encourage post-dispute resolution or jury waivers and not require mandatory arbitration. The passage of the Civil Rights Act encourages arbitration, as long as it is knowing and voluntary. Minorities and women, usually the primary victims of racial and sexual discrimination and harassment, must not be forced to choose between their civil rights and a job. The path an employer chooses for dispute resolution depends on their own legal history and political climate. The question of which brings the best resolution for an employer will

always be connected to the cultural ethics that a company chooses to follow.

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# INTEGRATION OF THE MIDDLE EAST AND NORTH AFRICAN STOCK MARKETS WITH GLOBAL STOCK MARKETS

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## ABSTRACT

*This study determines the global integration of ten Middle Eastern and North African (MENA) equity markets with global markets of France, Germany, UK and the US. VAR analysis is used on monthly data between September 2005 and February 2011, to determine whether there is dependency of MENA equity market returns on the returns of the global equity markets. It is found that most MENA markets are impacted by global markets. This interdependence suggests financial integration of financial markets of MENA region with global financial markets amid increasing globalization, deregulation and advances in information technology.*

## INTRODUCTION

Awakened by the recent financial crises of 2008, an understanding of contemporaneous linkages of equity market returns have become a priority for practitioners and academicians. A series of eventful financial and political reforms have put the financial markets of Middle East and North Africa (MENA) region on the “investable” horizon. Significant structural changes during the past decade have opened most MENA equity markets to foreign investment. Capital in-flows in the region have increased rapidly as investors include MENA region equities for potential portfolio diversification benefits. These international investments have been crucial towards the economic growth of the entire MENA region. Most MENA nations were growth stagnant in a bipolar world created by the cold war (Aluwaisheg, 2004).

There was always difference of opinion among the MENA region nations, often resulting in conflicts. However, the creation of the Gulf Cooperation Council in 1981 (UAE, Bahrain, Saudi Arabia, Oman, Qatar, and Kuwait) and of the Maghreb alliance in 1989 (Morocco, Algeria, Tunisia, Libya, and Mauritania) along with the signing of the Euro-Mediterranean partnership in 1995, initiated profound political, social and economic revival of MENA region. The ideological shift has led to the creation of private firms necessitating funding and so issuing securities to raise funds.

Due to these factors, there is now considerable interest in equity markets of MENA nations among practitioners and practitioners. To investigate the underlying characteristics of MENA markets, researchers have focused on topics such as investigating the extent of economic and fi-

nancial integration among MENA countries (Hammoudeh et al. 2009; Zarour & Siriopoulos, 2008; Darrat and Pennathur, 2002), regional stock market efficiency (Abdmoulah, 2009; Civelek, 1991; El-Erian and Kumar, 1995; Smith 2004; Lagoarde-Segot and Lucey 2005), and the issue of volatility spillover among domestic sectors (Hammoudeh, et al., 2009), from US equity market to markets of Saudi Arabia and Bahrain (Abraham and Sayyed, 2005; Abdullah and Najand, 2009), and among oil, US and Gulf equity markets (Malik and Hammoudeh, 2007, Chang et al., 2010). There are also studies to understand risk component of investing in MENA markets (Girad and Omran, 2007).

However, an area of research that has received little attention in the literature is whether the equity markets of MENA regions exhibit integration with global equity markets. Besides the regional issues, there clearly exist the typical problems in individual MENA equity markets which are typical of newly formed or emerging equity markets. These issues relate to the size of the market, nature of its fragmentation and segmentation, aggressive growth of listed indices, level of concentration of capital (i.e. in hand of few dominant), regulation, liquidity, and a general unwillingness of individuals to invest in these markets for social, behavioral or risk averseness reasons (Derrabi and Leseure, 2005). Important disparities may also exist at the microstructure and the activity level (Bekaert and Harvey, 2002). Examining the relative importance of the underexplored regions allows us to better understand the dynamics of stock market undergoing significant reforms and regulatory changes such as these nations of the MENA region.

This paper extends the empirical evidence by investigating the nature of interdependence among the MENA equity market returns and the global market returns. The diversification argument will revolve around the correlation between the returns earned in the developed nation(s) equity markets and the returns on the MENA markets. Understanding the

co-movement dynamics of these less mature and emerging markets with the global markets in different market scenarios is important for understanding of portfolio management functions. These smaller markets may offer potential for

diversification for international portfolio that is not available in other more developed markets.

The rest of the paper is organized as follows. Section 2 reports a commentary on MENA region as an investment destination. Section 3 describes the data. Section 4 details the econometric methodology used, whereas Section 5 reports the empirical findings and the results. Finally, Section 6 concludes.

## LITERATURE REVIEW

When talking about the MENA region, it is easy to distinguish economies based on their natural resources. There are the oil-rich nations such as Saudi Arabia, Kuwait, Iraq and Libya, and then there are the oil-poor such as Egypt, Syria and Jordan. Presence of oil contributes significantly to the financial wealth of these nations (Bontis, 2004). Revenue generated from sale of oil has helped governments of these oil rich nations to invest in non-oil based sectors, infrastructure and education. This has led to demand for sophisticated and high quality products, and skilled manpower leading to growth of non-oil related industry in the MENA region (Zineldin, 1998). Similarly, nations in MENA region lacking oil resources developed strategies to establish their economies based on service and manufacturing industry. With a surge in non-oil based sector, the MENA economies are fast catching up and rapidly participating in economic globalization (Hirata et al., 2004). A hospitable business environment in MENA region is also encouraging domestic and foreign investors to invest in regional financial markets.

Traditionally, capital markets in the MENA region were less important in channeling financial funds between savers and borrowers (Neaime, 2006). A fairly developed system of commercial banking had always taken the lead in channelizing the funds in MENA region. However, the national stock markets of MENA region are emerging as major channel for cross-border mobility of capital and FDI. This has been largely possible owing to the process of liberalization, financial and administrative reforms, and infrastructure development to promote trade between the MENA countries and rest of the world. However, the pace of reforms, and level of FDI

has varied between MENA nations. For example, Lebanon, Algeria, Kuwait, and Libya have had long periods of political instability during 1980s and 1990s precluding and discouraging regional and foreign investment (Eid and Paua, 2002). Moreover, there were allowable foreign ownership restrictions, as well as a slow pace of reforms and privatization, given the prevalence of government ownership in most MENA countries. This has further created disparity of foreign investments among MENA nations. According to UNDP (2002), more than 80 percent of FDI stock in MENA region is concentrated in five countries: Saudi Arabia, Egypt, Tunisia, Bahrain, and Morocco.

With the shift from an oil based economy, there has been a general shift in leverage preference of local governments to promote equity based financing for projects and companies in MENA region. Attempts have been made to enhance regional competitiveness and international investment. To reduce the level of risk attached to trading and investment activity regional economic collaboration (Hanson, 1998) has been promoted. The Gulf Cooperation Council in 1981 (UAE, Bahrain, Saudi Arabia, Oman, Qatar, and Kuwait) and the Maghreb alliance in 1989 (Morocco, Algeria, Tunisia, Libya, and Mauritania) have been created in the MENA region. Economic integration encourages efficiency allocation of production factors and a more effective division of labor (Wu and Chen, 2004). It also reduces uncertainties associated with local governance and the planning system that would otherwise deter potential investors (Phelps and Jones, 2000). Like the European Union, the GCC, having achieved convergence on several macroeconomic indicators, are paving the groundwork for formation of a monetary union (Espinoza et al. 2010).

## DATA AND DESCRIPTIVE STATISTICS

For this study, monthly data between September 2005 and February 2011 were obtained. Global market returns from France, Germany, UK and the US were used as foreign market proxy. To assess the global integration of the MENA markets, data for 10 major MENA markets were included. These are the markets of Bahrain, Egypt, Jordan, Kuwait, Lebanon, Morocco, Oman, Qatar, Tu-

nisia and the UAE. The data is sourced from the MSCI Barra database. To eliminate local currency effect, all performance indices were in US dollar terms. The continuously compounded returns for all indices were computed.

Table 1 reports the descriptive statistics for variables. From the table one can observe that the mean returns for the markets of Egypt, Kuwait, Lebanon, Morocco, Tunisia, UK, US, France, and Germany are positive, whereas for all other markets is negative. The positive average returns may be attributed to the overall growth in the markets during the sample period. Further, all maximums are positive and minimums are negative. One can also note that Bahrain, Egypt, Kuwait, Lebanon, Qatar and the U.A.E reports a higher Standard Deviation than the global major markets in the sample. This is indicative of relatively higher volatility in the returns of the sample MENA market compared to the returns of developed markets. Largely the presence of negative Skewness indicates a distribution with an asymmetric tail extending towards more negative values. Only Lebanon, Morocco and Tunisia reported a positive Skewness. A large Kurtosis figure ( $>3$ ) is also observed, indicating a relatively peaked distribution. Only Kuwait has Kurtosis below 3. Presence of these observed Skewness and Kurtosis characteristics further motivate the use of time-series methodology for any result inference.

Table 2 reports the coefficient of correlation among the variables of interest. The level of correlations between sample MENA market returns and developed market returns is moderate to low. These figures seem consistent with our discussion that there exist inherent comparative differences between the MENA markets and developed markets economic environment. The moderate to low correlations among these variables suggest that each variable represents unique expectations of their individual market participants. However, we still think it is necessary to investigate the nature of interdependence between MENA market returns and developed market returns.

## ECONOMETRIC METHODOLOGY

Since the sample of MENA market returns and corresponding global market returns may act as

TABLE 1 DESCRIPTIVE STATISTICS							
	Mean	Median	Max	Min	Std. Dev.	Skewness	Kurtosis
BAH (Bahrain)	-0.0180	-0.0118	0.1746	-0.2835	0.0805	-0.5323	4.8835
EGY (Egypt)	0.0064	0.0146	0.2654	-0.3262	0.1051	-0.4801	3.7562
JOR (Jordan)	-0.0125	-0.0064	0.1536	-0.2317	0.0637	-0.7525	4.9433
KUW (Kuwait)	0.0006	0.0065	0.2102	-0.1904	0.0822	-0.1800	2.9307
LEB (Lebanon)	0.0096	0.0045	0.4769	-0.2260	0.1120	1.2479	7.3706
MOR (Morocco)	0.0158	0.0186	0.2393	-0.1555	0.0702	0.0706	3.9387
OMA (Oman)	-0.0019	0.0090	0.1343	-0.2986	0.0705	-1.2323	6.5020
QAT (Qatar)	-0.0026	0.0046	0.2332	-0.2648	0.0997	-0.1977	3.3707
TUN (Tunsia)	0.0093	0.0122	0.2417	-0.1747	0.0615	0.3283	6.0256
UAE (United Arab Emirates)	-0.0201	-0.0209	0.2405	-0.3336	0.1094	-0.0526	3.6839
UK (United Kingdom)	0.0017	0.0072	0.1324	-0.1913	0.0590	-0.5162	4.2403
US (United States)	0.0026	0.0115	0.0943	-0.1725	0.0500	-0.8848	4.2735
FRA (France)	0.0036	0.0086	0.1448	-0.2243	0.0724	-0.6756	3.5766
GER (Germany)	0.0075	0.0151	0.1539	-0.2297	0.0751	-0.7720	3.7631

a system, we choose the VAR model developed by Sims (1980) as an appropriate econometric approach to investigate the postulated relationships, i.e. to understand the nature of relation between returns of developed markets and the returns of MENA equity markets. The VAR was developed to account for problems with intervention and transfer function analysis. This model provides a multivariate framework where changes in particular variable are related to changes in its own lags and to changes in other variables in the system. The VAR treats all variables as jointly endogenous and imposes no a priori restrictions on the structural relationships, if any among variables being analyzed. Because the VAR expresses the dependent variables in terms

of only predetermined lagged variables, the VAR model is a reduced form model. Four separate system(s) comprised of individual global market returns with all sample MENA market returns were specified.

