

Information and Communication Technologies (ICT): A Tool to Implement and Drive Corporate Social Responsibility (CSR) Technologies de l'Information et de Communication : un outil pour implémenter et véhiculer la responsabilité sociale des entreprises (RSE)

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Information and Communication Technologies (ICT): A Tool to Implement and Drive Corporate Social Responsibility (CSR)

Technologies de l'Information et de Communication : un outil pour implémenter et véhiculer la responsabilité sociale des entreprises (RSE)

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Abstract
This paper examines the use of ICT in the implementation of CSR. ICT is a well established business tool today, while CSR is acknowledged as important, but varies by meaning, intent, and compliance. In this paper we clarify CSR varies by country and industry as there is no comprehensive and inclusive definition. This negatively impacts on the implementation and use of CSR. Thus, this paper proposes the use of ICT to facilitate the implementation of CSR, driving it toward a common understanding and usage of the term.

Key Words: Information and Communication Technology, Corporate Social Responsibility, Implementation, Diffusion.

Résumé
Ce papier s'intéresse au rôle des TIC dans la mise en place de la RSE. Les TIC sont un véritable outil de travail qui a intégré le quotidien des différents acteurs. Par ailleurs, la RSE est devenue un enjeu majeur pour différentes entreprises. Cependant, la définition du concept RSE n'est pas partagée et perçu de la même façon par les acteurs, les pays ou les secteurs d'activité. Cette différence de compréhension de la RSE est à l'origine de plusieurs problèmes quant à son implémentation et sa diffusion.
Dans ce papier, nous procédons, dans un premier temps, à la clarification du concept de la RSE (nous traçons notamment les frontières avec le développement durable ou le Green IT). Nous discutons, dans un temps, la proposition que l'utilisation des TIC comme un véritable levier dans la mise en œuvre et dans la diffusion de la RSE. Cette démarche permettrait, d'aboutir à 1/ une meilleure compréhension partagée de la RSE 2/ adoption des pratiques RSE par l'ensemble des acteurs.

Mot clefs: Technologies de l'Information et de Communication, Responsabilité Sociale des Entreprises, Implémentation, Diffusion.

Introduction

The use of computers and technology today has become fundamental to the operation of organizations and society (Kroeker, 2010; Yonck, 2010). Today, information is carried at phenomenal speeds within and across various communication networks known as information and communication technology networks (ICT). These allow the transfer of massive amounts of information in a matter of seconds, enabling humankind to advance in a multitude of ways. These include the transfer of rapid real-time communication across great distances; enhancing safety through the tracking of air, marine, and ground traffic; enabling rapid calculations and mathematical estimations to be made to enhance predictive capabilities and to advance science; enhancing the usability and manipulative abilities of models to better forecast and envision results in all the sciences; and, enabling and confirming medical diagnosis from considerable distances, among others. The advancements enabled by the transfer of information via computers and technology are readily observed in the ease with which business is conducted across regional and international borders.

Today, ICT permeates many different industries and is responsible for the growth of production and revenue (Basu and Ferald, 2008). With the increasing global penetration of computers and networks enabled by the Internet (Chinn and Fairlie, 2007), there are many studies indicating the adoption of ICT positively impacts concepts such as creation of significant differences in the world, economic productivity, poverty alleviation, and sustainable development (Madon, 2000; Puri, 2007; Walsham, 2001). Specifically in business, ICT is noted as important for reducing costs in the international and transnational arena (Rangan and Sengul, 2009).

While the installation of computers and connections responds to needs within socio-economic development (Hinson and Sorensen, 2006), the more inclusive ICT has become vital in many parts of the world (Price, 2006) for reasons including but not restricted to

development. ICT facilitates the transfer of knowledge around the world and the integration of multinational and transnational corporations (Rangan and Sengul, 2009). These transfers are noted as increasing the GDP growth (Altig and Rupert, 1999), as well as the non-linear work productivity and ability to multi-task (Aral, Brynjolfsson, and Van Alstyne, 2006), clearly demonstrating the added value of ICT.

ICT has also been cited as encompassing potential innovations within and among organizations by enabling the use and sharing of information. The benefits of ICT in organizations include the potential to reshape and reformulate organizations internally, as well as reshape their interactions with other organizations and individuals within the networks in which they lay (Burt and Taylor, 2000). The networks also offer to corporations the opportunity to engage in organizational learning and knowledge management (Castells, 1996; Quinn, 1992) due to the ability to store, retrieve, calculate, and reformulate information (McLoughlin, 1999). ICT networks have been included in numerous corporations and business enterprises including not for profits (Burt and Tayler, 2000), political campaigns such as seen in the 2008 US presidential campaign, and governments (Cardoso, Cunha, and Nascimento, 2004), among others. The pervasiveness of ICT in business thus makes it an important tool for implementing Corporate Social Responsibility (CSR).

