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Marlei Pozzebon
HEC Montreal

Tuan Vu
HEC Montreal

Angela Fleury
UFSC and FDC

Maira Petrini
FGVSP

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Information Management Models for Corporate Social Responsibility Practices

Marlei Pozzebon

HEC Montreal

Marlei.pozzebon@hec.ca

Tuan Vu

HEC Montreal and Deloitte Inc.

tuvu@deloitte.ca

Angela Maria Fleury de Oliveira

UFSC and FDC

angelaf@fdc.org.br

Maira Petrini

FGVSP

Maira@fgvsp.br

ABSTRACT

This paper reports the initial conclusions of a research in progress that investigates the role of information technology (IT) in facilitating the implementation of social responsibility agendas in contemporary organizations. The project's main goal is to produce relevant and actionable knowledge related to *how* IT can support socially responsible corporate projects. The intensive use of IT applications can improve the gathering, analysis, sharing and dissemination of indicators, measures and ideas among employees, clients, partners and the community. In order to sketch an initial picture of the phenomenon, a study was designed, involving Canada and Brazil. The empirical investigation includes two case studies, seeking to depict information management models for supporting social responsible practices.

Keywords

Corporate social responsibility, sustainability, information technology, information management models, social indicators.

INTRODUCTION

The general purpose of our project is to discuss the role of information technology (IT) in facilitating the implementation of social responsibility agendas in contemporary organizations. The field of corporate social responsibility (CSR) has grown exponentially in the last decade. Issues typically included in a socially responsible agenda relate to business ethics, community investment, environment, human rights and workplace, among others. An increasing number of companies worldwide have been engaging in serious efforts to integrate CSR into their business practices (Jones, 2003). The relevance of the emergence of CSR – a claim that a more balanced and better world is possible – should be evaluated in the complex context of globalization, deregulation and privatization, where inequalities in terms of social, environmental and economic conditions continue to grow (UNIDO, 2004). Despite the explosion of interest in and concern with CSR, its effective implementation faces serious obstacles.

On the other hand, there is the ubiquitous role of IT. IT is seen by several analysts not only as one of today's most pervasive phenomena, but as the motor of so-called societal "revolutions" like the information society and the network society (Castels, 2000). IT has come to pervade human activities at all levels – individual, organizational and institutional. IT is seen as a strategic support for organizational processes, and the knowledge we are aiming aim to produce is related to *how* IT can support socially responsible corporate projects.

Viewed separately, CSR and IT each represent relevant themes for investigation. Curiously, few studies have considered these two themes together. The purposive use of IT applications can improve the gathering, analysis, sharing and dissemination of useful knowledge (including indicators, measures and ideas) among employees, clients, partners and the community. In this paper, we examine different *information management models* that can support socially responsible organizational practices. Our aim is to provide an original framework for theoretical advances in the field and actionable knowledge for supporting projects implementing CSR. By actionable knowledge we mean knowledge that enables organizational and societal members to make informed choices about important practical problems.

In order to sketch an initial picture of the phenomenon, a study was designed, involving Canada and Brazil, a “developed” and a “developing” country, respectively. The empirical investigation combines two initial case studies, one in each area. Because the case studies are still in progress, we are presenting here our preliminary insights, which are open to debate and suggestions for improvement.

LITERATURE REVIEW

The Evolution of CSR Models

One explanation for the explosion of interest in business ethics and CSR relies on the growing body of literature showing that CSR does, in fact, have a positive impact on business economic performance (Miles and Munilla, 2004). For instance, several studies claim that initiatives aimed at improving environmental performance (such as reducing emissions of gases that contribute to global climate change or reducing use of agrochemicals) also lower costs; recycling initiatives cut waste-disposal costs and generate income by selling recycled materials; in the human resources arena, flexible scheduling and other work-life programs result in reduced absenteeism and increased retention of employees, often saving companies money through increased productivity and reduction of hiring and training costs (BSR, 2004). In addition, a company considered socially responsible is likely to benefit both from its enhanced reputation with the public as well as from its reputation within the business community, increasing the company’s ability to attract capital and trading partners. Despite such a huge interest in the theme, a consensus about a single definition of CSR does not exist (Jones, 2003). A variety of terms are used, sometimes interchangeably, as occurs with CSR and sustainability.