The VAR model can be expressed as:

$$Z(t) = C + \sum_{s=1}^m A(s)Z(t - m) + \varepsilon(t) \tag{1}$$

where, Z(t) is a column vector of variables of interest, C is the deterministic component comprised of a constant, A(s) is a matrix of coefficients, m is the lag length and ε(t) is a vector of random error terms.

TABLE 2 COEFFICIENT OF CORRELATIONS AMONG VARIABLES OF INTEREST																
BAH (Bahrain)	1															
EGY (Egypt)	0.5757***	1														
JOR (Jordan)	0.3745***	0.4345***	1													
KUW (Kuwait)	0.6537***	0.4177***	0.3260***	1												
LEB (Lebanon)	0.3491***	0.3861***	0.2921**	0.1848	1											
MOR (Morocco)	0.4228***	0.4866***	0.2878**	0.3335***	0.3908***	1										
OMA (Oman)	0.5408***	0.5656***	0.4444**	0.5466***	0.3596**	0.3134**	1									
QAT (Qatar)	0.4538**	0.6184***	0.5081***	0.4237**	0.2658**	0.1880	0.6198***	1								
TUN (Tunsia)	0.2670**	0.4225***	0.2793**	0.1979	0.1527	0.3675**	0.3798***	0.1715	1							
UAE (United Arab Emirates)	0.5713***	0.5615***	0.5960***	0.5062***	0.2604**	0.2505**	0.6738***	0.6757***	0.2933**	1						
UK (United Kingdom)	0.4058**	0.6095***	0.3976**	0.5017***	0.2649**	0.3896**	0.5628***	0.5622***	0.3915**	0.6112***	1					
US (United States)	0.4279***	0.5650***	0.3960**	0.5335***	0.2375*	0.3172**	0.5013***	0.5516***	0.3798**	0.5947***	0.8822***	1				
FRA (France)	0.3742**	0.5972***	0.3545**	0.4058**	0.2589**	0.4340**	0.4745**	0.5587***	0.3856**	0.5605***	0.9111***	0.8854***	1			
GER (Germany)	0.4251**	0.6397***	0.4153**	0.4172**	0.2821**	0.4154**	0.4699**	0.6062***	0.3871**	0.5807***	0.8792***	0.8990***	0.9644***	1		
Note: *, **, *** denote significance at 10%, 5% and 1% respectively																

The VAR specification allows the researchers to do procedural simulations and integrate Monte Carlo methods to obtain confidence bands around the point estimates (Doan, 1988). The likely response of one variable to a one time unitary shock in another variable can be captured by impulse response functions. As such they represent the behavior of the series in response to pure shocks while keeping the effect of other variables constant. Since impulse responses are highly non-linear functions of the estimated parameters, confidence bands are constructed around the mean response. Responses are considered statistically significant at the 95% confidence level when the upper and lower bands carry the same sign.

It is well known theorem that traditional orthogonalized forecast error variance decomposition results based on the widely used Choleski factorization of VAR innovations may be sensitive to variable ordering (Pesaran and Shin, 1996; Koop, Pesaran and Potter, 1996; Pesaran and Shin, 1998). To alleviate such potential problems of misspecifications, the recently developed generalized impulses technique as described by Pesaran and Shin (1998) we employed in which an orthogonal set of innovations does not depend on the VAR ordering.

ESTIMATION RESULTS

Before proceeding with the main results, the time series properties of each variable were checked by performing unit root tests using Augmented Dickey Fuller (ADF) test (Dickey and Fuller, 1979, 1981) and Phillips-Perron test (Phillips and Perron, 1998). Based on the consistent and asymptotically efficient AIC and SIC criteria (Diebold, 2003) and considering the loss in degrees of freedom, the appropriate number of lags is determined to be two. In the case of the ADF test and Phillips-Perron test, the null hypothesis of non-stationarity is rejected. The inclusion of drift/trend terms in the ADF test equations does not change these results.

By means of vector auto regression on monthly data (between September 2005 and February 2011) of relevant market index returns we achieve important results in this paper. We find evidence of interdependence of most MENA

markets to world market albeit with varying degree. This is consistent with the contention that individual financial markets of the MENA region exhibit their domestic business conditions. This indicates an existence of a limited opportunity for international portfolio diversification in the MENA region. However, this condition may change with the ongoing political and financial reforms and increase in foreign direct investment from within and outside the region. The findings from this paper have important implications for investors, managers, policymakers, and scholars interested in the equity markets of MENA markets or newly maturing equity markets in general. Table 3 reports the unit root test for variables of interest.

The generalized impulse responses from the VAR model to trace the response of one variable to a one-standard-deviation shock to another variable in the system were constructed. The Monte Carlo methods were used to construct confidence bands around the mean response was also employed. When the upper and lower bounds carry the same sign, the responses become statistically significant at the 95% confidence level.

To analyze the effects developed market returns on sample MENA market returns of Bahrain (BAH), Egypt (EGY), Jordan (JOR), Kuwait (KUW), Lebanon (LEB), Morocco (MOR), Oman (OMA), Qatar (QTR), Tunisia (TUN), and the United Arab Emirates (UAE) we categorize the response results based on sample global reference market returns, i.e. returns of France (FRA), Germany (GER), UK (UK), and the US (US). Based on AIC and SIC, we analyze the VAR models with two lags.

1 Sims (1980) suggests that autoregressive systems like these are difficult to describe succinctly. Especially, it is difficult to make sense of them by examining the coefficients in the regression equations themselves. Likewise, Sims (1980) and Enders (2003) show that the *t*-tests on individual coefficients are not very reliable guides and therefore do not uncover the important interrelationships among the variables. Sims (1980) recommends focusing on the system's response to typical random shocks i.e., IRFs. Given these theories, we analyze the relevant IRFs and do not place much emphasis on the estimated coefficients of the VAR models.

TABLE 3  
UNIT ROOT RESULTS

	ADF		PP	
	level	1st Diff	level	1st Diff
BAH (Bahrain)	-4.568	-9.705	-4.601	-15.238
EGY (Egypt)	-6.354	-9.910	-6.326	-27.052
JOR (Jordan)	-6.283	-11.255	-6.284	-21.147
KUW (Kuwait)	-5.393	-12.133	-5.393	-17.199
LEB (Lebanon)	-6.256	-11.737	-6.256	-31.417
MOR (Morocco)	-7.619	-15.862	-7.711	-31.805
OMA (Oman)	-4.657	-11.974	-4.740	-12.754
QAT (Qatar)	-7.310	-10.471	-7.398	-34.749
TUN (Tunsia)	-6.960	-8.520	-6.938	-36.700
UAE (United Arab Emirates)	-5.327	-11.482	-5.327	-21.560
FRA (France)	-6.540	-11.265	-6.485	-30.983
GER (Germany)	-6.470	-8.592	-6.416	-28.383
UK (United Kingdom)	-5.381	-9.410	-5.395	-23.992
US (United States)	-5.842	-8.312	-5.879	-25.171
1% Critical Value		-3.537		-3.537
5% Critical Value		-2.908		-2.908
10% Critical Value		-2.591		-2.591

Figure 1 plots the impulse responses of the MENA market returns to one time standard deviation increase in market returns of France (FRA). The response of LEB, MOR, OMA, and TUN are positive and significant for first period and then becomes insignificant. Response of EGY, JOR, and UAE are positive and significant for two periods and then becomes insignificant. BAH has a delayed response, becoming positive and significant in the second period and then becomes insignificant. Delayed response is often due to market participant analyzing news com-

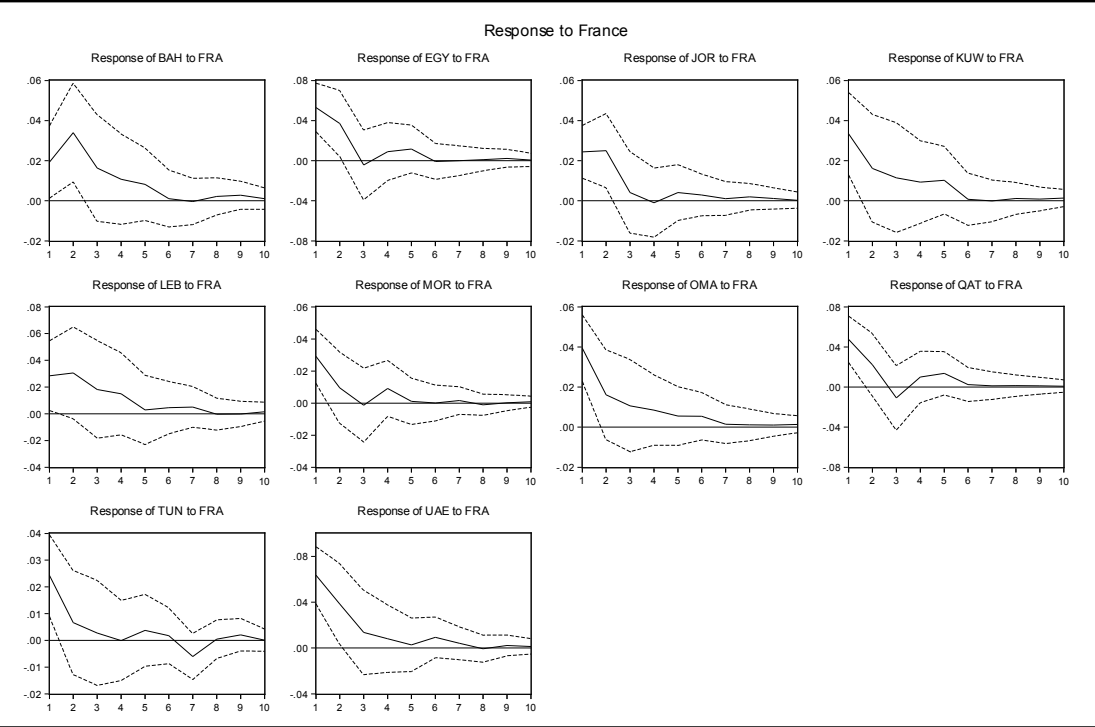
ing in the market before reacting on it. The results suggest a general trend of sample MENA equity market returns being affected by the market returns of France.