CSR has a long history, beginning in the 1920's (Clark, 1926). Today, however, there is a growing demand by the public, which has been responded to by government, for business to demonstrate its social and environmental responsibilities (Moon and Vogel, 2008). This has resulted in studies that discuss many reasons (Hanke and Stark, 2005), not the least of which is the financial gains of adopting CSR (Lindgreen, Swaen, and Johnston, 2009a). Amongst these studies remains the call initiated by Friedman (1970) that the true social and environmental responsibility of business is to increase its profits (Amable, Demmou, and Ledezma, 2010).

The definition of CSR is thus in question. But the call of the population for CSR and the need to implement CSR practices within the firm due to legislation mandating reports of responsible behaviors, such as found in Europe, is no longer an option. It is the intent of this paper to discuss how corporations can realize the implementation of CSR and drive the CSR actions and policies through the use of the pervasive nature of ICT networks.

Within this paper, we discuss both ICT and CSR within organizations and society, drawing linkages both real and potential. We then utilize the abilities of ICT to discuss the implementation and driving of CSR within organizations, respecting the ongoing evolution of both concepts.

1. ICT within organizations and society

This section of the paper looks to defining and briefly highlighting the evolution of ICT within both organizations and society. ICT is recognized as a powerful tool due to its ability to integrate all actors into a cohesive amalgam, capable of creating change.

1.1 ICT: definition and evolution

ICT is a field of work and study that "includes technologies such as desktop and laptop computers, software, peripherals, and connections to the Internet that are intended to fulfil information processing and communications functions" (Statistics Canada, 2008). Another definition for ICT comes from UNESCO, which states ICT is "the combination of informatics technology with other, related technologies, specifically communication technology" (UNESCO, 2002). Thus, ICT uses the newest technologies to process and communicate information.

In developing these technologies, the field of ICT is broad and diverse: but it was not always so. The precursor for the Internet, Arpanet, banned commercial use of the emerging technology (Internet History, 2006). However, in 1989, commercial emails first appeared and by 1990 Arpanet formally closed leaving the Internet with over 300,000 hosts within a

TCP/IP system with Ethernet technology (Internet History; 2006). This technology facilitated a dramatic growth (Internet History, 2006), noted in 1998 when the OECD published a definition of the ICT sector as "a combination of manufacturing and services industries that capture, transmit and display data and information electronically" (Organisation for Economic Co-operation and Development, 2002, p.5). With the review of the field in 2002, the OECD incorporated a product classification system (Organisation for Economic Co-operation and Development, 2002), enabling the rapid inventorying and control functions, adding to the versatility of ICT in commerce. However, this evolution has not been noted in the definition that specifies the application of ICT in industry and does not include other functionalities now incorporated into ICT including verbal and pictoral information transfer and the calculation and retention of statistics, among others facets now evidenced. Other definitions of ICT focus on specific attributes, such as the provision and access to information via telecommunications including wireless and other networks, rather than trying to incorporate the diversity of the entire field. Today, ICT has experienced a convergence that has intertwined communications with photography, communication with information access, and software with real-time technology. This is shown in the growing number of hand-held devices that can access the Internet and telecommunication networks, exemplified by the 4,100 million mobile cellular subscribers compared to the 1,267 million fixed telephone subscribers and the 1,542 million Internet users in 2008 (International Telecommunication Union, 2009).

ICT has been cited as encompassing potential innovations within organizations by enabling the use and sharing of information. The benefits of ICT in organizations include the potential to reshape and reformulate organizations internally and their interactions with other organizations and individuals within the networks in which they lay (Burt and Taylor, 2000). Networks also offer to corporations the opportunity to engage in organizational learning and knowledge management (Castells, 1996; Quinn, 1992) due to the ability to store, retrieve,

calculate, and reformulate information (McLoughlin, 1999). ICT networks have been included in numerous corporations and business enterprises including not for profits and humanitarian enterprises (Burt and Tayler, 2000), political campaigns such as seen in the 2008 US presidential campaign, and governments (Cardoso, Cunha, and Nascimento, 2004), among others. This pervasiveness of ICT is discussed in the following section.

1.2 The use of ICT: An omnipresent factor

ICT today is used in a multitude of businesses (Fitterer and Rohner, 2010; Hynes, 2010), in a multitude of countries (Dimelis and Papaioannou, 2010), for a multitude of purposes (Martinez-Caro and Cegarra-Navarro, 2010; Sharif, Irani, and Weerakkody, 2010). The OECD statistics showing Internet penetration within business is shown in figure 1, following.