Over the last 30 years, a number of researches have proposed not only that economic responsibility is just one of the challenges facing a corporation but also that a multidimensional view is required. Table 1 summarizes the most important CSR models. Carroll (1979) is one of the first in proposing a corporate social performance model (CSPM), a framework to study social responsibility of corporations that encompasses four dimensions – *economic, legal, ethical, and discretionary* – which are not mutually exclusive and are “not intended to portray a continuum with economic concerns on one end and social concerns on the others” (p. 499). For Zenisek’s (1979), social responsibility behavior is also a continuum, and the societal type of organization is one showing the highest social responsibility conscience, which means organizations that take an increasing number of stakeholders’ concerns. Wartick and Cochran (1985) redefine Carroll’s model to expand the scope of corporate responsibilities and the criteria used to measure managerial social performance.

Authors	CSR model
Carroll (1979)	<i>Corporate Social Performance Model (CSPM)</i>
Zenisek (1979)	<i>Four-Celled Model</i>
Wartick and Cochran (1985)	<i>Carroll’s CSPM extended.</i>
Clarkson (1995)	<i>Stakeholder Management Model</i>

Table 1. CSR Models

In 1995, Clarkson uses empirical data to validate the Wartick and Cochran’s (1985) corporate social performance model. He ends by demonstrating the difficulty to separate the socially responsible corporations from those that are not: a company cannot be seen as not socially responsible unless it has a “history of un-profitability, coupled with evidence of illegal or unethical corporate behavior” (p. 95). Clarkson (1995) proposes the stakeholder management model that emphasizes the importance of using appropriate levels of analysis: institutional, organizational and individual. At the moment, Clarkson’s model in the more integrative approach to measure corporate social performance. However, researchers found several barriers in demonstrating the usefulness of the corporate social performance measurement. Doubtless, additional research is needed.

In our research, we adopt the definition of CSR as *a comprehensive set of policies, practices and programs that are integrated into business operations, supply chains, and decision-making processes throughout a company, aimed at including responsibility for current and past actions as well as future impacts* (BSR, 2004). CSR is seen as a multidimensional concept, and its investigation involves different dimensions, stakeholders and levels of analysis (Table 2)

Dimensions	Stakeholders	Levels of analysis
Social	Employees	Individual
Economic	Shareholders	Organizational
Environmental	Customers	Institutional
	Suppliers	
	Society	

Table 2. CSR Dimensions

Current Standards for CSR

Another important aspect of literature on CSR is the proliferation of codes, standards, indicators and performance measurement tools that have been designed to support, measure, assist in implementation, and enhance accountability for corporate performance on CSR issues. Two main approaches characterize the debate surrounding such emergent external standards. On the one hand, there are authors calling for some kind of consolidation or simplification of this range of standards in order to facilitate the identification, comprehension and implementation of policies and practices that commit to specific performance standards. On the other hand, rather than providing substantive recommendations, other authors believe that standards must be diverse and open, only providing guidance for companies seeking to report on their social, environmental, and economic performance.

We have identified four widely used standards, and we have associated them with the CSR dimensions they try to address (Table 3). SA8000 is specific for labor rules and conditions and ISO14000 for environmental issues. GRI and AA1000 are more comprehensive and they relate to the three dimensions: social, economic and environmental.

Dimensions	Standards	
Social	SA8000 (Social Accountability International)	GRI (Global Reporting Initiative) AA1000 (Institute of Social and Ethical Accountability)
Economic		
Environmental	ISO 14000 (International Organization for Standardization)	

Table 3 CSR Standards

Organizations aiming to cope with CSR must select, operationalize, visualize and monitor social responsible indicators and to integrate them into their everyday practices and management systems. Information models can be purposively designed and managed to improve the flow of information and key indicators within and across companies, giving support to the process of visualizing and monitoring CSR indicators. The problematic brought into focus by the present investigation is therefore guided by the following research question: *what information management models can support organizational adoption, implementation and monitoring of CSR standards and practices?* By *information management models* we mean models that put together interrelated information activities like identification of information needs, moving through information gathering, organization, storage, distribution and use.

RESEARCH APPROACH

This study has been conceived as a qualitative study using in-depth case studies. The empirical work is being developed in two countries, Canada and Brazil. Due to the continental dimensions of these two countries, and practical concerns about access and timing, two regions are targeted: Quebec and southern Brazil. We are following three sequential and integrated phases of empirical work: exploratory, in-depth examination, and theorizing and communication.

The exploratory phase, based on documentary analysis (web sites, media news and public reports) was already carried out and the main results were the identification of companies which are explicitly committed to a CSR agenda and, particularly, the identification of potential case studies to be more deeply investigated.

