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Information Systems Effectiveness: The Application of Corporate Social Responsibility Policy and Total Quality Management Model

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Abstract

Information systems (IS) have made it possible for upper organizational management to secure their organizations' confidential information electronically. However, due to the deficiencies of IS, unauthorized employees are gaining access to information that does not relate to their work duties. The IS deficiencies mentioned in this paper are lack of relevance, limited access, absence of training, and poor security (LLAP). The research questions asked how top management could protect their organization's information from unauthorized employees, and how the proposed enhanced total quality management (TQM) model could aid in improving the deficiencies mentioned. The research's authors apply the enhanced TQM construct with additional elements of the triple bottom line (TBL) for the improvement of organizations' IS, and address how implementation of the constructs could aid management in becoming socially responsible to their organization and the community at large. In addition, this research provides information on how organizational management may determine the best decision in relation to securing their organizations' IS.

Key Words: TQM, TBL, CSR, IS, organizations, employees, relevance, access, training, security

Introduction

Information systems (IS) enable organizational management to protect their information through electronic means from unauthorized users. Considering the wide use of IS in organizations, IS researchers have echoed the need for management to protect information resources against cyber crime and data breaches (Smith, Winchester, Bunker, & Jamieson, 2010). Nonetheless, due to the deficiencies of IS, unauthorized employees are able to gain access to their organization's confidential information. Information system deficiencies mentioned in this research are lack of relevance, limited access, absence of training, and poor security (LLAP). These components have the potential to prevent an organization from meeting its desired goals as well as providing quality services to its customers. In some cases, uncontrolled IS are called shadow systems, which may be likened to the *Hit by a Bus* scenario. In this situation, something happens to the key employee or person who is responsible for building

or preserving the shadow system. Due to the way the system is manufactured, it has very little supporting documentation in that there is no possibility of instantaneous revival of organization information. Without the key individual, there is a poor chance of system recovery because of the absence of the system documentation (Behrens, 2009). When customers' information is inadequately secured due to poor IS, organizational leaders may be considered socially irresponsible to their organization as well as to the community at large.

Corporate social responsibility (CSR) is defined as a long-term social contract between an organization and the surrounding communities (Kreng & May-Yao, 2011). Whether an organization's management should be socially responsible to the surrounding communities is a topic that has not been widely discussed in the past few years (Cohen, Holder-Webb, Nath, & Wood, 2011; Peloza & Falkenberg, 2009). An organization may improve and maintain its appearance of social responsibility by implementing the elements of total quality management (TQM), which consist of *ethics, integrity, trust, training, teamwork, leadership, recognition,* and *communication* (Zakuan, Yusof, Laosirihongthong, & Shaharoun, 2010; Welikala & Sohal, 2008). This construct is a guiding standard that represents the dynamics of continuous improvement in an organization (Quazi & Bartels, 1998). Upper management can potentially improve their organization's IS by applying the concept of TQM. Nevertheless, it remains a challenge for management to find ways to implement the concept of TQM in their organization's IS while, at the same time, becoming socially responsible to their organization and the surrounding communities. Organizational leaders may employ the elements of TQM in their organization's everyday functions by acknowledging the triple-bottom-line (TBL) perspective. This perspective borders on maintaining sustainability in organizations.

Organizational leaders have the potential of building rapport with employees and the community at large by focusing on *people, profit*, and *planet* (Cokins, 2009). These facets of TBL are the foundation of organizational growth and are defined by a set of standards, concerns, and practices that must be addressed in order to avoid potential conflicts that may result from their community presence (Mitchell, Curtis, & Davidson, 2008). The principle of TBL emphasizes what is learned through the development of processes and the power- and rapport-building that might occur during the course of learning (Mitchell et al., 2008). Determining how to protect an organization's information would aid management in making the best decisions for their organization. The three degrees of quality — good, better and best — are used to suggest different ways in which management may secure and maintain their organization's IS.

This research objective is to discover how upper management could protect their organization's information from unauthorized employees and how the enhanced TQM model could aid in improving IS deficiencies, or LLAP, of organizations. The authors apply an enhanced TQM construct with the additional elements of TBL as methods that can be used to improve an organization's IS. The researchers chose these constructs because previous studies used similar goals in managing and securing organizations' information (Chang & Sun, 2007; Hemsworth, Sánchez-Rodríguez, & Bidgood, 2008; Xiaoqing, Guijiang, & Kwai-Sang, 2007; Sarre, Doig, & Fiedler, 2001). This paper's authors are interested in this topic because of volume of media attention given to IS management. This research is intended for upper management of organizations, and highlights important factors that management may consider when determining which IS are best for their organization.