CONCLUSION AND MANAGERIAL IMPLICATIONS

Political and financial reforms, globalization, and advances in information technology have dramatically changed the structure of MENA region financial markets. Therefore, in an integrat-

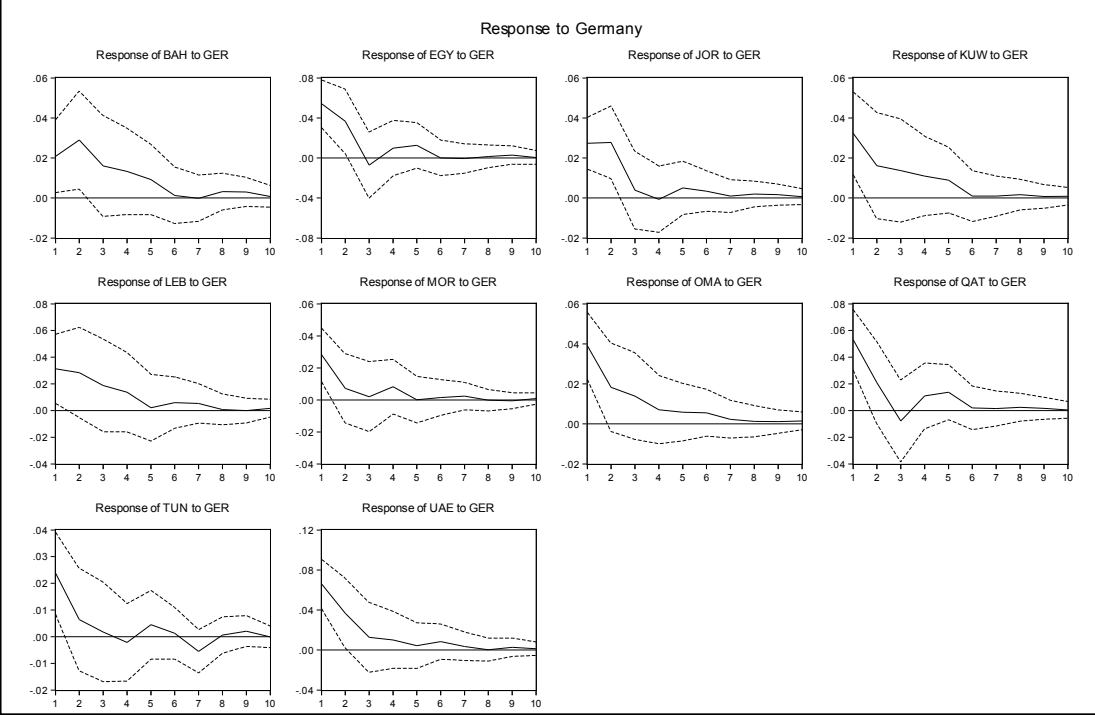
**FIGURE 1**  
**IMPULSE RESPONSE TO FRANCE**

Impulse response of MENA market returns to France market returns. MENA markets of Bahrain (BAH), Egypt (Egypt), Jordan (JOR), Kuwait (KUW), Lebanon (LEB), Morocco (MOR), Oman (OMA), Qatar (QTR), Tunisia (TUN), United Arab Emirates (UAE). Global reference market is France (FRA).



**FIGURE 2**  
**IMPULSE RESPONSE TO GERMANY**

Impulse response of MENA market returns to Germany market returns. MENA markets of Bahrain (BAH), Egypt (Egypt), Jordan (JOR), Kuwait (KUW), Lebanon (LEB), Morocco (MOR), Oman (OMA), Qatar (QTR), Tunisia (TUN), United Arab Emirates (UAE). Global reference market is Germany (GER).



ed market investors can share their consumption risk efficiently which in turn decreases the costs of capital firms, hereby stimulating investment and economic growth. In this study, VAR model was used to examine and understand dependence of returns of MENA equity markets on major world equity market returns. Results indicate that market returns of all sample MENA equity markets exhibit a varying degree of positive dependence on market returns of France, Germany, and the UK. For the case of US, all markets except those of Lebanon and Morocco exhibit positive dependence.

Overall, there is a mixed evidence of global integration of equity markets of MENA region. This is consistent with the contention that individual financial markets of the MENA region exhibit primarily their domestic business conditions. Hence there still exists a limited opportu-

nity for international portfolio diversification in the equity markets of MENA region which may have been overlooked by international investors. However, this condition may change with the ongoing political and financial reforms and increase in foreign direct investment from within and outside the region. The findings from this paper have important implications for investors, managers, policymakers, and scholars interested in the equity markets of MENA countries.

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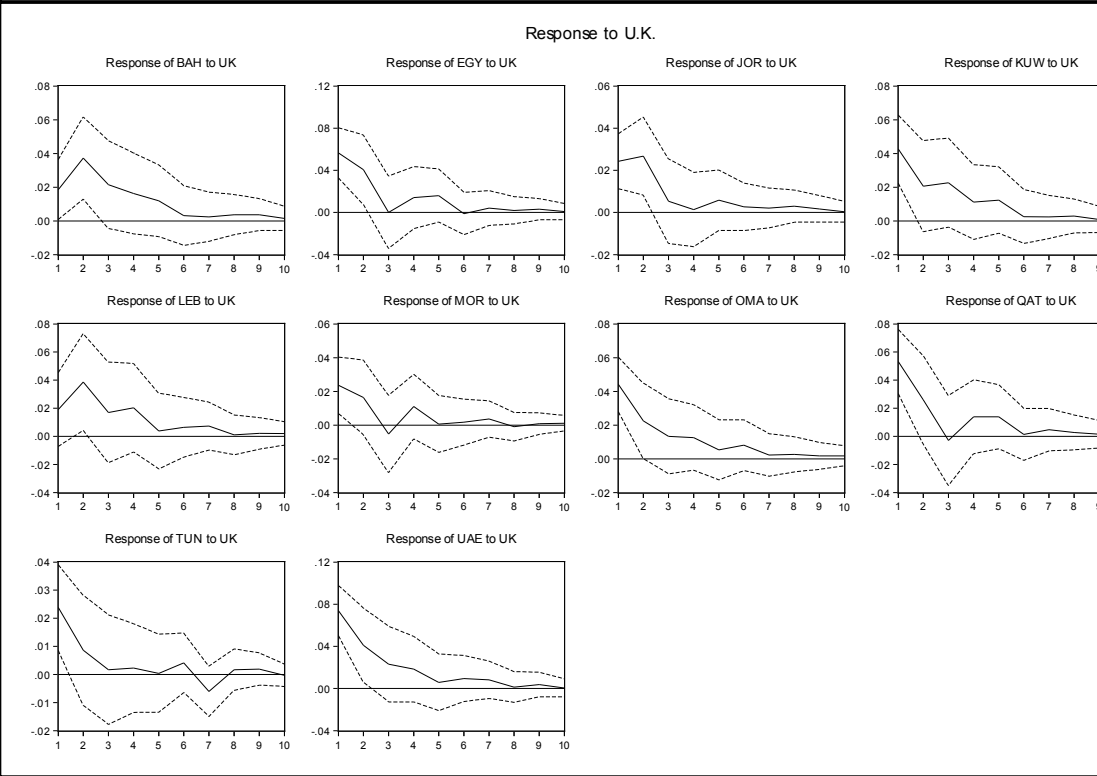
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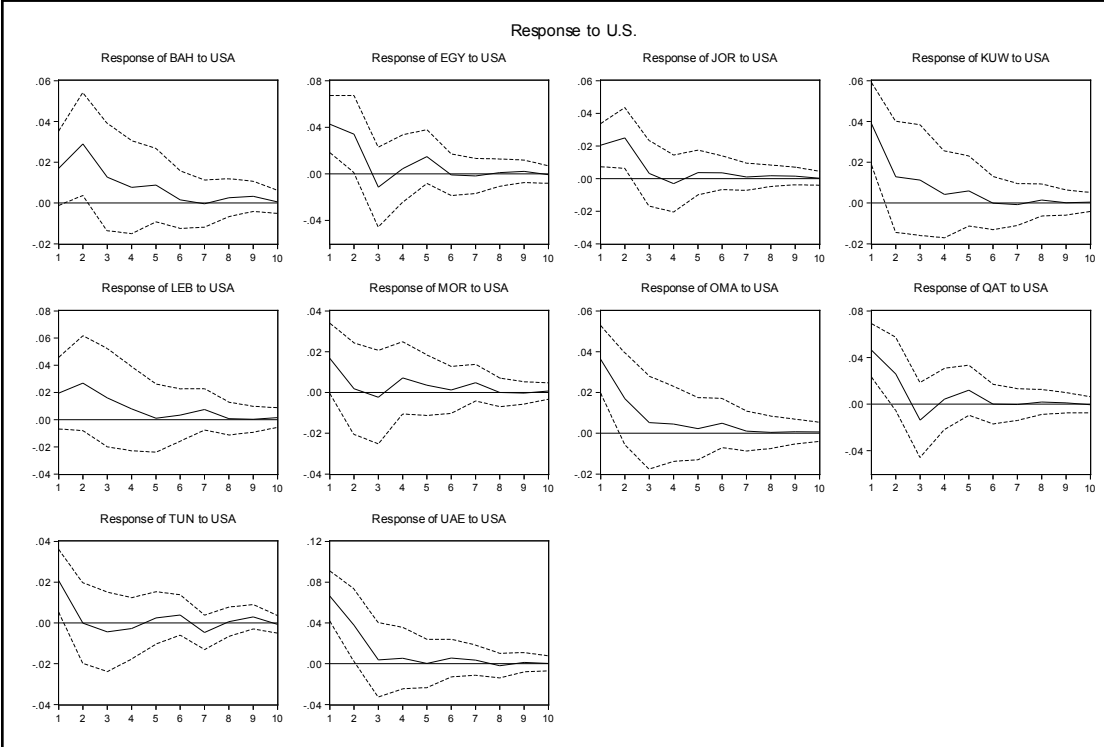
**FIGURE 3**  
**IMPULSE RESPONSE TO UK**

Impulse response of MENA market returns to France market returns. In table are MENA markets of Bahrain (BAH), Egypt (Egypt), Jordan (JOR), Kuwait (KUW), Lebanon (LEB), Morocco (MOR), Oman (OMA), Qatar (QTR), Tunisia (TUN), United Arab Emirates (UAE). Global reference market is U.K. (UK).