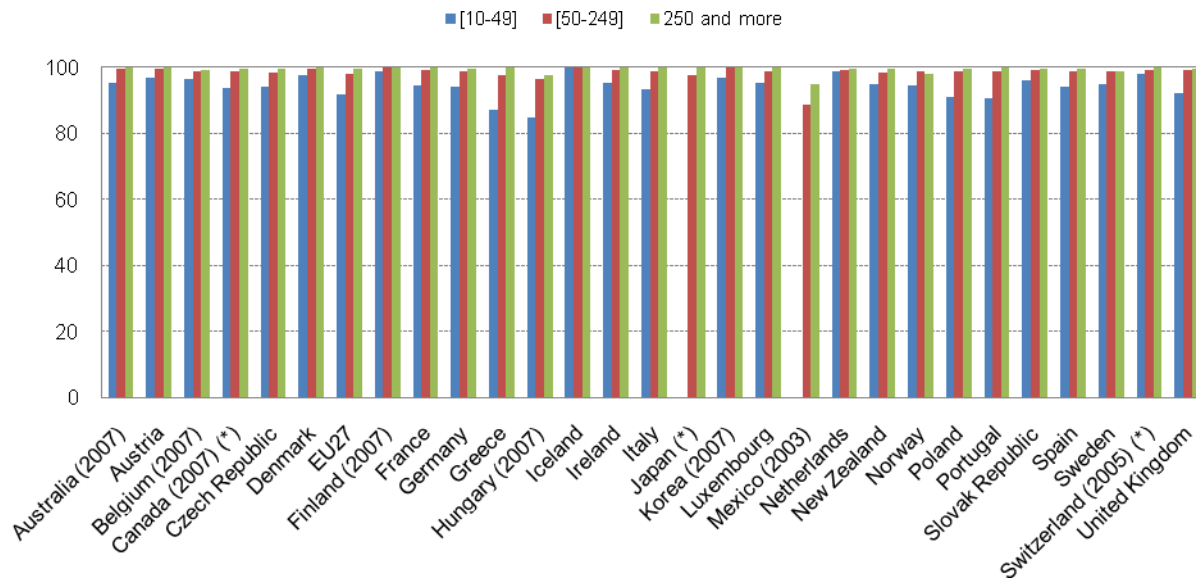


Figure 1: OECD Internet Penetration by size class, 2008 or latest available year, percentage of business with 10 or more employees (Available as 2d. Business broadband penetration by size class, Directorate for Science, Technology and Industry, 2010).

This clearly demonstrates the high penetration of the Internet within business in many countries, albeit not all. The appearance of these countries as opposed to other emerging countries is a testament to the value of ICT for the propagation of business.

ICT is also used by individuals for a multitude of purposes including education (Busetti, et al., 2007; UNESCO, 2002), daily living (Richardson, 2009), and social networking (Rose, 2007). This prevalence of ICT in everyday life can be noted in the following table from International Telecommunication Union, Figure 2. This demonstrates the developments of the various components of ICT over the span of 1998 to 2009.

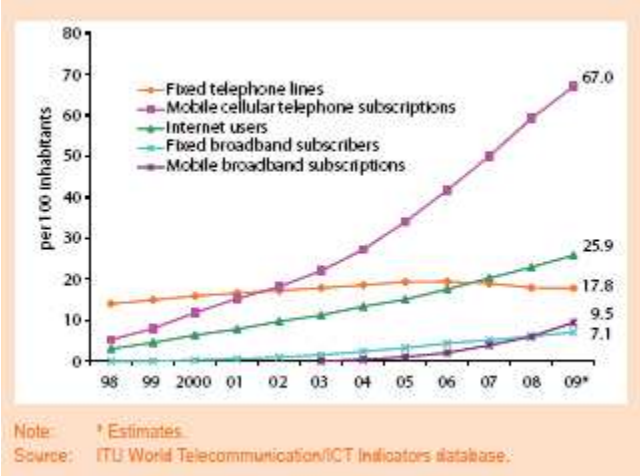


Figure 2: Global ICT Developments, 1998 to 2009 (International Telecommunication Union, 2010)

What is clearly apparent is the increasing popularity of the various technologies, certainly demonstrating the maturing of the field. The maturity explains the slowing of the growth in the developing countries as shown in Figure 3.

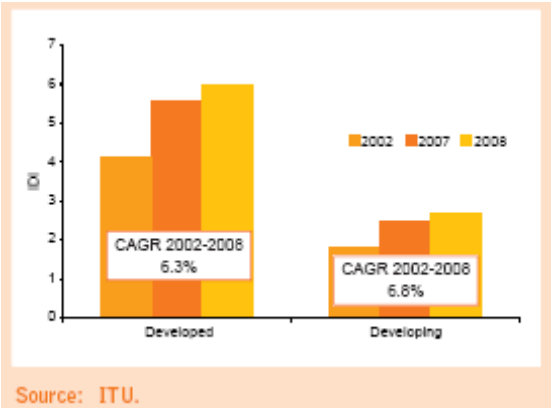


Figure 3: ICT growth levels, 2002 to 2008 (International Telecommunication Union, 2010)

Despite this growth in ICT, it must be noted that the costs of broadband remain unaffordable in many developing countries, explaining the low level of growth as shown in Figure 4.