The remainder of this paper is divided into five sections. The first section introduces the corporate social responsibility (CSR) principle. The second section deals with IS deficiencies, or LLAP. The third section discusses the traditional TQM elements. The fourth section applies the enhanced TQM model to an organization's IS by using the three degrees of quality, which are

good, better, and best. This section also includes information on the application of TBL within organizational IS. The fifth section concludes with a summary and research contributions.

Corporate Social Responsibility Principle

Corporate accountability is a prevalent trend among business owners. When examining organizations' involvement in communities, researchers have relied heavily on CSR principles (Kreng & May-Yao, 2011; Becker-Olsen, Taylor, Hill, & Yalcinkaya, 2011; Dhaliwal, Li, Tsang, & Yang, 2011). Hollender (2004) mentioned that many organizations around the world, including those that are multinational, are beginning to take into consideration their social behavior, expressing the types of commitments they intend to create in the community at large, and are considering creating CSR reports that inform the public of these commitments. To be in accordance with CSR principles, top management of organizations would need to work together with surrounding communities (Devinney, 2009). This approach may be advantageous to community members, but due to the diversity of client communities, organizations may not be able to satisfy all of their customers.

In reflecting on the needs of community members, Devinney (2009) pointed out that the leaders of an organization need to "understand that corporations do not operate in a singular clear society with unambiguous and uncontested norms" (p. 49). Each organization has its own values and goals; what may be considered an appropriate goal for one organization may not be the same for another organization. Epstein (1987) mentioned that, to assess the performance of an organization's contributions to society, the organization would need to be evaluated by its business ethics, social responsibility agreement, and the organization's social responsiveness. If the organization is flourishing in these areas, then it may be considered socially responsible.

An example of an organization that is positively adhering to CSR effort is Tyson Foods. This organization ties its CSR efforts to its mission and it is dedicated to alleviating food shortage and in due course ending childhood hunger. For instance, Tyson Foods Inc initiated a campaign in Austin, Texas and donated 100 pounds of chicken to the capital area food bank for each comment that was posted on its blog (Uhrmacher, 2012). The management team at Tyson Foods appears to recognize what it means to be socially responsible. Understanding what it means to be socially responsible would enable management of an organization to recognize the deficiencies in their organization's IS.

Information Systems Deficiencies—LLAP

This section explains IS deficiencies and how these deficiencies may affect an organization's overall performance. Many organizations are making use of various types of IS at an ever-increasing speed. Because of the large number of employees who have access to organizations' IS, management may be unable to recognize their IS deficiencies. Failure to identify shortcomings exhibits a lack of social responsibility because it suggests that management may not have implemented security measures to deter leakage of the organization's information. Some IS deficiencies that may affect an organization's daily operations are lack of relevance, limited access, absence of training, and poor security (LLAP). Figure 1 illustrates the IS deficiencies and how they are related to each other.