**FIGURE 4**  
**IMPULSE RESPONSE TO US**

Impulse response of MENA market returns to France market returns. MENA markets of Bahrain (BAH), Egypt (Egypt), Jordan (JOR), Kuwait (KUW), Lebanon (LEB), Morocco (MOR), Oman (OMA), Qatar (QTR), Tunisia (TUN), United Arab Emirates (UAE). Global reference market is US (US).



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# THE ORGANIZATIONAL RELATIONSHIP BETWEEN COMPLIANCE AND INFORMATION SECURITY<sup>1</sup>

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## ABSTRACT

*Organizations continually experience losses, financial and otherwise, due to non-compliant behaviour (Stanton et al., 2005). As managers must balance the task of motivating employees to comply, without imposing counter-productive forms of punishment for non-compliant behaviour, executing leadership in agreement with IT security policy and compliance is emerging as a challenge (D'Arcy et al., 2009).*

*Information system security is an essential feature in most organizations today and compliance is one method of gaining visibility for processes and controls that ensure digital security, the organizational aspect of which being explicit in the Information Security Plan (ISP). The purpose of this paper is to investigate the perceptions and beliefs held by employees and managers regarding compliance with their company's ISP, by means of the identification of a set of constructs based on workplace culture, personal attitudes and the players (actors) involved. Fifteen variables have been used to build the constructs and this research, an empirical investigation of a set of 7 hypotheses, has been conducted by means of a questionnaire and presents the confirmation of these hypotheses, along with other significant findings, as its conclusions.*

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## INTRODUCTION

Compliance is a conceptual area that focuses on satisfying, at a global level, the requirements of various laws and regulations and, at a local level, mandates and policy frameworks, the majority of which also have the purpose of improving security, including information security. This paper focuses on Compliance in relation to Information Security.

Compliance has a variety of definitions, all pertaining to regulations and laws in force, which also address audit matters in order to assess the implementation of those regulations; i.e. “[compliance is] either a state of being in accordance with established guidelines, specifications or legislation or the process of becoming so” (Techtarget 2010). Those regulations come primarily from legislation and secondly from best practices (Siponen 2005; Schlarman 2007); only at the

latter level can an organization's own specific guidelines be derived from internal practices or experience, whereas legal rules are not negotiable.

Within each organization itself, the Information Security Plan is the major source of regulation, as it comprises both legal requirements and internal policies. As the result of both the exogenous and endogenous drive, organizations create an Information Security Plan (ISP) to provide employees with those guidelines (Whitman et al. 2001).

## BRIEF ABOUT ISS

Information Systems Security (ISS) is the name given to all processes and activities aimed at protecting electronic information from tampering, corruption, theft, and/or unauthorized use or access. The prime objective of ISS is to make information available to its intended users for productive use (Whitman, 2008).

In the early information system years, it was believed that self-sufficiency and adhering to the best practices in ISS would suffice for information protection (Siponen and Vance, 2010). Over time, information sensitive sectors like health-care, finance, and education developed policies to provide a systematic approach to the ISS process (Dhillon, 1997; Thomson and von Solms, 1998; Siponen, 2005).

Some research shows that increased security breaches during the last decade forced regulators to realize that conventional methods of securing digital information may no longer be applicable. This increase initiated the need for successful compliance programs that are proactive in avoiding the risks of security breaches (Doherty and Fulford, 2006), the incidence of which has been rising (Gordon et al., 2006; Ponemon, 2009a).

Other authors focus on the dual nature of Information Security (Spagnoletti and Resca, 2008) and consequently an organization’s overall security strategy must integrate a sound compliance program that covers all departments and departmental activities (Neumann, 1999).

Decentralized approaches have been difficult to implement and monitor (Anderson, 2008) thus research findings show the need for a unified approach, where information trickles down to various levels of the organization, which is easy to monitor and whose benefits are quantifiable right from the beginning of implementation (Stallings, 2008, Bodungen et al., 2008).

OBJECTIVES AND SCOPE

The organizational relationship between Compliance rules (exogenous) and internal policies for ISP (endogenous) can be observed as a three-fold conceptual definition: Workplace Culture, Personal Attitudes and Actors (Hu et al., 2007; Dinev and Hu, 2007; Elffers et al., 2003, Boss et al., 2009; Cavusoglu et al., 2004).

This paper aims to explore the impact of the organizational issues of compliance on an organization’s existing information security policy on the basis of this threefold approach.

Regardless of where an organization is on the compliance/non-compliance spectrum (Elffers, 2003), the framework discussed in this paper has

the potential of revealing those cracks, through which many important aspects of compliance may fall, the nature of non-compliant employees (Bulgurcu et al., 2010), and those aspects that jeopardize security (Melville et al., 2003).

The revelation of those aspects can help scholars with a stream of research findings and can also help managers put the organization on a track to compliance and a more desirable state of information systems security (Warkentin and Willison, 2009).

LITERATURE REVIEW

Extant literature suggests that most threats to an organization’s information security arise from the careless and negligent attitudes and behaviour of employees (Siponen et al., 2009; Siponen and Vance, 2010; Dhillon, 2005; Im and Baskerville, 2005). When evaluating the behaviour of employees who choose either to comply or not to comply with information security policies and procedures, there are several pertinent issues to consider (Herath and Rao, 2009; Stanton, 2005).

According to Poneman’s (2009) study of security policies and employee compliance behaviour, most of the attrition in complying with security policies occurs when the organization fails to provide adequate training to employees. This is a major drawback when companies invest enormous amounts of money in planning policies and deploying infrastructure and technologies but fail to train the human asset that actually executes the organization’s plans and strategies through employee expertise and knowledge.

An important issue is about that personal attitude that denotes an individual employee’s motivation towards complying with security policy (Staton et al., 2005; Myrty et al., 2009). These attitudes are also determined by his/her positive and/or negative feelings about the individual and organizational consequences of non-compliance.

If an employee is motivated and possesses the willingness and ability to carry out specific compliance behaviour, the chances are greater that he/she will actually execute that behaviour (Ajzen and Fishbein, 1980; Ajzen, 1991; Mathieson et al., 2001; Ajzen and Albarracin, 2007; Fishbein, 2007).

SUMMARY OF PREVIOUS FINDINGS AND CAUSES WITH RESPECT TO EXISTING LITERATURE		
Finding	Causes	Authors
IS threats	IS threats	Siponen et al., 2009; Siponen and Vance, 2010; Dhillon, 2005; Im and Baskerville, 2005
Non compliance	Behaviors/ employees	Herath and Rao, 2009; Stanton, 2005
Attrition in complying with security policies	Organization fails to provide adequate training	Poneman, 2009
Motivation for security policy	Personal attitude	Staton et al., 2005; Myrty et al., 2009
Feelings about consequences of non-compliance	Motivation	Ajzen and Fishbein, 1980; Ajzen, 1991; Mathieson et al., 2001; Ajzen and Albarracin, 2007; Fishbein, 2007
Risk of security breaches	Negligent attitude	Lee and Lee, 2002; Boss and Kirsch, 2007
Attitudes are the result of favourable or unfavourable perceptions	Employee perceptions about the ISP	West, 2008, Warkentin and Willison, 2009
Policies being ineffective	No perception of actual plans	Spagnoletti et al., 2011
Ineffective policies and breaches	Employees overlook the security norms	Ponemon, 2009; Cavusoglu et al. 2004a
Organizations fail about security compliance as an enterprise wide	Policies and regulations are too complex to be understood	Staton et al., 2005
Management cannot enforce policies	Employees find ways to avoid penalties	D’Arcy, 2009; Dhillon, 1997

Delving a bit deeper into the threats arising from non-compliant behaviour, recent research suggests that it is mostly the negligent attitude of employees that places the organization in serious risk of security breaches (Lee and Lee, 2002; Boss and Kirsch, 2007). These attitudes are the result of favourable or unfavourable employee perceptions about ISP as a whole; favourable perceptions about ISP, have proven to lead to fewer instances of non-compliance (West, 2008, Warkentin and Willison, 2009).

A further relevant issue arises from policies that are ineffective, i.e. when organizations plan and record strategies on paper with no serious thought about their actual execution (Spagnoletti et al., 2011). This emerged as one reason why employees overlook the security norms and perform carelessly at times, leading to ineffec-

tive policies and breaches in compliance that go unreported (Ponemon, 2009; Cavusoglu et al. 2004a).

Other authors state that organizations fall short of making security compliance an Enterprise-wide campaign because rules, policies, and regulations are too complex to be understood by employees (Staton et al., 2005). Organizations often fail to enforce policies to protect information systems strictly enough and are much too lenient in executing and then governing the policies with which employees, who have by now become lax, must comply, thus adding to inefficiency. Employees often find ways to avoid penalties or punishment because policies are not stringent enough and management, therefore, cannot enforce them (D’Arcy, 2009; Dhillon, 1997).

It has been argued that most employees are generally unaware that policies pertaining to security and compliance within the organization even exist. (Boss et al., 2009; Bodungen, 2008). This failure to communicate policies to every channel of the organization at the outset constitutes an additional major hurdle for achieving information security capabilities through compliance (Spagnoletti et al.,2011).

For example, the U.S. Securities and Exchange Commission (SEC) failed to resolve twelve of the twenty information security weaknesses previously reported by the United States Government Accountability Office audit for the year 2008 (GAO, 2008). Despite the obvious impact of information security on the stability of the World's securities market and pressure from government and banks, if such a vital body as the SEC failed to implement its Information Security Program fully (ivi, pages 12–14), how can any other organization even imagine it will succeed in fully implementing ISPs?

THE RESEARCH QUESTIONS

Interesting findings about Compliance and ISP show that what plays a fundamental role is the perception of the “sense of security” (Anderson, 2009). This suggests that perception and personal reflections are far more important than actual levels of technical implementation.

Accordingly, the investigation of this research shifts from technical issues to Compliance behaviour (Ajzen, 1991), in order to understand the aspects pertaining the employees’ perception of security and ISP (Åhlfeldt and Spagnoletti, 2007) and therefore its impact.

In the attempt to answer hidden and non-salient facets of Compliance and ISP (Ranbhotam and Mitra 2009), a series of four general Research Questions (R.Q.) guide the remainder of the discussion:

- 1. Is Compliance perceived as an essential component of organizational culture?
- 2. Is personal attitude playing a role in order to achieve Compliance?