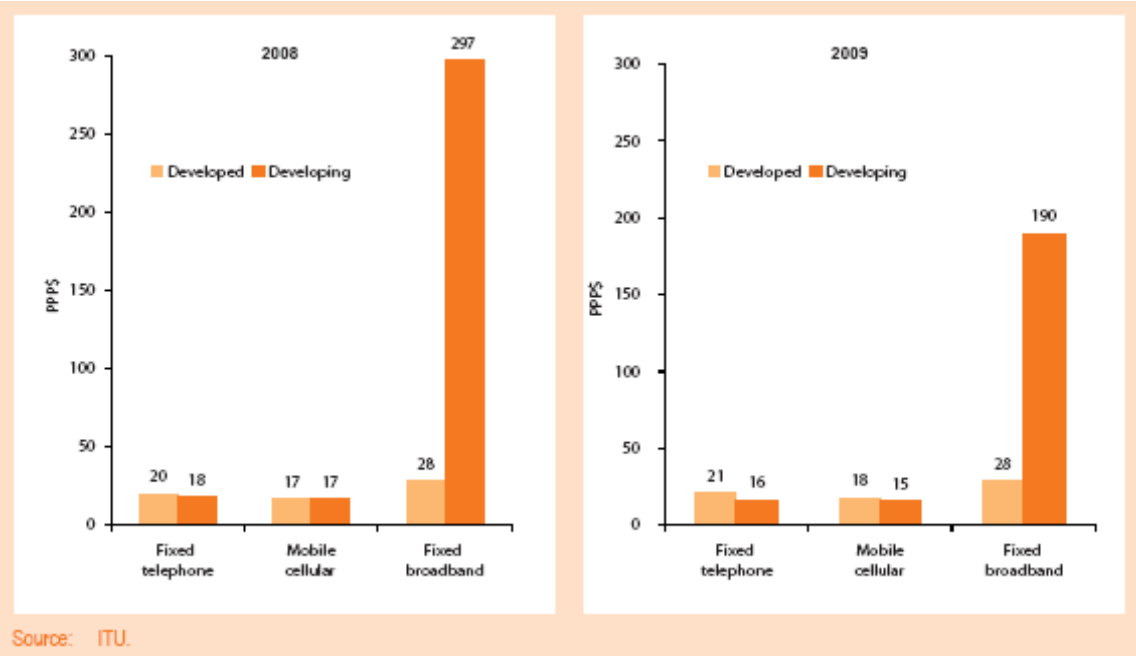


Figure 4: ICT price sub-baskets by level of development (International Telecommunication Union 2010)

However, despite this maturity and costs, innovations and next-generation technologies continue to emerge and converge with existing technologies. This continues to decrease the costs, making them more available and further decreasing the costs.

Whereas previously ICT was seen as the purview of business, it is now obvious that it has become commonplace and routine in daily life. This is concomitant with the emerging recognition of Human Rights and the place of the individual within business. As individuals become more proficient with ICT; its use as a proxy to facilitate the introduction of CSR may expedite and simplify the development and monitoring of CSR, as discussed in the following section.

2. Corporate Social Responsibility:

Within this section we will look to define Corporate Social Responsibility as it is structured in society today. Using the many definitions, we look to the need to implement CSR globally to fulfil the mandates of the population and governments.

2.1 Corporate Social Responsibility: an ill-defined concept

Corporate social responsibility (CSR) is a term appearing in the academic literature since the 1920's (Clark, 1926). Over the years, the practice and application of CSR in the community has been examined within academia and is dominated by three distinct theories. The first, Stakeholder Theory, originally developed by Freeman (1984) states that CSR stems from the compliance of organizations via corporate strategy with the needs and aspirations of the community. The second theory, Social Contract Theory, was first noted by Socrates' choice to accept his execution by the state and more recently by Thomas Hobbes (1651: 1985), John Locke (1690: 2003), and John Rawls (1971). As demonstrated by these authors, throughout the centuries, CSR intoned that man is obligated to obey the mandates and norms of the society in which he lives. This theory is questioned; in particular concerning whether the psychology of the individual is inadequate when dismissing affective bonds as non-essential and voluntary (Baier, 1988, 1994). Further, this theory relies, partly out of the times in which it was developed and partly because no one but feminists have questioned it, on the conceptualization of an "economic man" who fails to represent children, women, and some men (Held, 1993). The third and final theory, Legitimacy Theory, states that commercial enterprises are bound to operate within the society that then endorses its continuation. However, this theory is debated as to whether or not it is even a theory (Bebbington, Larrinaga-Gonzalez, and Moneva-Abadia, 2008). Further, Legitimacy Theory is bound to Social Contract Theory in that the legitimacy is founded in the social contract between the

commercial enterprise and the society in which it is lodged. Thus, the only remaining theory is that of the Stakeholder Theory, proposed by Freeman (1984).