Figure 1. Characteristics of Organizations' Information Systems—LLAP
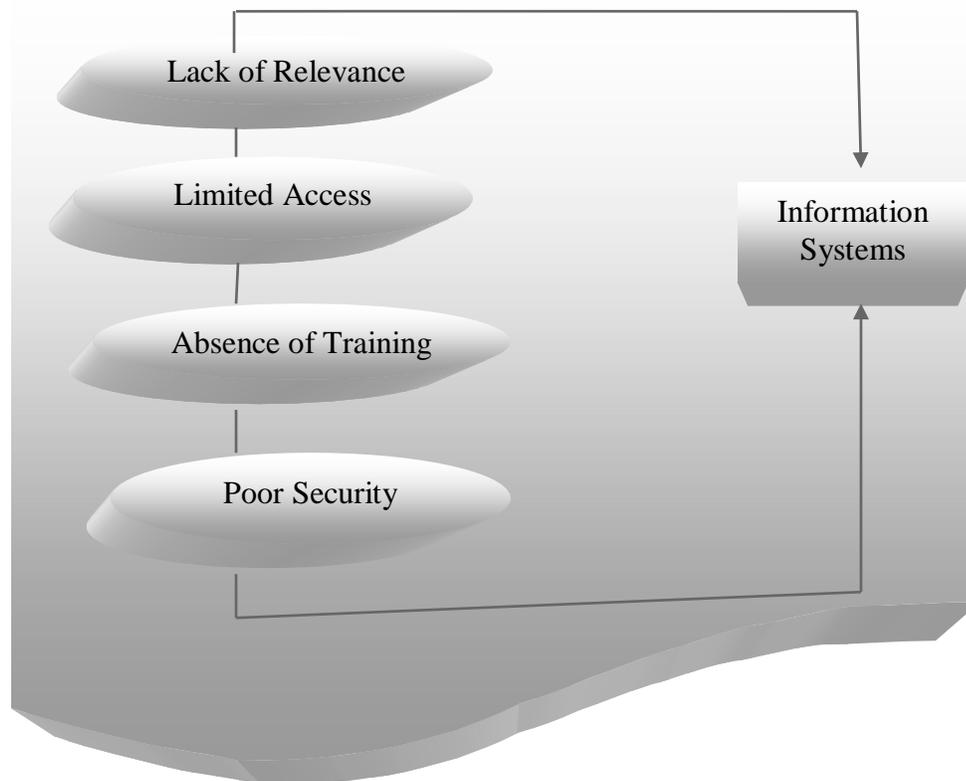
The first deficiency, lack of relevance, is mentioned first because, without knowing which IS are relevant to an organization, management would not be able to access the IS and may be unable to determine which type of training programs would enable employees to manage the organization's data. The second deficiency, limited access, is significant in determining which employees should be permitted to make use of the organization's different IS. The third and fourth deficiencies, absence of training and poor security, are placed next to each other because employees need to be trained so that they are able to understand the security measures of the IS. If the IS deficiencies mentioned are not taken care of, an organization's IS may be vulnerable to unauthorized users.

Traditional Total Quality Management Elements

This section discusses the different elements of TQM and how they are applied in organizations. Total quality management calls for an organization's upper management to apply systematic and logical reasoning to their daily affairs. Supporters of TQM have stated the significance of implementing TQM programming in achieving organizations' success (Welikala & Sohal, 2008; Prida & Grijalvo, 2008). Elements of TQM include ethics, integrity, trust, training, teamwork, leadership, recognition, and communication (Zakuan, Yusof,

Laosirihongthong, & Shaharoun, 2010; Welikala & Sohal, 2008). These elements build on each other and are the foundation for organizational growth.

Ethics

Without an ethical standard, an organization's employees may find themselves behaving in a manner that is unethical and potentially illegal. Prida and Grijalvo (2008) noted that in an organization that has goals for continuous improvement, the environment, rather than the worker, becomes the key element. An organization's ethical values direct employees' conduct in appropriate ways and provides guidance on how to handle other organizations' information. An example of a situation where an employee acted ethically is when the senior financial analyst of Lockhead Martin Corp opened an email attachment that should have been blank from one of their organizations' competitors (Wilder & Soat, 2001). According to the manner in which the email was sent, it appears the competitor had unintentionally included proprietary rate calculations for a federal government contract. Instead of using the information for the benefits of Lockhead Martin Corp, the senior financial analyst reported the matter immediately to her supervisor and the unit's legal counsel. This swift action was taken because if the document was still in Lockhead's database after 5pm, the system would automatically back up the information to Lockhead's system and the management would have found themselves in possession of information that does not belong to their organization.

Moreover, to avoid other employees and unwanted guests from accessing the information, the senior advisor and the legal counsel worked with their organization's information technology department to remove the document from their server and also informed the competitor of their mistake by sending the information back to them in a diskette (Wilder & Soat, 2001).When management instills the organization's ethical values in the minds of its employees, the employees may be more likely to treat the organization's information accordingly. In some cases a member of the management team may act unethically. For example, the CEO of Citibank told Congress that he received a compensation of one million dollars a year when he actually received $11 million (Scheid, 2011). This behavior is not only dishonorable but also a federal offense. Ethical behaviour of employees and upper management reveals social responsibility because it shows that leaders and employees of the organization are interested in acting honourably even though they are not obligated to do so. Organizational leaders' and employees' behaviour reflects on the integrity of the organization and whether the organization can be trusted.

Integrity and Trust

An organization that is socially responsible may be recognized as an organization with integrity. A trustworthy organization does its best to ensure the services and products they offer to the customers are straightforward. Welikala and Sohal (2008) declared, "the human resources of a company are what differentiate one company from another because committed and competent people can increase productivity and improve quality" (p. 628). When an organization is recognized as having integrity, customers may be more likely to trust the quality of the organization's products. Furthermore, employees are more likely to trust the organization they work for when the management creates an environment that would enable the employees to trust the leadership team. Employees' trust in their leaders would also motivate them to demonstrate behaviors that would enable their leaders to trust them as well. Employees'

perception about the organization would further determine how they respond to the training they receive.