- 3. What is the perception about the organizational actors who should enforce Compliance towards ISP?
- 4. Is there a difference between the points of view of employees and managers?

To be able to answer these R.Q.s we decided to take into account the perception of employees and managers about Compliance and ISP along with the personal ideas about what Compliance is about and who should enforce Compliance and ISP.

This decision about the R.Q.s is consistent with previous findings of existing literature and robust theoretical frameworks (Fishbein and Ajzen, 1975; Ajzen and Fishbein 1980; Ajzen and Albarracin, 2007; Myyry et al., 2009; Straub, 1998; West, 2008). A set of 7 hypothesis were built in order to respond to R.Q.s.

RESEARCH MODEL AND HYPOTHESIS

As discussed earlier, organizational aspects of Compliance with ISP consist of distinguishable dimensions of culture, attitudes and actors. The proposed research model is derived from various models by Ajzen, Fishbein, Siponen and Baskerville (see table 1).

To answer to the four R.Qs. mentioned above, three constructs were identified as instruments to use in order to guide the analytical results of the empirical investigation: Workplace Culture; Personal Attitude; Actors.

TABLE 1 CONSTRUCTS AND SOURCES	
Construct	Sources
Workplace Culture	Boss and Kirsch, 2007; Boss et al., 2009; D’Arcy et al. 2009; Fishbein et al., 2007;
Attitude	Fishbein and Ajzen, 1975, Ajzen and Fishbein, 1980, Ajzen, 1991; Ajzen and Albarracin, 2007; Herat and Rao, 2009; Papadaki, 2010;
Actor	Bulgurcu et al. 2010; Dinev and Hu, 2007; Freeman, 2007; Im and Baskerville, 2005; Myyry et al., 2009; Siponen and Vance, 2010; Siponen et al., 2009.

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Construct WPC

From a socio-technical standpoint, the workplace culture (WPC) was investigated according to aspects related to the employees’ belief that information security is desirable and the perception that Compliance can enforce security. If security is the desirable goal and Compliance is perceived throughout the organisation as the tool to achieve the desired goal, this could prove to be a positive motivation within workplace culture.

The construct also accounts for the perception of punishment for non-compliance and the perception of IS threats as the antecedents for Compliance (Dhillon and Beckhouse, 2001). The construct serves also to verify whether Compliance is seen as a rewarded and organization-wide cultural force to be pursued by everyone (Boss and Kirsch, 2007). Literature has so far demonstrated the interdependency between beliefs, as antecedent, and behaviour, as consequent (Fishbein, 2007).

Construct ATT

The personal attitudes (ATT) of employees are defined according to the Theory of Planned Behavior (Fishbein and Ajzen, 1975; Ajzen and Fishbein, 1980; Ajzen 1991), which makes the distinction between technological driven aspect and behavioural aspects driven by attitude. IT leadership occurs when, in order to oblige processes to follow certain paths and steps, there is the side effect to make those behaviours compliant with the Information Security Plan (Vardi and Weitz, 2004). This is a major drawback, for instance, of ERP implementation. Attitude driven behaviour is influenced directly by individual beliefs as well as IT constraints. IT leadership is particularly effective when processes are loosely structured and there is a strong need for compliance.

Construct ACT

The Actors (ACT) construct was built in order to understand the perception of those individuals within the organization who are believed to be the most important in the enforcement of Compliance with ISP. Complete understanding of ISP can be difficult to achieve and might vary according to the position of the individual in the organization, i.e. managers and employees. Misunderstanding or ignorance of ISP naturally leads to non-compliance and a more vulnerable information system (Freeman, 2007; Im and Baskerville, 2005). The effect of the behaviour of other actors was also investigated according to the effort required for compliant behaviour and the perception of employees about the conditions implemented to facilitate counter-balancing the reduction in productivity associated with Compliance (Siponen and Vance 2010; Warkentin et al. 2004). Perception, according to the position in the organization of the individual, about who is the actor can also influence behaviour (Siponen et al. 2009).

The following hypothesis were formulated for the empirical investigation:

- H1: Rewards for compliance with the ISP are positively perceived as beneficial.
- H2: There is positive relation between organisational culture and personal attitudes.
- H3: There is an inverse relationship between the org. culture about Compliance and ISP and the perception of Compliance as simply an administrative tasks.
- H4: There is a positive relationship between the perception of managers’ behaviour regarding Compliance and the behavioural isomorphism (convergence) of other employees.
- H5: There is a positive relationship between the organisational role about ISP and compliant behaviour.
- H6: Organisational behaviour of managers and executives are perceived as a driving force influencing others to comply with ISP.

H7: Responses from managers and executives are different from those of the employees.

RELATION BETWEEN HYPOTHESIS AND CONSTRUCTS		
Hypotheses	Pertain to	Construct
H1 and 2	→	WorkPlaceCulture
H3 and 4	→	Attitude
H5, 6 and 7	→	Actors

In order to verify the mentioned hypothesis within the framework of identified constructs, we included a number of control variables related to the characteristics of the answers. In order to account for the impacts of these characteristics on an employee’s intention to comply with the ISP, an initial distinction was made between employees’ and managers’ responses. The variables were the baseline for the construction of the questionnaire.

The basic assumption for the structure of the variables was that the level of perception of an employee as well as his/her organisational position may influence compliant behaviour. This assumption is consistent with widely accepted and established literature (Ajzen and Fishbein, 1980; Ajzen, 1991; Dinev and Hu, 2007; Fishbein and Ajzen, 1975; Herath and Rao, 2009; Siponen et. al., 2010).

The composite grid of variables are summarized in the Table 2.

THE INSTRUMENTS

The proposed research model was tested through the survey method and the data collected. The sample consisted of 213 office employees, managers and executives, who responded via a questionnaire available on web, and the unit of analysis was the individual perception regarding the items of the questionnaire, derived from variables. As Compliance is always a thorny issue and

TABLE 2 VARIABLES	
Variable	Description
V1	the perception of external motivation to abide by rules
V2	the perception of security threats as an influence on behaviour towards Compliance
V3	the personal favour about the importance of Compliance at any organisational level
V4	the knowledge and the perception about the consequences of non-compliant behaviour
V5	the reflection that a reward system for compliant behaviour is appropriate
V6	the personal convincing the IT plays a role in facilitating Compliance
V7	the perception that Compliance is an administrative task
V8	the perception about the influence of managers’ behaviour
V9	the idea that the security-oriented tasks have a positive influence on Compliance
V10	the perception about the influence of the interaction with other employees which adopt a Compliance motivated behaviour
V11	the level of awareness of the Information Security Plan (ISP)
V12	the level of perception of the comprehension of the ISP
V13	the personal favour about the facilitating conditions that encourage compliant behaviour
V14	the perception about the statement that managers follow Compliance better then others
V15	the idea that Directors and Executives should enforce Compliance

TABLE 3 DEMOGRAPHICS		
Occupation	Count	%
Board of Directors/Steering Committee/CEO (1)	80	37.96
CIO/IT Manager/CISO (2)	41	18.98
Business Manager (4)	7	3.24
IT Employee	5	2.31
Employee (Other than IT) (5)	77	36.11
Other (6)	3	1.39
No Answer	0	0.00
Total	213	100.00

any failure to observe legal requirements might entail prosecution, the anonymity of participants in the survey was assured by the lack of any form registration or IP logging.

Of the total of 216 questionnaires compiled, 213 were useable. Incomplete questionnaires were avoided making all questions compulsory in order to finish the questionnaire. The companies and individuals participating in the research were mainly Italian, with a small number of other EU based organisations.

Table 3 summarizes the demographic profile of the participants.

As mentioned above, the instrument was operational and based on previous studies into the beliefs, perceptions and compliant behaviour surrounding the socio-technical view of organisational issues.

The same measurement items used in those studies were applied to or adapted for this research.

The 5 measures of Workplace Culture were derived from Boss (2007), D’Arcy (2009) and Fishbein (2007), i.e. variables V1 → V5.

Personal Attitude was measured mainly from the point of view of Ajzen’s Theory of Planned Behavior (Ajzen, 1991), i.e. variables V6 → V10.

The 5 measurements about Actors are from both Im and Baskerville’s categories (2005), and from Siponen and Vance (2010).

For all measurement items, the 7 point Likert scale was used, with anchors ranging from strongly agree (1) to strongly disagree (7).

ANALYSIS AND RESULTS

All analysis was conducted utilising SPSS software. The 2 tail correlation significance test showed values of 95%, so correlation significance was verified. The internal reliability of significant variables was verified by performing a Cronbach’s  $\alpha$  test, which showed values higher than 0.82. It should be noted that the alpha values might have been influenced by a slight redundancy between the items of the questionnaire, an intentional feature as a number of the variables were control variables. Correlation between significant variables was performed with the correlation index  $p$ .

ANOVA

The analysis of variance was computed on all data sets in order to obtain more accurate empirical evidence of the possible differences between panels. The ANOVA F test gave results regarding the 5 variables that suggested differences. A detailed analysis is given in the appendix.