The second phase is an in-depth examination of a number of case studies. Two of them are already in progress, one in Brazil (Metco Inc.) and one based in Quebec (Nacta Inc.). In-depth case study has been suggested as a powerful research strategy, the benefits of which are likely to be strengthened when they are also comparative (Pettigrew, 1990). We are applying *standardized open-ended* interviews protocol, in order to obtain a similar type of information from each company (Patton,

1990). Until this moment, we carried out three formal interviews at Nacta and four formal interviews at Metco, where we could stay for two days visiting and observing. We are planning to conclude these two first case studies in May 2006. Another case in Quebec is now also in progress and we are negotiating our presence in a fourth case, in Brazil.

The last phase of this project is one of theorizing and communication. This phase is of crucial importance, because the entire learning process carried out over several case studies will be compiled, synthesized and reexamined in light of existing literature, in order to present a refined repertory and an actionable framework of information technology applications. Giving the lack of studies putting CSR and IT together, we decided to adopt a grounded theory approach. Grounded theory is a qualitative research method that seeks to develop theory from a process of continuous interplay between data gathering and data analysis. Because grounded theory is not just a coding technique, we will apply it as a comprehensive method of theory generation. A grounded theory is one that is inductively derived from the study of the phenomenon it represents. That is, it is discovered, developed, and provisionally verified through systematic data collection and analysis of data pertaining to that phenomenon. Therefore, data collection, analysis, and theory stand in reciprocal relationship with each other. One does not begin with a theory then prove it. Rather, one begins with an area of study and what is relevant to that area is allowed to emerge (Strauss and Corbin, 1990, p. 23). Being an inductive methodology, grounded theory allows the researcher to develop a theoretical account from empirical observations or data. According to Myers (1997), grounded theory has been useful in developing context-based and process-oriented explanations of IS phenomena.

BRIEF DESCRIPTION OF CASE STUDIES

Nacta Inc.

NACTA is a Canadian firm that ranks among 300 corporations in 23 countries that are leaders in their industry in terms of sustainability and CSR values. NACTA operates in 58 countries and has around 88,000 employees deployed in over 300 operating locations. Over half of NACTA activities are associated with mining, refining and smelting operations, as well as generation of hydroelectricity. These activities are not without danger and carry high health and safety risks for NACTA's employees, in addition to non-negligible environmental costs. Beyond the sustainability issues directly related to products and process, NACTA also face a broad range of challenges that can vary from human rights and labour standards as they expand in new markets to securing their "license to operate" and maintaining access to natural resources in locations around the world. Despite such challenges, NACTA is considered to be one of the world leaders in sustainability. How does the CSR program at NACTA work?

CSR is not a static program at NACTA but an approach that evolves and is built upon past efforts. The integration of several issues (environmental impact of their operations, interactions with aboriginal communities, deals with deal unions and employees) culminated with the publication of a sustainability report in 2002, now published every year. Regarding the mechanisms operating behind NACTA's CSR program, we found an integrated management systems, which we will call here IMS-1. Using IMS-1, NACTA tries to implement best practices in occupational health and safety, environmental performance, community relations and corporate ethics and, where appropriate, follows international standards, like ISO 14001 standards for environmental and the OHSAS 18001 for health and safety practices. IMS-1 ensures that all businesses share the same focus by bringing all geographic locations under a shared management system. The heart of IMS-1 is a network of interconnected information systems, including portals and dashboards.

Metco Inc.

METCO is a Brazilian firm taking part of multinational holding (META group) operating in 17 countries in Latin America with more than 15000 employees, and founded by a business leader intensively involved with sustainability and social responsibility movements from the 1990s. METCO is a leader in the plastic tube sector in Latin America, with around 1520 employees. Part of its growth is due to successive acquisitions of and fusions with other companies in the period of 1991-2003. Similar to NACTA, METCO is recognized as one of the leaders in sustainability in Latin America. The firm is continuously developing and improving social responsible practices with their clients, employees (called collaborators), suppliers (called business partners) and local communities.

The most important initiative operating behind METCO's CSR program is the development of an integrated management systems, called here IMS-2. Similar to NACTA's experience, IMS-2 provides an integrated vision of the firm's strategic management. At the heart of IMS-2 we found the "sustainability scorecard", a framework adapted from the well-known balanced scorecard framework. They incorporate the notion of triple bottom line, an expanded spectrum of values and criteria for measuring organizational (and societal) success according to three dimensions: economic, environmental and social. One

of the core concepts is eco-efficiency. With a sustainability scorecard, METCO links indicators from different dimensions in a cause-effect chain that allows the proactivity of their business practices.