Training

When an organization has established its code of ethics, has integrity, and is well trusted by others, management should then train its employees on how to implement a TQM model. To successfully implement a TQM model, all employees need to be involved in the TQM program. Prida and Grijalvo (2008) stated, "the involvement and participation of the workers not only improves their quality of life, but has also proved to be very useful for facilitating organizational flexibility and improving productivity and product quality" (p. 347). For example, by training employees on how to successfully implement the TQM model, management will also be preparing employees on how to become a leader, e.g, instead of teaching employees things that pertain to their job duties, they will have the opportunity of being introduced to different situations that may require them to implement the model of TQM. By doing this, employees will be prepared to take the role of a leader when they are called upon by their organizational management. When upper management engages employees in TQM participation, upper management is more likely to see positive results through employees' satisfaction, improved work performance, and increased profitability (Welikala & Sohal, 2008). By training employees on how to implement a TQM construct, organizational management adheres to CSR efforts and employees learn what management expects from them.

Teamwork

Training employees on a TQM program may also promote teamwork. Developing a culture of teamwork would enable the upper management of an organization to easily implement a TQM construct. Welikala and Sohal (2008) asserted that an organizational activity becomes well organized when employees with different life and educational experiences work together as a team. When employees are instructed to behave ethically, they are more likely to work together to ensure they are all behaving in accordance. Such employees may be allowed to make decisions regarding the affairs of the organization. For example, in the process of working in a team, employees are more likely to bring different life experiences to help with the project. This will motivate them to shed light on the project from different individual standpoints. An organization with a flexible value structure has a decision-making system that empowers employees not only to recognize problems but also to provide solutions to the problems (Welikala & Sohal, 2008). An employee's work performance would determine if the organizational management would promote the employee to a leadership position.

Leadership, Recognition, and Communication

Based on the performance of the employees, management may promote employees to leadership positions. The employees who are promoted should be trained on how to lead their co-workers. Employee involvement in an organization's daily affairs enables them to feel that their opinions about the organization matter and that they are permitted to contribute to the changes in their work environment (Welikala & Sohal, 2008). Recognizing employees' efforts and commending them through promotions may encourage other employees to work hard so that they will be recognized. A promotion may be seen as a way of communicating to employees that

they have the potential to excel and possibly advance in the organization. Encouraging employees to perform with their best effort enables management to make the best decision regarding their organization's systems. Figure 2 illustrates how TQM facets are connected to each other.

Figure 2. Conceptual Model of Traditional Total Quality Management
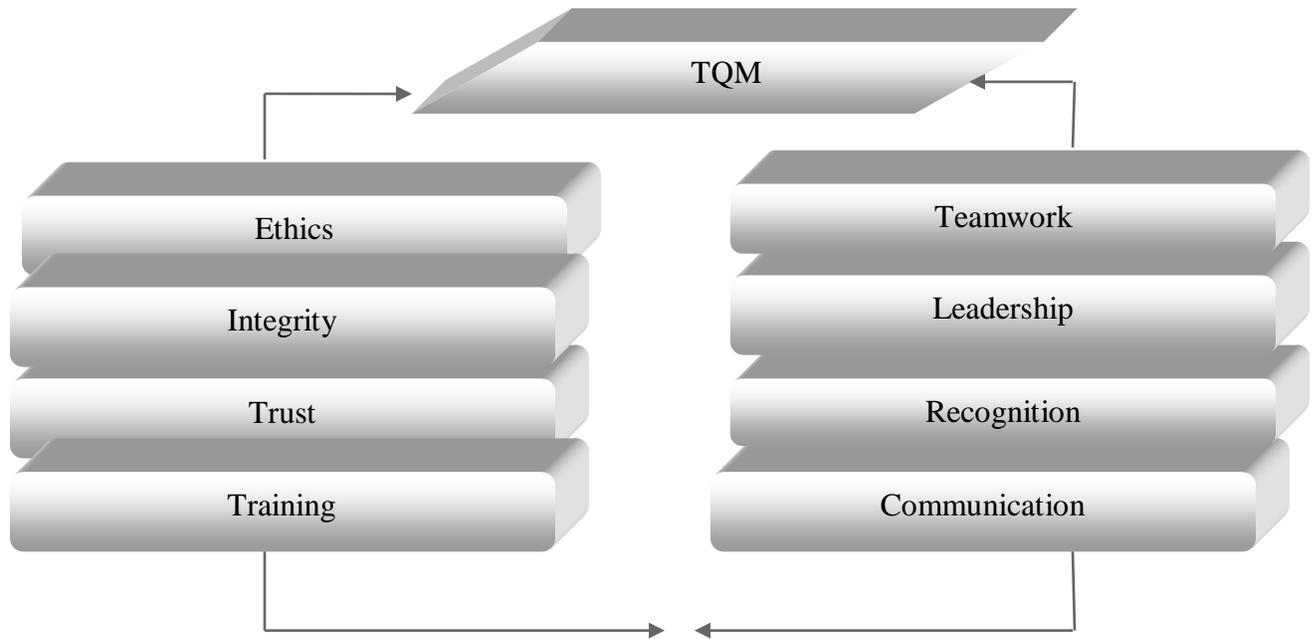
The set of blocks to the left comprises elements that describe how well an organization is adhering to CSR efforts. The first group of the set of blocks to the right depicts how employees' and management's efforts contribute to the organization's quality of services. The recognition and communication blocks depict how management and employees may lead their organization to success. The information on the last two sets of blocks enables management team to properly implement the TQM model in their organization.