DISCUSSION AND CONCLUSION

For the purpose of this research, we aimed at investigating the perception and the beliefs surrounding organisational issues such as Work-place Culture, Personal Attitude and those Actors deemed to be responsible for enforcing Compliance with the organization’s ISP. In order to do this and search for evidence of a difference in their relative perception and beliefs, as derived from existent literature, two panels based on employee-type, average employees and managers/executives, were established. As hypothesized, it was found that Workplace Culture has a positive impact on the development of personal Attitude. This suggests that attitude has an antecedent in organisational culture. In line with this finding, evidence to confirm the validity of the hypothesis about the positive effect of external motivation (i.e. punishment) was collected. This finding suggests that the overall validity of external motivation is perceived as important, both by managers and employees. It is also interesting to note that the variable of IS threats as the antecedent for Compliance (V2) turned out to be a valid confirmation. This is primarily because we assume that a specific perception of threat may have differen-

EMPLOYEES														
WPC					ATT					ACT				
V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15
Mean	3.24	3.38	4.08	4	4.14	3.9	3.1	3.09	3.73	3.13	3.16	3.98	4.08	3.14
Median	3	3	3	3	4	3	3	3	3	3	3	3	3	3
Mode	3	3	3	3	3	3	3	3	3	3	3	3	3	3
STD	0.98	1.09	1.53	1.5	1.22	1.18	1.16	1.22	1.17	1.3	0.91	1.56	1.54	1.32

TABLE 6  
BASIC STATISTICS AND CORRELATION ON EMPLOYEES PANEL

MANAGER and EXECUTIVES														
WPC					ATT					ACT				
V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15
Mean	3.32	3.25	3.61	3.55	3.57	3.67	3.3	3.45	3.56	3.32	3.38	3.63	3.62	3.42
Median	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Mode	3	3	3	3	3	3	3	3	3	3	3	3	3	3
STD	0.72	0.7	1.05	1.05	0.91	0.96	0.86	0.95	0.92	0.87	0.83	1.07	1.05	0.92

TABLE 5  
BASIC STATISTICS AND CORRELATION ON MANAGERS AND EXECUTIVES PANEL

ALL SAMPLE														
WPC					ATT					ACT				
V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12	V13	V14	V15
Mean	3.29	3.31	3.81	3.74	3.81	3.77	3.22	3.3	3.63	3.24	3.29	3.77	3.82	3.31
Median	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Mode	3	3	3	3	3	3	3	3	3	3	3	3	3	3
STD	0.83	0.88	1.29	1.28	1.08	1.06	1	1.08	1.04	1.07	0.87	1.31	1.3	1.11

TABLE 4  
BASIC STATISTICS AND CORRELATION ABOUT ALL SAMPLE

TABLE 7 RESULTS OF HYPOTHESIS TEST			
Hypothesis		Instr.	Support
1	Rewards for compliance with the ISP are positively perceived as beneficial	V1-V5	YES
2	Positive relation between organisational culture and personal attitudes	V3-V6/V9	YES
3	Inverse relationship between the org. culture about Compliance and ISP and the perception of Compliance as simply an administrative tasks	V7-V3	YES
4	Positive relationship between the perception of managers' behaviour about Compliance and the behavioural isomorphism of other employees	V10-V14	YES
5	Relationship between the organisational position about ISP and the compliant behaviour	V9-V12	YES
6	Organisational behaviour of managers and executives are perceived as a driving force influencing others to comply with ISP	V8-V15	YES
7	Responses for a managers and executives panel are different from those of the employees' panel	Median, mode ANOVA	NO PARTIAL

positive behaviour towards compliance. Whether this is a mere perception or a justified belief, it is a direct confirmation of hypothesis 5. All employees, managers and executives were positively oriented towards perceiving the driving force towards Compliance to be the duty of Senior Executives, Directors and Managers. This view was shared by both panels. The consequences of this common perception are that compliant behaviour is again related primarily to external drives and only in second place to internal drives, i.e. attitudes. Hypothesis 6 was thus confirmed. The conceptual consequences may suggest that, as organisational culture has proven to be an antecedent for personal attitude, the behaviour of Senior Management and Executives can be identified as the workplace culture. This by-finding offers scope for further investigation, which cannot be carried out using the present data set and instruments. Hypothesis number 7 was only partially confirmed by the results. It turned out that the median and mode of responses were equal. The measured mean and standard deviation do not yield grounds to contradict the evidence of the

median and mode (tables 5 and 6). The ANOVA analysis, on the other hand, shows that for certain variables, 5 in total (V3, V4, V5, V8, V13), there was a significant difference between the two groups (panels). This was confirmed by the significance value of the F test <0,05 (i.e. 95%). There was no difference in responses about managers perceiving the adoption of better complaint behaviours compared with employees. All panels appear to agree on that belief.

LIMITATIONS

Any limitations in this research might be attributable to the type of instruments utilised to measure the perception and beliefs of the panel participants. There was no investigation into the actual levels of implementation of Compliance nor into effective compliant behaviour. This kind of measurement was not possible with the questionnaire method. A third of participants (approx. 37%) were CEOs, Directors and Executives and the perception of Compliance by top-level



management is based mainly on reports and official documents prepared for the Board of Directors which, by Italian law, is solely responsible for Compliance. Whilst these reports can be assumed to be reliable and truthful, at the very best they might not emphasize further action needed and really only highlight what has been already achieved with regard to Compliance. It is possible that the perception of Compliance and ISP held by these managers has been influenced by statements made in official documents. Although previous research has proven that a positive perception of ISP leads to better compliance behaviour (West, 2008; Warkentin and Willson, 2009), this leaves an interesting starting point for more in-depth investigation. Another limitation can be found in the instruments utilised. The correlation between the variables was measured and not their "cause". Even though the research methodology was based on solid theoretical models, a number of different constructs or variables could be used in the future. It might be appropriate to repeat the investigation with the same individuals at a later date to test the consistency of the model and any change in perception and beliefs. Whilst participants responded to the questionnaire according to their own perceptions and beliefs, their answers may reflect their intentions rather than the facts. When expressing belief in the effect of some sort of punishment for non-compliant behaviour, they might be thinking in abstract terms rather than in reference to their own circumstances. Very rarely will an Executive receive punishment for non-compliant behaviour alone (if no harm or loss to company arises). The individual perception might change over time if, for instance, s/he receives punishment for non-compliant behaviour. No distinction was made for the type of industry in which the participant worked nor for his/her age or gender. Further investigation into the relationship between these variables and those of this research would be of value. Finally, as some recent findings show that attitude plays a significant role in explaining the relationship between beliefs and intention (Bulgaru et al., 2010), it would be interesting to incorporate that assumption within the model of this research in order to develop these findings.

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## APPENDIX

## ANOVA ABOUT VARIABLES THAT SHOW A SIGNIFICANT DIFFERENCE BETWEEN THE TWO PANELS

<b>V3</b>	Variance analysis: single factor				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>	
Managers/Executives	123	444	3.609756098	1.092363055	
Employees	90	367	4.077777778	2.342197253	
VARIANCE ANALYSIS					
<i>Origin of the variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>significance value</i>
Among groups	11.38413298	1	11.38413298	7.029219856	0.009
In groups	341.7238482	211	1.619544304		
Totals	353.1079812	212			
<b>V4</b>	Variance analysis: single factor				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>	
Managers/Executives	123	437	3.552845528	1.118086099	
Employees	90	360	4	2.247191011	
VARIANCE ANALYSIS					
<i>Origin of the variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>significance value</i>
Among groups	10.391618	1	10.391618	6.517803228	0.011
In groups	336.4065041	211	1.594343621		
Totals	346.7981221	212			
<b>V5</b>	Variance analysis: single factor				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>	
Managers/Executives	123	439	3.569105691	0.821004931	
Employees	90	373	4.144444444	1.473283396	
VARIANCE ANALYSIS					
<i>Origin of the variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>significance value</i>
Among groups	17.20343906	1	17.20343906	15.6946123	0.0001
In groups	231.2848238	211	1.096136606		
Totals	248.4882629	212			
<b>V8</b>	Variance analysis: single factor				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>	
Managers/Executives	123	424	3.447154472	0.904971345	
Employees	90	278	3.088888889	1.497627965	
VARIANCE ANALYSIS					
<i>Origin of the variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>significance value</i>
Among groups	6.670804229	1	6.670804229	5.775815764	0.017
In groups	243.695393	211	1.154954469		
Totals	250.3661972	212			
<b>V13</b>	Variance analysis: single factor				
<i>Groups</i>	<i>Count</i>	<i>Sum</i>	<i>Mean</i>	<i>Variance</i>	
Managers/Executives	123	445	3.617886179	1.106890577	
Employees	90	368	4.088888889	2.374032459	
VARIANCE ANALYSIS					
<i>Origin of the variation</i>	<i>SQ</i>	<i>gdl</i>	<i>MQ</i>	<i>F</i>	<i>significance value</i>
Among groups	11.52961563	1	11.52961563	7.024375985	0.009
In groups	346.3295393	211	1.641372224		
Totals	357.8591549	212			

# THE IMPACT OF CORPORATE TRANSPARENCY ON SEASONED EQUITY OFFERINGS

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## ABSTRACT

*I examine the impact of corporate transparency on seasoned equity offerings (SEOs) by inspecting the firm characteristics, price performance prior to SEO announcements, market reactions to announcements, and long-term performance post issuance. All results are consistent with the information price discount hypothesis. A higher information risk can increase required returns and reduce stock prices. Even though I find that low transparency firms have more positive stock performance prior to SEO announcements, the price increase on average is not significant enough to completely eliminate the information discount. In the long run, SEOs issued by high transparency firms underperform those issued by low transparency firms, showing that high transparency firms are more successful at issuing overvalued stocks. Therefore, managers who plan to issue SEOs in the future should increase disclosure to reduce information asymmetry and the attached price discount.*

## INTRODUCTION

I examine if low transparency firms are more successful than high transparency firms at timing seasoned equity offerings (SEOs) because of their information advantage over outside investors. To examine the impact of corporate transparency on SEOs, I analyze the firm characteristics, stock price performance prior to SEO announcements, market reactions to the announcements, and long-term stock performance following SEO issuances. All of the results in this study are consistent with the information price discount hypothesis. I find that increased information asymmetry problems raise perceived information risk and therefore the risk premium, while the increased required return reduces the stock price of low transparency firms. More importantly, this information price discount makes the issuance of overvalued stocks more difficult for low transparency firms. Specifically, I find that low transparency firms have higher book-to-market ratios and therefore are underpriced on average, as a result of higher information risk. Low transparency firms also have significantly higher financial leverage. Higher financial leverage and book-to-market ratios indicate that low transparency firms are more likely to raise external capital through debt than equity since rational managers should

avoid issuing stocks at discounts. While both low transparency and high transparency firms experience positive abnormal stock performance in the six-month period prior to SEO announcements, low transparency firms experience more positive stock performance (less negative market reactions at announcement) than high transparency firms. In the long run, while the different choices of benchmarks affect the magnitude of long-term abnormal performance, all results are consistent and robust across different methodologies. High transparency firms perform worse than low transparency firms up to five years post stock issuance. Consistent with the information price discount hypothesis, while low transparency firms often experience more positive price performance prior to SEO announcements, the less negative market reactions at announcements indicate that the price increase is not significant enough to offset the information price discount. Furthermore, the less negative post-issuance long-term performance of low transparency firms also confirms the information price discount hypothesis. High transparency firms are more successful at issuing overpriced stocks. Since complete price adjustment occurs in the long run, high transparency firms which are successful at issuing overvalued stocks underperform in the long run. While information asymmetry may still provide managers

with certain advantages,<sup>1</sup> my results show that the information price discount of low transparency firms makes the timing of SEOs more difficult and less profitable in general.