Despite the application of theory to CSR, there is little convergence in the understanding of the term either among its users or among countries. CSR is discussed as a mechanism of corporate governance (Chih, Chih, and Chen, 2010). This is exemplified by the socially responsible dimensions of the Dow Jones Sustainability Index, being economic (including corporate governance, risk and crisis management, codes of conduct / compliance / corruption and bribery, and industry-specific criteria), environmental (including environmental reporting and industry specific criteria), and social (including corporate citizenship / philanthropy, labor practice indicators, human capital development, social reporting, talent attraction and retention, and industry specific criteria) (Dow Jones, 2009). CSR is also discussed as synonymous with sustainable development. For example, in France, CSR is a subset of sustainable development, despite the establishment of it as a separate domain at the Johannesburg Summit in 2002. This separation has been confirmed in the arena of academia with Academy of Management Conference in 2007 wherein CSR was identified as including social responsibilities, the ethical environment including personal values, the public policy environment including legal and regulatory mandates (Dubbin, Graafland, and van Liedeerke, 2008), the ecological environment, and the stakeholders' environment including corporate governance and technology (Academy of Management, 2007). Others look to CSR as including and being driven by greater stakeholder awareness of corporate behaviour including ethical, social, and environmental; increased stakeholder, investor, and peer demands for CSR; and the corporate conscience (Ernst and Young, 2002).

Identifying the components of CSR through the literature brings a number of concepts to the fore. These include: voluntariness, broad range of stakeholders, economic, legal, ethical, philanthropic, address and correct social problems, adapt to needs of society, optimize

the economic well being of organizations, optimize the economic wellbeing of stockholders, optimize the economic wellbeing of stakeholders, starting where the law ends, considering the effects on individuals, considering the effects on the social system, education, happiness of employees, politics, seeking profits, going beyond economic interests, going beyond technical interests, maintaining the shareholder value within the economic paradigm, prudent management, desirable to society, maintaining morality, and maintaining wellbeing (Freeman and Hasnaoui, 2010). These coincide with the various definitions of international organizations that monitor or work with organizations to establish CSR (Freeman and Hasnaoui, 2010). However, the definition of CSR is neither inclusive nor established.

Included in the multitude of aspects included in the definition of CSR, is the ecological environment. This reflects CSR's initial break away from sustainable development in 2002. It also reflects the reality of the definition of CSR in France. The authors would state that inclusion of this element is confusing because by including sustainable development under the guidelines of CSR leaves the work within sustainable development to corporations when in fact this work belongs to humanity and cannot be restricted to only corporations. Further, with the multitude of definitions of CSR, including aspects of sustainable development within its borders broadens the understanding of the term to the "motherhood and apple pie" syndrome wherein it begins to mean everything and nothing. Thus, within this paper, we exclude aspects of CSR that are encompassed within sustainable development. Instead, within this paper the concept of Corporate Sustainability is adopted. This is taken from the European Corporate Sustainability Framework (ECSF) research project, wherein the concepts of Corporate Sustainability and Corporate Responsibility are recognized as fluid, different, but mutually dependent (Hardjono, van Marrewijk, and de Klein, n.d.). Links CSR with Sustainable Development within the triple bottom line of people, planet, and profit recognizes the differences between them while recognizing the potential interplay. The

differences come from the principles that are based on the firm's unique values, which are then founded in the firm's orientation and contextual environment (Caldelli and Parmigiani, 2004), while the interplay results from the difference between the goals and objectives of the two concepts. However, while the triple bottom line intersects CSR with sustainable development, the overlap does not place CSR into sustainable development but rather highlights the corporate responsibilities within sustainable development to conduct environmental performance. This demonstrates that while sustainable development and CSR have commonalities, they are in fact separate and distinct. Further, sustainable development is the responsibility of everyone while CSR is the responsibility of corporations and those working within them. These two aspects will not be merged in this paper, but any attribute or characteristic overlap will be dealt with specifically as CSR.

As stated by ECSF, the definition of CSR is fluid. Broadly, CSR is defined by its users and compliance is in fact voluntary. The World Business Council for Sustainable Development defines CSR as "the continuing commitment by business to contribute to economic development while improving the quality of life of the workforce and their families as well as of the community and society at large" (Watts and Holme, 1998). The European Commission defines CSR as "a concept whereby companies integrate social and environmental concerns in their business operations and in their interaction with their stakeholders on a voluntary basis" (European Commission, 2010). While there are differences between these definitions, they are united with the triple bottom line which includes social and environmental performance and economic success (The Global Reporting Initiative, n.d.). The commitment to CSR is identified by the individual company by the commitment of the organization to extend its operations and concerns beyond the traditional economic priorities into the arena of stakeholder interests and concerns (Capriotti and Moreno, 2007). To include the transparency and ethical behaviour within CSR (Capriotti and Moreno, 2007), the

rankings, ratings, or evaluation models that relate to CSR tend to be based on the triple bottom line (Schäfer, 2005).