Enhanced Total Quality Management

This section examines how IS deficiencies — LLAP — can affect TQM elements. The TQM elements that are mentioned in this section are integrity, leadership, and teamwork. The three degrees of quality — good, better and best — are used to suggest how management may make the best decision regarding their organization's IS. This section also provides information on the application of TBL in regard to IS management. Management may decide which decisions are best by determining which IS are relevant to their organization.

Lack of Relevance

Organizational management may decide which IS are relevant to their organization by considering the quality of the systems. Nelson et al. (2005) stated that "quality is defined by

conformance to customer expectations that may relate to excellence, value, and other attributes that are salient to consumers in shaping their perceptions of quality" (p. 201). If the IS used by an organization is not aiding them in providing superior services to their customers, then the quality of the IS is not relevant to the organization. For example, Mumford (1991) related an account of an organization that was not successful in the implementation of XSEL PC software. Before the organization implemented the software, its employees were excited about the idea and were willing to try it out. The purpose of implementing the software is to prevent sales employees from making mistakes that will cost their organization a significant loss. When the system was finally brought on board, the employees begin showing less interest in it. Because of this behavior, the mistakes that were made by the sales employees began increasing. The software company that manufactured the system tried to update the system by enhancing it so that employees will find it easy to use. However, the employees stopped using it completely because they felt it was irrelevant to their work and it added extra administrative tasks that prevented the sales employees from making sales. The management of the organization worked hard to train employees on how to use the software but employees continued to show less interest until they completely neglected the system. If the organization management had thoroughly considered the relevance of the system in their organization, there are chances that they would not have spent their resources and time in implementing it.

When an organization's IS are poor, a system collapse may occur; an organization's employees may not be able to accomplish any work when the IS are malfunctioning. Chen, Kataria, and Krishnan (2011) mentioned that, when an organization's IS are faulty, the affected employees would need to wait while other systems experiencing similar problems are serviced. Nelson et al. (2005) asserted that an organization's IS portray excellence, value, quality as conformance with specifications, and quality as meeting the organizations' expectations. To meet these criteria, organizational management need to adopt IS that are reliable and manageable.

It is good to espouse IS that are dependable and convenient; however, for the IS to qualify as among the best, top management would need to establish security measures that have the potential to track how customers' information is used within and across business processes. Preventive measures, such as software chips that can monitor how often customers' information is accessed each day, may be used to ensure the information is not breached or misused. This behavior of management is ethically and socially responsible because it demonstrates that management is responsible for their organization's information. Furthermore, to fully monitor how an organization's information is used, management may implement a preventative measure known as a vulnerability matrix (Chen at al., 2011).

The vulnerability matrix is a situational alertness system that informs the system administrators which nodes on the network are vulnerable to an attack (Chen et al., 2011). For instance, an IS that is designated primarily for storing customers' information may have a node that is vulnerable to a breach. The vulnerability matrix has the potential of enabling management to become aware of this threat before a breach occurs. When reflecting on quality, Oaks (2007) observed that even though these resources may be more costly, it may be a best value that can serve an organization well. Furthermore, upper management should teach their employees appropriate ways of using customers' information through examples. Leaders may accomplish this by observing how employees make use of customers' information on a daily basis using the organization's IS.