PRICE DISCOUNT HYPOTHESIS

When information asymmetry worsens, investors often demand higher required returns while the increase in required returns leads to price discounts (Beatty and Ritter, 1986). Since managers have no incentive to issue undervalued stocks, the information price discount hypothesis predicts that low transparency firms should either issue more debt<sup>2</sup> or attempt to raise their stock prices prior to SEO announcements (Myers and Majluf, 1984). As a result, the price discount predicts that low transparency firms should have higher leverage ratios and more positive stock performance before SEO announcements. In this case, the more positive price movements prior to announcements are the consequences of managers attempting to eliminate the price discounts rather than to hype or inflate stock prices. Therefore, the information price discount can reduce low transparency firms’ ability to issue overvalued stocks. Consequently, the information price discount hypothesis predicts that low transparency firms should have insignificant or less negative market reactions than high transparency firms. Since complete price adjustment typically does not occur immediately around announcements, those firms which are successful at issuing overvalued stocks will underperform in the long run. If the price discount prevents low transparency firms from issuing stocks at inflated prices, low transparency firms should outperform high transparency firms in the long run.

<sup>1</sup> Verrecchia (1983), Sengupta (1998), Healy, Hutton, and Palepu (1999), Bushee and Noe (2000), Leuz and Verrecchia (2001), and Botosan and Plumlee (2002).

<sup>2</sup> Graham and Harvey (2001) find that about two-thirds of managers admit that equity price is a very important factor when issuing equity. Baker and Wurgler (2000) find that firms are more likely to issue (repurchase) stock when their market values are relatively higher (lower) than past market value and when market-to-book is high (low).

In summary, the information price discount hypothesis predicts that the information price discount should prevent low transparency firms from issuing overvalued stocks. Therefore, low transparency firms should have higher leverage ratios, better stock performance prior to SEO announcements, insignificant or less negative market reactions, and better long-term performance than high transparency firms.

DATA, METHODOLOGY, AND RESULTS

SEO Sample Data

I identify SEO firms and their announcement dates for the period 1980-2002 from the Securities Data Corporation (SDC) database. Stock returns are obtained from CRSP, and accounting data are obtained from Compustat. When the announcement date is not available, I use the SEC’s filing date as the announcement date. Risk-free rates and factors for the factor model (Carhart, 1997) are obtained from Kenneth French’s web site at [http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data\\_library.html](http://mba.tuck.dartmouth.edu/pages/faculty/ken.french/data_library.html).

To measure corporate transparency, I follow the methodology in Lang and Lundholm (1996) and use the analyst forecast dispersion obtained from the IBES (Institutional Brokers Estimate System) Summary Tapes.<sup>3</sup> After excluding all financial and utility firms, the final sample provides 2,946 SEO firms from 1980 to 2002.

<sup>3</sup> Marquardt and Wiedman (1998), Krishnaswami and Subramaniam (1999), Gilson et al. (2001), Zhang (2006), Finnerty and Yan (2006), and Ang and Lo (2008) also use forecast dispersion in their papers. Poor information quality can reduce the predictability of the firm’s earnings and therefore increase the earnings forecast dispersion. Analyst forecast dispersion can also capture information beyond what is contained in financial statements, such as earnings guidance and managers’ voluntary communication. In addition, analysts’ forecast dispersion incorporates manager’s private information about the firm’s earnings other than information collected by analysts. Mensah and Werner (2003) also find high transparency firms to have lower analyst forecast dispersion.

TABLE 1  
Firm Characteristics and Offering Size of SEO Firms  
(All SEO Firms)

Equal numbers of SEO firms are assigned to high and low transparency portfolios based on industry median-adjusted, price-scaled analyst forecast dispersion. Book-to-market ratio is book value divided by the June 30 market value of equity. Book value of equity is calculated as book value of common equity minus preferred stock plus deferred taxes and investment tax credits, plus post-retirement benefit liabilities for fiscal year t-1. Preferred stock is defined as redemption, liquidity, or carrying value, where redemption (carrying value) is the most (least) preferred measure of preferred stock. Leverage is measured by total debt to total assets minus the industrial median. Actual number of shares offered is obtained from SDC data. All variables are winsorized at one and 99 percentiles. Mean, (median), and [P-value] are provided. T test is used to test the difference.

	High Transparency	Low Transparency	Difference
Size (in Millions)	2,236 (534) [<0.0001]***	1,322 (343) [<0.0001]***	914 [0.0007]***
Industry-Adjusted Book-to-Market	-0.12 (-0.14) [<0.0001]***	0.12 (0.01) [<0.0001]***	-0.24 [<0.0001]***
Industry-Adjusted Financial Leverage	18.38% (2.25%) [<0.0001]***	42.99% (11.88%) [<0.0001]***	-24.61% [<0.0001]***
Actual Number of Shares Offered (in Millions)	2.90 (2.00) [<0.0001]***	3.27 (2.10) [<0.0001]***	-0.37 [0.0006]***

In Table 1, I examine the firm characteristics and offering size of SEO firms. Similar to Lang and Lundholm (1993), I find low transparency firms to be smaller than high transparency firms in general. Consistent with the information price discount hypothesis and with Healy, Hutton, and Palepu (1999), stocks of low transparency firms are more likely to be traded at discounts; therefore, low transparency firms have higher industry-adjusted book-to-market ratios. Note that book-to-market ratios are adjusted by industry median to allow direct cross-industry comparisons. Also consistent with the information price discount hypothesis, low transparency firms are more likely to raise money through issuing debt in order to avoid issuing undervalued stock; therefore, low transparency firms have higher financial leverage than high transparency firms. Next, the actual number of shares offered shows that low transparency firms, on average, issue a larger number of shares per issuance than

high transparency firms. This, combined with the higher book-to-market ratio and financial leverage, is consistent with the information price discount hypothesis. Investors discount the stock price of low transparency firms because of perceived information asymmetry problems. With discounted stock prices, low transparency firms are more likely to issue debt than equity. When issuing equity, low transparency firms have to issue more shares in order to raise the same amount of money as high transparency firms.

Short-term Analysis

To examine abnormal performance, I first identify benchmarks for the SEO firms based on industry, size, and book-to-market equity to examine abnormal stock performance. NYSE stocks are used to find the five-by-five size and

book-to-market breakpoints for each year.<sup>4</sup> In addition to using matched firm returns as the benchmark's returns, I also use equal-weighted and value-weighted CRSP returns for robustness checks (Brown and Warner, 1980). To examine abnormal stock returns around the SEO announcement dates (day  $t=0$ ), I calculate abnormal returns for firm  $i$  on day  $t$ ,  $AR_{it}$ , as follows:

$$AR_{it} = R_{it} - R_{benchmark,t} \tag{1}$$

where:  
 $R_{it}$  is the return for stock  $i$  at time  $t$  and  
 $R_{benchmark,t}$  is the benchmark return at time  $t$ .

Cumulative abnormal returns (CARs) are computed by summing the abnormal returns.

In Table 2, two different event windows around the SEO announcement date (day 0) are used. The (-1, 1) window is used to measure the immediate market reactions around SEO announcements. The (-125, -1) window is used to examine the prior-to-announcement stock performance to determine if low transparency firms do in fact experience more positive stock performance prior to SEO announcements.<sup>5</sup> Mean CARs with associated  $t$ -statistics are shown for high and low transparency SEO firms in Table 2, Panels A and B, respectively. The difference in mean CARs between the two transparency samples is presented in Panel C of Table 2. Consistent with the information price discount hypothesis, low transparency firms have more positive stock performance prior to SEO announcements. To make sure that the more positive stock performance prior to announcements is not the result of low transparency firms hyping or inflating their stock prices, I also examine the market reactions around announcements. While both high transparency and low transparency firms experience negative market reactions, high transparency firms receive worse market reactions than low transparency

firms. This result indicates that the market still perceives the price of high transparency firms to be more overvalued than that of low transparency firms because of the information price discount in the first place. Therefore, the result of the short-term analysis is consistent with the information price discount hypothesis.

Long-term Analysis

Since complete price adjustments do not always occur in the short run, I also examine the long-term performance of SEO firms. Examining long-run performance can be very sensitive to model choices because small short-horizon imprecision can be compounded in the long term and cause misspecified results. Therefore, several long-term methodologies are carefully used to ensure robust results. I examine one-year, three-year, and five-year buy-and-hold abnormal returns, beginning the month after the SEO issuance date, as follows:

$$BHAR_{it} = \prod_{t=1}^T [1 + R_t] - \prod_{t=1}^T [1 + R_{benchmark,t}], \tag{2}$$

where  $BHAR_{it}$  represents the buy-and-hold abnormal return for firm  $i$  at time  $t$ , while  $t=0$  is the SEO issuance month (Mitchell and Stafford, 2000). To test the means of the BHARs, I compute bootstrapped skewness-adjusted  $p$ -values based on the procedures in Brock et al. (1992) and Ikenberry et al. (1995). Firm size and book-to-market ratio are used to identify matched firms.

I also use CARs to examine the long-term performance of SEO firms because CARs are less skewed than buy-and-hold abnormal returns, and conventional  $t$ -statistics for CARs are well specified (Lyon, Barber, and Tsai, 1999). Next, calendar-time approach factor models are also used since they can more accurately estimate long-term performance (Fama, 1998). While both three-factor and four-factor models are used, only the results based on the four-factor model are provided since Brav, Geczy, and Gompers (2000) find that Carhart's (1997) four-factor model captures the covariation of SEO returns.<sup>6</sup> Carhart's (1997) four-factor model is given as follows:

<sup>6</sup> Both factor models provide very similar results.

<sup>4</sup> If the matched firm delists during the return period, the next closest matched firm is used for the remainder of the period. Firms that announce SEOs in the prior three years are excluded from consideration as a matched firm. Loughran and Ritter (1995) argue that failure to do so weakens statistical power.

<sup>5</sup> Lang and Lundholm (2000) find that SEO firms start drastically increasing their disclosures six months prior to the announcements.

TABLE 2  
PERCENT CUMULATIVE ABNORMAL RETURNS AROUND THE SEO ANNOUNCEMENT DATE

The following results are calculated based on value-weighted CRSP returns and on industry, size, and book-to-market matched returns, respectively. Equal-weighted results are also examined. Equal weighted results are always consistent yet just slightly less significant (not provided). All results are winsorized at one and 99 percentiles.