Despite this confusion over the terminology, it is clear there is a gap being filled by actions performed in the name of CSR. In the next section we look to identifying the issues potentially resolved by CSR.

2.2 Identifying the issues and the need for Corporate Social Responsibility

There is little research into the implementation of CSR in practice. While International Organization for Standardization (ISO) is working on standards for the implementation and monitoring of CSR in business, the standards are not yet published and will not be mandatory, leaving the ISO14001 dealing with environmental management, not CSR. Looking specifically into CSR, some research indicates that initiatives designed to develop CSR can and do result in undesirable effects (Piercy and Lane, 2009). This is partially due to the many barriers that prohibit full or partial implementation (Piercy and Lane, 2009; Smith, 2003). These barriers may be the cause of the failure to implement CSR noted in a number of industries (Dodds and Kuehnel, 2010; Lindgreen, Swaen, and Maon, 2009). Other research looks to the internal organizational developments necessary for the integration of CSR into business models and processes (Dunphy, Griffiths, and Benn, 2003; Mirvis and Googins, 2006; Zadek, 2004) leaving gaps concerning the social aspects of business. Changes in models are noted in the organizational culture (Lyon, 2004), but the cultural analysis is incomplete and non-inclusive (Doppelt, 2003). This analysis reflects the recognition of the need for business to prioritize human and social values rather than economy (de Woot, 2005), a change that impacts on the fundamental relationship of the organization to its stakeholders and environment (Etzioni, 1988).

The reliance of CSR on Stakeholder Theory clearly fits within corporation's reliance upon ICT for operations. With Stakeholder Theory founded on the freedom of those impacted

by the operations of the corporation to demand fairness within a just society, the use of ICT and the various tools within ICT can be lodged. The tools include means by which all stakeholders are enabled to communicate to the world every event and situation witnessed. This is demonstrated in the global outrage with Google for accepting the censoring of the government and the Chinese people's resistance to the "Green Dam Youth Escort." Open ICT is perceived as fundamental to the fairness required by a just society. However, this realm is little investigated within academia.

Another little researched area is the correlation between CSR, ICT, and human rights. Existing research indicates a correlation between the perceived importance of CSR and the sensitivity toward human rights (Puncheva-Michelotti, Michelotti, and Gahan, 2010). ICT is fundamental to the application of Article 19 of the United Nations Declaration of Human Rights that states "Everyone has the right to freedom of opinion and expression; this right includes freedom to hold opinions without interference and to seek, receive, and impart information and ideas through any media and regardless of frontiers" (United Nations, n.d.).

The potential of conflict between these rights and the foundations and incentives to develop CSR can be extrapolated from an article examining implementation in China (Lin, 2010). The development of CSR is correlated with the political, social, and economic constraints implanted by the governmental policies. If these policies are uneven, not only in the implementation of them among different areas of the country but among the many facets incorporated within CSR, the constraints can be identified. That is, China has a record of abuses in the human rights field and thus, the development of human rights within CSR is limited through the manipulation of the government (Lin, 2010) and perhaps the companies themselves in looking to entering developing countries to decrease costs.

This brings to light the normative nature of CSR in mandating behaviors, including voluntary compliance and morality (Wettstein, 2009). However, corporations are not

attending to the normative mandates of CSR, including human rights (Wettstein, 2009). Some of the elements missing because of the lack of attention include the focus on labor and human rights, equality of rights, the empowerment of individuals, and the redistribution of power and privilege (Utting, 2007) all elements potentially under the jurisdiction of CSR.

Despite these failings of corporations to uphold the normative nature of CSR, the appearance of CSR adds value to the corporation, specifically in Europe where companies are mandated to report CSR activities. This enhances the retention of employees, thus decreasing costs (Naude, 2009), promotes community and environmental stewardship (Nelling and Webb, 2006), and increases market value (Barnett, 2007; Orlitzky et al., 2003; Verschoor, 1998; Webley and More, 2003). These benefits lead to the conclusion that improving the implementation of CSR will result positively for corporations as well as their employees and society as a whole.

2.3 CSR implementation

The implementation of CSR requires a commitment by the executives, owners, and administration. It is commonly accepted wisdom that policies and procedures endorsed by those most affected will be more successfully implemented than mandating changes in a "top down" manner. But there is debate concerning whether strategy should approach CSR from a business perspective or a social perspective (Sharp and Zaidman, 2010). These authors find CSR must be approached strategically, but is most effective in firms that support a value-centric perspective. Following the initial adoption, Sharp and Zaidman (2010) find CSR activities become individual volunteerism, diminishing the involvement of the corporation and bringing into question the results of CSR.