When inappropriate handling of customers' information is recognized, management should correct employees by showing them the proper way of managing information. This

demonstration should be accompanied by written documentation on how to properly use customer information within and across an organization's processes. This behavior of management would enable employees to adopt positive views about CSR and to think outside the bottom-line mindset (Hollender, 2004). Management may encourage employees to properly manage the organization's IS by granting them access to the systems.

Limited Access

Considering the large number of people who could gain access to an organization's confidential information, management should restrict the amount of information that is available to employees and others who have access to the IS. Awad and Krishnan (2006) suggested, "If managers are not careful, their firms may be the victims of consumer backlash for overstepping the bounds of expected information practices" (p. 14). Organizations become subject to backlash when they do not adhere to CSR and may be penalized by the community members (or customers) whose information has been breached. Management who grant access to customers' information to all employees may be violating the privacy of the customers. As a result, customers' confidential information may be used the wrong way. For example, a report issued by the U. K Information Commission's office mentioned that T-Mobile employees sold thousands of customers' information to T-Mobile rivals, and the rivals used the information to solicit customers whose contracts were soon to expire (Claburn, 2009). Furthermore, management may better avoid data encroachment by unauthorized users in their organizations by focusing on IS countermeasures that would preserve the integrity of the IS. In considering how quality may be maintained, Oaks (2007) asserted that leaders should use resources that are "best and most effective in achieving their assigned purposes" (p. 5). Implementation of the best IS countermeasures enable management to preserve the integrity of their organization's data.

An organization that does not preserve the integrity of the IS it uses in production, and in managing of customers' and organization's information, is more likely to encounter problems with its products and services. Mandke and Nayar (2004) observed that, for an organization's IS to be recognized as having integrity, the management of the IS would need to go beyond quality by adopting an IS that also possesses accuracy, consistency, and reliability. Adopting IS that are consistent and reliable would enable an organization to properly preserve their organization's data without infringement from intruders or internal personnel. Securing an organization's IS is important in maintaining sustainability in an organization and a community because it shows that customers' information is available only to authorized employees.

Absence of Training

Upper management may involve their employees in many IS training programs that may benefit their organization. Nonetheless, management should not exhaust their available time and resources on training programs that are merely good and leave little time for those that are better or best (Oaks, 2007). It would be good to train employees on the IS that they use on a regular basis. However, for this training to qualify as better or best, management would need to involve employees in different training programs that are geared toward IS management. Also, Upper management would need to introduce employees to IS security seminars and conferences that would expose them to the security measures they need to utilize various IS. For example, when management are scheduled to attend IS control seminars, they need to invite employees to attend the seminars as well. This way employees and management will be informed on IS security

measures equally. By doing this, management and employees will be more likely to understand protocols pertaining to IS security control in the same manner. Kanji (1991) noted that "unless top management leads the way, it will be difficult to bring about the required cultural change" (p. 208). Upper management should lead the way for their employees by encouraging teamwork.

Teamwork is an essential part of utilizing an organization's IS. Without teamwork, employees of an organization are less likely to work in accordance with the IS the organization adopts. Knowing that employees would need to work together to ensure the IS used in their organization are utilized appropriately, management would need to carefully structure how employees are designated into various teams. Baker, Day, and Salas (2006) suggested that "team members must possess specific knowledge, skills, and attitudes, such as the skill in monitoring each other's performance, knowledge of their own and teammate's task responsibilities, and a positive disposition toward working in a team" (p. 1578). Employees are more likely to learn how to manage their organization's data with the IS the organization utilizes by monitoring one another's performance on IS management. Involving employees in IS adoption may aid them in understanding the various IS security needs within their organization.

Poor Security

Leadership is a TQM element that encompasses everything an organization's leader does. Organizational leaders should work on their responsibility as management as if everything in the organization depended on it (Oaks, 2007). The decisions management makes regarding IS security affect the organization as a whole. An example of an organization that experienced a breach in their system due to poor security is the Motion Pictures Association of America (MPAA). MPAA experienced an attack on their systems and suspected computer hackers were responsible. If the organization had implemented a strong security system, the outage would have been prevented (Security threats, 2000).