Panel A: High Transparency Portfolio				
Event Period	CRSP Returns Mean	P-value	Matched Returns Mean	P-value
(-125, -1)	15.06%	<0.0001***	11.00%	<0.0001***
(-1, 1)	-0.93%	<0.0001***	-1.30%	<0.0001***
Panel B: Low Transparency Portfolio				
Event Period	CRSP Returns Mean	P-value	Matched Returns Mean	P-value
(-125, -1)	21.91%	<0.0001***	16.29%	<0.0001***
(-1, 1)	-0.70%	<0.0001***	-0.52%	0.0006***
Panel C: Low Transparency Portfolio Minus High Transparency Portfolio				
Event Period	CRSP Returns Mean	P-value	Matched Returns Mean	P-value
(-125, -1)	6.85%	<0.0001***	5.29%	<0.0001***
(-1, 1)	0.23%	<0.0001**	0.78%	<0.0001***

$$r_{it} = \alpha_i + b_iMKT_t + s_iSMB_t + h_iHML_t + p_iPRIYR_t + e_{it} \tag{3}$$

where  $i$  represents the low or high transparency portfolio;  $r_{it}$  is the monthly return in excess of the T-bill rate for the low transparency or high transparency portfolio in month  $t$ ;  $MKT$  is the excess monthly return on the CRSP value-weighted market index (Fama and French, 1993);  $SMB$  and  $HML$  represent monthly returns on value-weighted zero-investment portfolios;  $PRIYR$  is the one-year price momentum return. I also construct a zero-investment portfolio by taking a long position in low transparency firms and a short position in high transparency firms to determine if such an investment strategy provides abnormal profits.

In Tables 3, 4, and 5, long-term results based on bootstrapping buy-and-hold abnormal returns (BHARs), cumulative abnormal returns (CARs), and calendar-time approach weighted least square four-factor model (Carhart, 1997) are presented, respectively.<sup>7</sup> In Tables 3 and 4, while both low

transparency and high transparency firms experience negative abnormal BHARs and CARs in the long run, high transparency firms underperform low transparency firms at 1% significance until five years after SEO issuance.

In Table 5, I find that the calendar-time approach four-factor model does in fact eliminate the significance of abnormal performance (Brav, Geczy, and Gompers, 2000). The negative long-term performance of high transparency firms is no longer statistically significant. More importantly, while low transparency firms experience statistically significant abnormal performance in the five-year window, the abnormal profits are positive, indicating that low transparency firms have to issue stocks at discounts when in need of external funding. The zero-investment portfolio also shows that taking a long position in low transparency SEO stocks and a short position in high transparency SEO stocks will earn significant and positive abnormal profits. Therefore,

cate that not only is the intent of market timing prevalent among managers, but also is the market timing effort generally successful.

<sup>7</sup> Ritter (1991), Loughran and Ritter (1995), and Spiess and Affleck-Graves (1995) find that initial public offerings (IPOs) and SEO firms underperform non-issuing firms in the long run. Such findings indi-

TABLE 3 LONG-TERM BUY-AND-HOLD ABNORMAL RETURNS FOLLOWING THE SEO ISSUANCE		
Bootstrapping methodology is used to calculate buy-and-hold abnormal returns (Brock et al., 1992). Displayed results are calculated based on industry, size, and book-to-market matching; excluding industry as one of the matching criteria provides similar results. All results are winsorized at one and 99 percentiles. Only value-weighted results are provided. Two-tail tests are used, while *, **, and *** represent 10%, 5%, and 1% statistical significance.		
Panel A: High Transparency Portfolio		
Event Period	Matched Returns Mean	P-value
One Year	-36.86%	<0.0001***
Three Year	-48.61%	<0.0001***
Five Year	-57.30%	<0.0001***
Panel B: Low Transparency Portfolio		
Event Period	Matched Returns Mean	P-value
One Year	-7.68%	<0.0001***
Three Year	-24.82%	<0.0001***
Five Year	-14.37%	<0.0001***
Panel C: Low Transparency Portfolio Minus High Transparency Portfolio		
Event Period	Matched Returns Mean	P-value
One Year	29.18%	<0.0001***
Three Year	23.79%	<.0001***
Five Year	42.93%	<0.0001***

while the calendar-time approach eliminates all of the negative long-term performance, the positive long-term performance of low transparency firms is consistent again with the information price discount hypothesis. The stock price of low transparency firms is more likely to be traded at discount. Therefore, low transparency firms are more likely to raise money through debt than

high transparency firms in order to avoid issuing undervalued stocks. However, when issuing debt is impossible, low transparency firms have to issue stocks at discounts. Even though low transparency firms, in general, experience better stock performance than high transparency firms prior to SEO announcements, such more positive stock performance is necessary to eliminate a portion of the information price discount rather than to inflate stock prices prior to SEO issuance. Most importantly, the robust results in this study show that, in general, low transparency firms are worse off at timing SEO issuance than high transparency firms.

CONCLUSIONS

I examine the impact of corporate transparency on 2,946 SEO issuances between 1980 and 2002. I find that low transparency firms have higher book-to-market ratios, higher financial leverage, and a higher number of shares of SEO issuance. All of the above findings, combined with more positive stock price performance prior to SEO announcements, less negative market reactions, and better long-term performance than high transparency firms, are consistent with the information price discount hypothesis. Investors are aware of the information asymmetry problems of low transparency firms. Therefore, the increased information risk increases the required returns and reduces the stock prices of low transparency firms. To avoid issuing stocks at discounts, low transparency firms are more likely to raise external funds through debt than equity. For low transparency firms to announce SEOs, they need more positive stock performance prior to announcement in order to offset the information price discount. However, based on the results of market reactions and long-term performance, more positive prior-to-announcement stock performance is not the result of “hying” stock prices but an effort to reduce the price discount prior to stock issuance. In conclusion, all of our results are consistent with the information price discount hypothesis. Managers who plan to issue SEOs in the future are better off by reducing the information asymmetry problems and therefore the attached information price discounts. Remaining low transparency, in general, will not

TABLE 4 LONG-TERM CUMULATIVE ABNORMAL RETURNS FOLLOWING THE SEO ISSUANCE				
Different benchmark returns are used in the analysis. CRSP equal-weighted and value-weighted returns are both used in addition to matched firm returns. Matched firms are assigned based on industry, size, and book-to-market matching of non-SEO firms. Excluding industry as one of the matching criteria provides similar results. Earnings-scaled dispersion is also used and provides very similar results. All results are winsorized at one and 99 percentiles. Only value-weighted results are provided. Two-tail tests are used, while *, **, and *** represent 10%, 5%, and 1% statistical significance.				
Panel A: High Transparency Portfolio				
Event Period	CRSP Returns Mean	P-value	Matched Returns Mean	P-value
One Year	-14.12%	<0.0001***	-31.84%	<0.0001***
Three Year	-6.29%	0.0010***	-53.34%	<0.0001***
Five Year	5.89%	0.0040***	-55.68%	<0.0001***
Panel B: Low Transparency Portfolio				
Event Period	CRSP Returns Mean	P-value	Matched Returns Mean	P-value
One Year	6.33%	<0.0001***	6.01%	<0.0001***
Three Year	3.76%	0.0176**	-23.66%	<0.0001***
Five Year	7.78%	<0.0001***	-32.85%	<0.0001***
Panel C: Low Transparency Portfolio Minus High Transparency Portfolio				
Event Period	CRSP Returns Mean	P-value	Matched Returns Mean	P-value
One Year	20.45%	<0.0001***	37.85%	<0.0001***
Three Year	10.05%	<0.0001***	29.68%	<0.0001***
Five Year	1.89%	0.5337	22.83%	<0.0001***

provide managers with enough information advantage to issue stocks at inflated prices.

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TABLE 5 CALENDAR-TIME APPROACH FACTOR MODELS FOR CALENDAR-TIME PORTFOLIOS			
Both three- and four-factor models (Fama and French, 1993; Carhart, 1997) are used and provide similar results. Only the results based on the four-factor model (Carhart, 1997) are displayed since Brav, Geczy, and Gompers (2000) find that Carhart's (1997) four-factor model captures the covariation of SEO returns. Weighted least squares (WLS) is used since Ang and Zhang (2004) find that the WLS provides more reliable results than the ordinary least square (OLS) does. The four-factor model is stated as the following: $r_{it} = \alpha_i + b_i \text{MKT}_t + s_i \text{SMB}_t + h_i \text{HML}_t + p_i \text{PRIYR}_t + e_{it},$ where $r_{it}$ represents the excess returns for portfolio $i$ at time $t$ ; MKT is the excess market return; SMB is the Fama and French (1993) size factor; HML is the Fama and French book-to-market equity factor; and PRIYR is the Carhart (1997) momentum factor. In addition, zero-investment portfolios are constructed as follows: $r_{L_t} - r_{H_t} = \alpha_i + b_i \text{MKT}_t + s_i \text{SMB}_t + h_i \text{HML}_t + p_i \text{PRIYR}_t + e_{it},$ where $r_{L_t}$ and $r_{H_t}$ represent the excess portfolio return for low and higher transparency portfolios, respectively, at time $t$ . The intercept in this case represents the abnormal profits earned by taking a long position in a low transparency portfolio and a short position in a high transparency portfolio. P-values are provided in parenthesis, while *, **, and *** represent 10%, 5%, and 1% statistical significance.			
Panel A: One-Year Returns			
Independent Variables	High Transparency Portfolio	Low Transparency Portfolio	Zero-Investment Portfolio
Intercept	-0.1167 (0.4306)	-0.1036 (0.4692)	0.0368 (0.8153)
MKT	1.1018 (<0.0001)***	1.2057 (<0.0001)***	0.0869 (0.0271)**
SMB	0.5448 (<0.0001)***	0.8207 (<0.0001)***	0.2964 (<0.0001)***
HML	-0.0276 (0.6044)	-0.0872 (0.0889)*	-0.0760 (0.1788)
PRIYR	0.0001 (0.9995)	-0.0228 (0.4521)	-0.0367 (0.2720)
Panel B: Three-Year Returns			
Independent Variables	High Transparency Portfolio	Low Transparency Portfolio	Zero-Investment Portfolio
Intercept	-0.0855 (0.4483)	0.0450 (0.6477)	0.1301 (0.2742)
MKT	1.1162 (<0.0001)***	1.1607 (<0.0001)***	0.0410 (0.1698)
SMB	0.5161 (<0.0001)***	0.8059 (<0.0001)***	0.2981 (<0.0001)***
HML	0.1212 (0.0029)***	-0.0368 (0.3089)	-0.1424 (0.0011)***
PRIYR	-0.2424 (<0.0001)***	-0.2057 (<0.0001)***	0.0273 (0.2755)
Panel C: Five-Year Returns			
Independent Variables	High Transparency Portfolio	Low Transparency Portfolio	Zero-Investment Portfolio
Intercept	0.0410 (0.6742)	0.2108 (0.0231)**	0.2018 (0.0666)*
MKT	1.0924 (<0.0001)***	1.1293 (<0.0001)***	0.0342 (0.2124)
SMB	0.5409 (<0.0001)***	0.8375 (<0.0001)***	0.3107 (<0.0001)***
HML	0.2162 (<0.0001)***	0.0355 (0.3013)	-0.1556 (<0.0001)***
PRIYR	-0.2288 (<0.0001)***	-0.1925 (<0.0001)***	0.0291 (0.2057)

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