Others concur that the implementation of CSR as a strategy from the "top down" not only limits the enactment, but significantly decreases the awareness and viability of CSR (Nord and Fuller, 2009). It is acknowledged that despite the age of the concept of CSR, the

lack of awareness of the optimal application leads one to the conclusion the implementation of CSR remains at an embryonic stage. This embryonic stage then must be encouraged to develop, through drivers that encourage and promote CSR. At this point, the introduction of ICT will facilitate the implementation and drivers of CSR.

3. The attainment of CSR through ICT:

Although as aforementioned, CSR is much researched and discussed, the academic literature is strangely quiet about the means through which it can be implemented. Yet, if not implemented, CSR simply remains an interesting academic artefact and a victim of terminological clutter (Galloway and Dunlop, 2007). CSR has no universally recognized definition, leaving it amorphous and open to interpretation. Within the resulting variety of definitions comes the ability for CSR to be a concept capable of implementation by anyone at any time in any place for any reason. This flexibility allows us to propose herein that CSR can be implemented and driven using the global networking of ICT.

The existent power of ICT comes from its global reach in the circularity of its democracy allowing immediate e-participation, its accessibility allowing for e-participation, and its flexibility allowing for its democracy. Although the web is still used for one-way dissemination of information either through digitized words, audio, or video; it is increasingly being used as a tool for two-way communication through the use of bulletin boards, discussion forums, and blogs. For example, CSR is the topic of corporate (Forbes - http://blogs.forbes.com/csr/2010/04/29/welcome-to-the-new-forbes-csr-blog/, World Press - http://csrlaw.wordpress.com/), media (BusinessWeek - http://bx.businessweek.com/corporate-social-responsibility/blogs/, Link TV - http://www.linktv.org/CSR/blog), organizational (CSR International - http://www.csrinternational.org/?page_id=59, BSR - http://blog.bsr.org/), and individual blogs, CSR@Intel - http://blogs.intel.com/csr/; CSR Perspective - http://www.csrperspective.com/), and individual (http://craneandmatten.blogspot.com/,

http://fhcsr.typepad.com/) blogs. But ICT also incorporates face-to-face communication such as that enabled by Skype, Eluminate, and WebEx. With few rules and regulations enforceable in the increasingly global environment, organizations and individuals appropriate ICT for their own purposes. While the Web is a powerful tool for manipulation of information, it can also be used for opening new portals of information made transparent because it is shared electronically and therefore instantly. But the traditional computer is no longer the only source of electronic communication and information sharing. With the emergence of cell phones and other devices that enable communication across nations and around the globe, ICT is a powerful tool to disseminate information concerning CSR to the public.

The development of communication devices capable of accessing the Internet has facilitated the emergence of social media. Social media is noted to benefit business and individuals alike (Lillington, 2006). The networking using this media facilitates individuals (Kennedy and Wellman, 2007) and organizations (Stephens and Davis, 2009), but always leaves humans at the centre of Web 2.0. Being at the centre, people read, add to, subtract from, forward on, or trash the information and the message. But Web 2.0, while enabling communication, also personalizes the access, allowing individuals to be identified, or the machine accessed to launch the information thanks to the IP coding. Thus, individuals now must take responsibility for their actions undertaken on the Internet and their communication. In taking this responsibility, the individual is thus culpable for the diffusion of concepts, ideas, and facts throughout their network. Networks are defined as a system, bound together by communication that is designed around a similar purpose. Individuals are and can be members of multiple networks, each with different purposes.

Networks are increasing in size with the increasing globalization facilitated by the ability to communicate. This increase simultaneously demands adherence to cultural norms and diminishes their influence. With the increasing flexibility of technology, that is the ability

to imbed videos and URL links in a multitude of formats, few networks or those within networks, are not influenced or impacted by the technology.

The increasing interconnectivity of communication technologies now allowing ICT to actively participate in the creation and management of knowledge (Cegarra-Navarro, Wensley, and Martinez-Conesa, 2010). The dependency between the implementation of newly created knowledge and ICT is recognized as having greater importance than other resources, including monetary funding (Knockaert, Spithoven, and Clarysse, 2010). This shifting focus away from resources into knowledge, education, and information system planning is stronger in developed countries (Wielicki and Arendt, 2010). Recognizing the importance of these three elements mandates the creation of an ICT platform upon which CSR can be discussed, debated, defined, and referenced.

When dealing with CSR, the construction of this platform necessitates the inclusion of Web 2.0 and networking. Using this ICT platform to facilitate the awareness of CSR is the first step to global recognition of the components of CSR and the steps necessary to implement it. The ICT platform will facilitate the communication about CSR, its operations and solutions, furthering the development of CSR either using recombination of existing concepts and ideas or recombination of existing concepts and ideas with those that are new to develop innovative solutions.