Furthermore, management may make decisions regarding the implementation of encryption and encoding techniques to protect discretion and authenticity of information. For example, management may choose to invest in an encryption algorithm that is sophisticated and difficult to penetrate. The more complex the encryption algorithm, the more complicated it becomes for unauthorized users and hackers to listen in on communications. Nevertheless, if an encryption is not tested before use, management may discover that their choice of encryption may not be as effective as originally thought. Management should have in mind that some decisions regarding IS management are good while other decisions are better. In reflecting on quality, Oak (2007) asserted that management must forgo some good decisions in order to choose others that are better or best in order to contribute to the improvement of the organization. Forgoing some good decisions would enable upper management to put into effect new procedures that are better or best.

Additionally, it is good for an organization's upper management to put into effect new policies and procedures that will enable their employees to properly make use of IS. However, for the decision to qualify as better or best, management would need to involve their employees in making of policies and procedures guidelines. Management should be aware that the insight that a decision is good does not suffice to justify making the decisions (Oaks, 2007). It would be better to involve employees in the IS regulation process because this involvement would encourage them to "begin to view the focal system as personally important and relevant and [they would] therefore be likely to be more accepting of the system than they would be otherwise

had they not participated" (Spear & Barki, 2010, p. 509). Reflecting on which IS to adopt would enable management of an organization to acknowledge the enhanced TBL view.

Enhanced Triple Bottom Line Application

People

The management of an organization may involve employees in cooperation with IS manufacturers in the development of new IS programming. Employees may be involved in the IS development process because they are more likely to know what IS features are needed based on their work experience. This leadership behavior exhibits social responsibility because it suggests that leaders are more concerned with the services provided by their employees and the ability to satisfy the customers than to merely adopt any IS to provide services to their customers. Working together with IS developers would also aid the organization's leaders to utilize the IS in such a way as they see fit. Moreover, involving employees in the IS development process may aid leaders and employees in understanding the organization as a whole. Guamieri and Kao (2008) stated that, when employees are involved in the organizations' decision making process, such as IS development, they are able to understand the totality of the business and build significant relationships with customers. Preserving and protecting IS will be profitable to an organization because it will enable employees to provide adequate services to customers.

Profit

Leaders of organizations may also cut costs on IS adoption. Baker (2010) mentioned that, when employees are taught new technologies and they incorporate those technologies in work practices, they are more likely to be innovative. This new skill of innovation would encourage employees to build different features within the adopted IS. Using employees to improve an organization's IS would save an organization money because the money the organization would have used to employ an outside IS specialist may be utilized for something better. Kreng and May-Yao (2011) observed that "when knowledge[able] workers improve manufacturing and service processes, they not only reduce the organization's costs, but also improve product reliability and consumer satisfaction" (p. 531). Furthermore, providing employees with the opportunity to innovate or provide additional IS features does not necessarily entail that leaders of the organizations relinquish all IS security measures to the employees. Managers must have countermeasure procedures in place so that employees cannot gain access to information that does not pertain to their job duties. By implementing IS countermeasures and providing employees with the opportunity to be innovative, organizational leaders may potentially save their organization money and pay attention to the planet.

Planet

The planet represents the surrounding communities of the organization. An organization that is mainly focused on manufacturing security systems may be able to sell at a reduced cost for the community at large. Providing security systems at a lower cost to community members may be considered socially responsible because it suggests that leaders of the organization are concerned about the safety of the community members. The people of the community and the employees of the organization may assist each other by providing services that will contribute to the betterment of the community at large. Hollender (2004) asserted that "workers and managers are seeking opportunities to do good and are waiting for someone to structure an activity that they can participate in that will allow them to make positive contributions to their community"

(p. 112). When organizational leaders and their employees seek ways to contribute to the community, the organization and the community are more likely to build a relationship of trust. The services provided by the organization and members of the communities have the potential of benefiting both parties. Figure 3 illustrates the three Ps and how they relate to each other.