PROVISIONAL CONCLUSIONS

Until this moment, we carried out six in-depth interviews (three in each company) and we are planning to do more in the near future in order to depict IMS-1 and IMS-2 in more detail. The initial analysis of these interviews helps us to generate initial categories that seem important for drawing information management models for CSR practices.

The first is regarding the notion of an *integrated management systems*. Both NACTA and METCO are integrating social responsibility in their everyday business practices and connecting them to long run strategy using an *integrated framework*. This recalls our early discussion about the CSR construct, which is multidimensional and multilevel, and therefore difficult to define and operationalize. Punctual actions do not allow a company to be socially responsible. CSR requires a long term process of organizational commitment, at all levels and areas, tied with a common vision. In such a process, information management seems an important element to be taken into account.

The second category is regarding two basic characteristics that seem to emanate from IMS-1 and 2 – *transparency and proactivity* – and they seem related to the purposive use of IT. Transparency can be associated to the use of portals and other web-based systems that allow all the stakeholders involved to access and monitor valuable information. Proactivity is related with the possibility of act timely regarding social responsible indicators. The adoption of a *sustainability scorecard* is at the heart of proactivity and merits more investigation.

From the feedback we are expecting to receive for the conference and from the data-gathering-and-analysis process we are still performing, we hope to start soon the third phase of our research: theorizing. Grounded theory is our methodological approach and it will follow us until the production of an actionable framework, our ultimate intent. In order to give the reader a first picture of the theoretical model we are building, we present in Figure 1 preliminary categories associated to each phase of a typical management model regarding the information: definition of needs, gathering and storage, distribution or diffusion, monitoring and evaluation. To each of these phases, we are defining the most important themes (categories) associated: conceptualization, contextualization, communication, action and learning. These categories are emerging from our data analysis and will be confirmed or transformed as the case studies evolve. Finally, some properties of these categories are also been identified: participation, transparency, engagement, proactivity and vision. We believe these properties are inherent to sustainable and socially responsible management models. This is a research in progress, so these findings are likely to change and are open to debate.

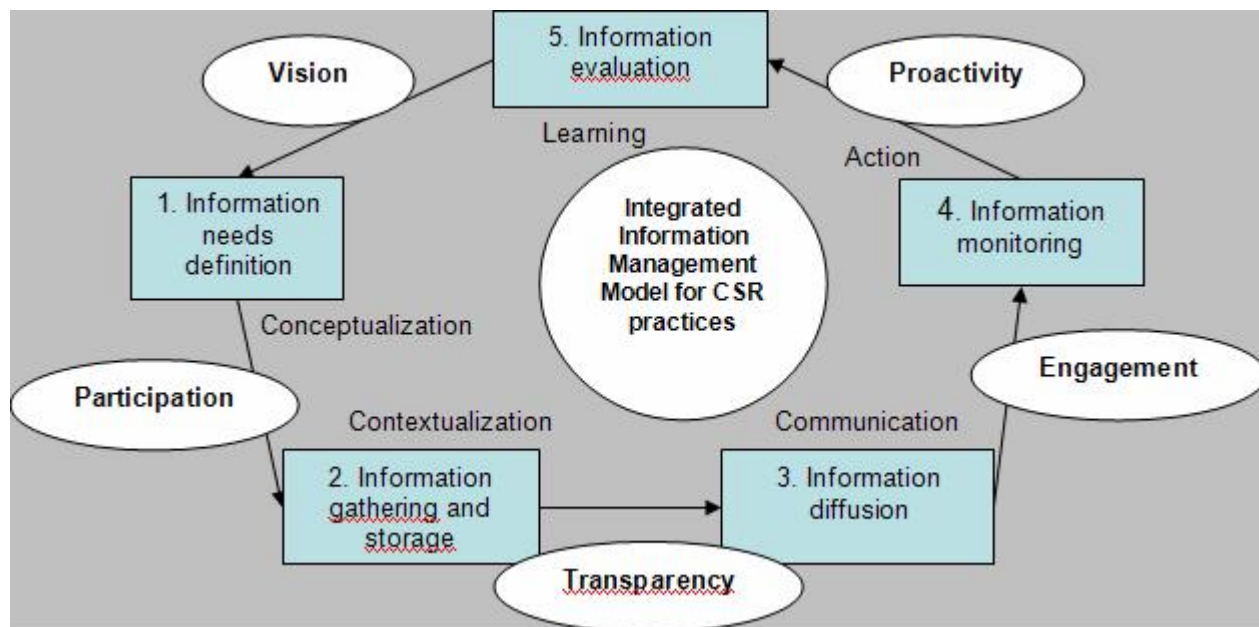


Figure 1. A preliminary information management model for CSR practices

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