The development of these platforms will both enhance and be enhanced by the networking and diffusion of information disseminated. The information relayed via the platforms will come from those interested in CSR and thus will cover a broad spectrum of interests. But just as Chaos Theory began in experimental physics and can now be found in diverse fields such as mental health and business, information concerning CSR, when exposed to the public eye, will morph and evolve into user friendly plans and programs. This morphing

and evolution is found to occur where ICT is democratic and efficient (Mitra, 2009). The democratization of ICT is found in the accessibility and freedoms of networking.

Networking facilitates the delivery of enhanced value through the alignment of goals and objectives, which in turn strengthens the bonds and collaborations (Hallikas, *et al.*, 2008). Because networking has evolved into a more open structure recognizing globalization depends on the speed of technological changes, the networking encouraged by CSR platforms looks to the need for structuring the value (Allee, 2003; Ahuja, 2000). These networks would develop specifically around CSR and would encompass collaborative relationships across and within industries to further the implementation and application of CSR. Through these networks information would be diffused, including information about CSR, how to implement it, and the necessary tools to drive it. This information would be diffused not only throughout the one network, but throughout many networks because of the diversity of links and communication patterns (Ekbia and Kling, 2005).

Just as the adoption of ICT in SMEs has been somewhat problematic, it is necessary to specifically address the adoption of CSR using ICT. As is apparent by the number of organizational and industry websites dedicated to CSR, there is ample support for the adoption of CSR. One factor noted as necessary to the adoption of eBusiness in SMEs is the need for commitment and support of industry associations and the ability to collaborate and find synergies among like-minded organizations (Gatautis and Vitkauskaite, 2009). This may necessitate the development of websites dedicated specifically to the interchange and exchange of information among SMEs concerning the implementation and monitoring of CSR. Using this platform, companies and their customers could discuss and streamline their procedures to not only implement CSR but to improve finances.

4. Conclusion

The links between ICT and CSR are strong. But in so much of the academic literature, CSR is examined within the arena of ICT. That is, ICT is examined for its practices and procedures that are reflective of CSR. Rarely is the converse examined. That is, the field of ICT examined as a means and a modality to implement CSR on a global scale is largely unexplored. Yet, ICT is the most logical means through which CSR can be implemented and driven throughout the globe.

As demonstrated in this paper, ICT has a global reach, being well established in developed economies and growing in strength and influence in the emerging economies. This globality is the missing ingredient in the implementation of CSR. Whereas CSR is neither universally defined nor understood due to cultural differences, ICT is a truly global and universal phenomenon. It is this phenomenon that provides an avenue for the implementation of CSR and the drivers to ensure compliance with the intent. ICT also provides the means to crease a forum for those working in the field of CSR to join together to discuss the meaning and application of the definition. This discussion may well result in a universal definition of CSR that, like the United Nations Declaration of Human Rights, can be couched in terminology that allows for cultural variances but sets basic ground rules. This allows for Freeman's (1984) Stakeholder's Theory to be encompassed because CSR results in the compliance of organizations via corporate strategy with the needs and aspirations of the community

The ICT facilitated discussion can in fact become global due to the omnipresent reach of the Internet and web technologies. Although Internet penetration is low in many countries, the recognition of the importance of ICT is demonstrated by the growth of the One Laptop Per Child network. This program creates an interconnectivity that allows for collaboration to develop creative solutions between and among individuals in emerging countries and anyone

else on the Internet (One Laptop Per Child, n.d.). With the highest Internet penetration being 76.2 percent in North America (Internet World Stats, 2010), many places in the world remain unconnected. But as indicated in Figure 1, many of the world's business, with business the home of CSR, are in fact connected. This connectivity indicates a capacity for implementation of CSR using ICT.

The connectivity within business also encourages the drivers for implementation and modification of CSR standards to be employed. Although the implementation of CSR will vary by culture, the drivers can be proposed, discussed, developed, tested, and modified using the commonality of discussion boards and interfaces. This allows and encourages those who have not adopted CSR to become responsive to the growing public pressure noted herein. Further, the commonality of this forum allows for further and advanced exploration of CSR around the world by academics and the business community. The possibility of enhanced concepts due to the merging of multiple concepts and ideas enriches this prospect.

The aim of this paper has been to sensitize researchers to the importance of ICT to enhance the implementation of CSR, as well as the means by which to drive its adoption and exercise globally. The capacity of Internet and communication technologies to enhance the implementation and drivers of CSR are as boundless as the advancement of technology. With the expansion of vistas through this technology, CSR can become the unifying driver for an ethical and socially responsible commercial environment. Is it not time we explored this possibility?

Future research into this topic will need to quantify this usage of ICT to implement and drive CSR. This research will, by the nature of the Internet and other technology, necessarily be international. The influence of ICT on those already utilizing CSR will guide the research to determine similarities and differences according to the nation, industry, and products.

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