Figure 3. Conceptual Model of the 3Ps
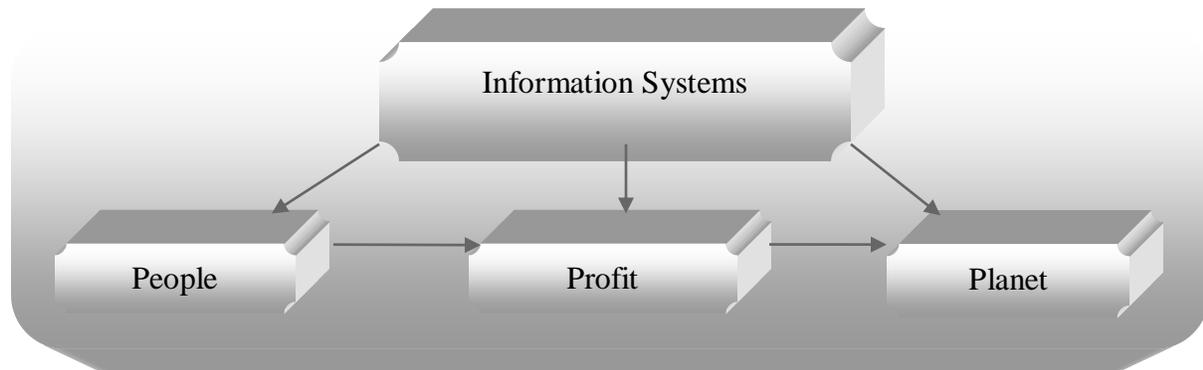
The people build up an organization. Without them, an organization may not be able to use its IS for services. The people are also the eyes of the organization; they are at the forefront observing the performance and strengths of the organization IS to see which areas need improvement. The profit is the end result or outcome of the work of the people. If the people of an organization are not putting in their best to advance the organization, the business may yield little or no profit. The profit is the result of the work of people; it may be little, depending on the effort of the people. The planet is the surrounding communities. For instance, an organization that is located in a community that is dominated by the elderly may need to consider how the elderly may benefit from their products. For instance, an organization that deals mainly with technologies such as cell phones may need to evaluate their products in terms of its price so that the community members could benefit from it. In essence the work of the people could affect the profit and planet of the organization.

Summary

Management of an organization may improve IS deficiencies (LLAP) by implementing the elements of TQM, which are ethics, integrity, trust, training, teamwork, leadership, recognition, and communication. In order to uphold socially responsible behavior, management of an organization would need to secure and maintain the IS used in manufacturing the products and services offered to the organization's customers and the surrounding communities. CSR issues are not black and white, and the likelihood of finding a flawlessly responsible organization is low (Hollender, 2004). However, management may protect their organizations' IS by making decisions that are not merely good but best for the organization and the community at large. The three degrees of quality—good, better, and best—would assist management of an organization to better implement the TQM constructs in their organization's IS. A TQM approach to customer focus involves providing suitable services to the organization's customers (Agus, 2004). In order to provide satisfactory services, organizational management needs to employ honest people who are committed to doing their job well. Management may implement the tenets of TQM in

order to secure their IS. By resolving their organization's IS deficiencies, management would find themselves adhering to CSR efforts.

Research Contribution

Research on CSR implementation has primarily focused on the integrity of CSR reporting , how this reporting is acknowledged when the person who carries it out is a professional, and how social responsibility objectives can be realized through teamwork (Pflugrath, Roebuck, & Simnett, 2011; Peloza & Falkenberg, 2009). Furthermore, research on TQM and TBL has focused on how managerial research could be improved by integrating the approach of TQM into management theory and the implication of the TBL construct in evaluating how a policy, project, or resource allotment will meet an organization's objectives (Dean & Bowen, 1994; Proctor & Straton, 2009). In contrast, the present research applies the CSR, TBL, and TQM constructs to the improvement of an organization's IS. This research addresses how the implementation of the mentioned constructs could aid management in becoming socially responsible to their organizations and surrounding communities.

As an alternative or supplement to conventional CSR, TQM, and TBL implementation in organizations, the present study promotes awareness of IS deficiencies (LLAP) in organizations and how this awareness could aid organizational management in becoming socially responsible to their organization and the community at large. Considering how some leaders do not adhere to CSR efforts, many leaders have begun to understand the implications of adhering to the CSR principle and have decided to make changes, not necessarily for altruistic reasons, but because of the economic benefits that are associated with it (Hollender, 2004). It is good to purchase IS that may aid organizational leaders to provide adequate services to their customers and community members; nevertheless, it will be better to adopt IS with a strong security factor to safeguard an organization's information. Consequently, the best decisions made by top management regarding the quality of the organization's IS will become a valuable awareness approach for IS educators, leaders, and professionals.

Conclusion

Although the TQM and TBL literature has often cited how management of organizations may improve the services provided by their organizations, the present research provided a different approach on how management may use these constructs to preserve and maintain the use of IS. Socially responsible behavior varies from one person to another; what may be considered socially responsible to one person may not be considered so by another. Organizations and their surrounding communities may decide which behaviors are socially responsible by communicating their ideas with one another. Nevertheless, leaders of organizations must be careful when sharing ideas with the leaders of the communities so that confidential information may not be communicated unintentionally. Organizational management may make the best decisions regarding their organization's IS by acknowledging their employees and the community at large.

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