Corporate Social Responsibility in the Dynamic Information Age of Inter-Systems Connectivity

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ABSTRACT
The Information age has caused an explosion of information through rapidly changing technologies. This technological change is accompanied by an accelerating shift in work relations, of which this paper focuses on connectivity, interdependence and dynamism. Along with this change in relations, new ethical cultures are evolving at different levels: individual, corporate, governmental, NGO and global. This paper then focuses on the work done in the Corporate Social Responsibility field to see how it has evolved to adapt to the new mode of inter-dependent connectivity in a dynamic environment of changing relationships.

Keywords: Corporate Social Responsibility, Information Age, connectivity, inter-dependent systems, economic relations

CORPORATE SOCIAL RESPONSIBILITY IN THE DYNAMIC INFORMATION AGE OF INTER-SYSTEMS CONNECTIVITY

With the wide diffusion of information on the internet, consumerist and environmental movements have become more powerful, as they are able to play on the trust that the brand is supposed to provide (Clarke, 2003). Their role has been to focus on fairness in corporate practices: those who violated expected norms of fairness would get punished (Kahneman et al., 1986 a & b). This paper seeks to take into account additional features of the information age: connectivity, dynamism and inter-system dependence and see how these have influenced the concept of corporate social responsibility. Part I describes the Information Age and explains how different concepts of Social responsibility relate to the new economic relations created by this Age; where possible the examples are limited to Information Technology (IT), even though in the information age all industries are affected by IT. Part II zooms in on the evolution of some of the different concepts and theories in the Corporate Social Responsibility (CSR) area before and after the era of connectivity and tries to show how theory has evolved and the debate has shifted to take into consideration the connectivity and inter-dependence questions.

I. INFORMATION AGE OF INTER-DEPENDENT CONNECTIVITY AND SOCIAL RESPONSIBILITY

A. Interdependent Connectivity and Information Needs

The information age is characterised by new technologies, which have led to globalization (Friedman, 2006). Some salient new technologies include windows, internet, workflow software, uploading and mobile telephones. The combination of these technologies has resulted in an accelerated shift to new work relations such as outsourcing, offshoring, insourcing, supply chaining and community developing (see Figure 1).

The key words in these new work relations are connectivity and collaborating. These collaborative forms replace hierarchical modes and the balance of countervailing power is continuously changing. It may be IBM today, Intel tomorrow, and Microsoft the next day, and so on... Thus, it is not only connectivity and collaborating but dynamic connectivity and collaborating. This is not to say that there are no issues of countervailing power on any given day. Within the information field, somebody will decide which information technology to use, who has authorization to upload or download, etc. However, neither the relationships nor the technologies are frozen.

In the prior vertical hierarchical mode, a person owed responsibilities to his superior in terms of accountability and to his subordinates in terms of caring and protection. Now, in this new horizontal collaborationist mode, the stakeholder becomes all-important. This is a two-way stakeholder relationship among equals (or more equal than before). The supplier needs the customer and the customer needs the supplier but they are both looking for better and more profitable relationships (leapfrogging) as well as trying to embed the existing relationship. A key element in these relationships therefore is the tension created by this conflict between trust and abandonment. Trust is required to ensure that gains would be equitably distributed across the supply chain and that everyone involved survives, at least while the relationship is ongoing. This trust requires new institutional arrangements. If the connections and collaborations are local, the institutional arrangements also need to be local.

One of the key elements required to ensure continuity of trust is the ability to control the stakeholder, and to obtain pertinent information. In the old hierarchical framework, the trust was obtained by the provision of information. The shareholders were provided annual accounting reports, the employees were asked to provide weekly or daily performance reports. In the new horizontal mode (see figure 2), the information cannot come from authority: it has to come from sharing. Since the stakeholders are interdependent, they may need to pool their information to be able to control each other. However, all information flow is asymmetric leading to joint problems of adverse selection (who is going to be my partner among the whole lot of Indians in the field) and moral hazard (what if he takes the advance and does not deliver). What complicates things further is that in this information age, every person connected to the internet is a stakeholder in the connectivity itself. He can thus create or destroy relationships and even the internet (virus attacks, see Holzinger, 2000 for examples). He can also use the rapid speed of communications to launch speculative attacks on currencies. Terrorists can also use a global supply chain to manufacture bombs. Thus, each person or stakeholder in this network has information about his intentions, which no one else may have. This asymmetric information problem could be solved if there are guaranteeing institutions (governments, rating agencies). These institutions again require information dissemination to be able to exercise...
their function. What kind of information is pertinent to control in this new information age of dynamic connectivity would be a central question for research. However, the information needs would themselves modify the information age as new technologies are developed to provide this information.

Information needs depend on performance indicators required. These performance indicators need to respond to the critical success factors that need to be controlled. In an old-world economy, profits may have been enough (Friedman, 1970). However, in the information age, where many pressure groups can widely disseminate information, a corporation now has to meet many other ethical, social and environmental criteria. The information needs therefore also depend upon the (social) responsibilities of different actors.

B. Social Responsibilities in the Age of Inter-Dependent Connectivity

There is a multitude of actors involved: individuals, corporations, governments, non-governmental organisations (NGOs), and global institutions such as the World Trade Organization, World Bank, etc, and the information age has modified all their responsibilities. Figure 3 indicates the responsibilities of these actors: the two-way arrows suggest that each influences the others. Firms and their corporate responsibilities play a central role because they have the economic power to back whatever role they wish to play. The other actors, notably the governments and NGO’s but also individuals as employees or customers try to influence this role. The payments of firms to these actors (taxes, donations, bonus, discounts) allow them to influence the policies of the other actors. Global institutions usually act through governments or NGO’s since they would not be able to afford constant interaction with millions of firms or billions of individuals.

For individuals, the survival of the system requires efficiency, equity as well as environmental protection. Efficiency requires a responsibility to continuing education and keeping oneself informed of all relevant changes in technology. Equity requires a responsibility to respect intellectual property of others’ websites and to create inter-dependencies by educating others so that they can use the individual’s abilities. These inter-dependencies are acutely highlighted in value-based networks (Wheeler, Volbert & Freeman, 2003) such as e-Bay, IBM, HP and Cisco. Environmental protection requires, for example, not overloading the system by spamming and limiting the use of printers.

At the corporate level, the Social Responsibilities of the information age could require helping staff evolve so that they can keep their jobs in a dynamic environment, outsourcing and downsizing if this will help survival and create growth elsewhere, and adding diversity to add value. Hoekstra (2003) indicates that the IT outsourcing to India has reduced the brain drain from that country since IT skilled people can earn as much sitting in their own cultural milieu. CSR also requires providing transparent reliable information to the network partners, based on reality and not hope (Hoekstra, 2003). If one plans a 30% growth, all other partners prepare for it. If this growth is far off the mark, it creates problems for all. Failure of one major actor could drown thousands of collaborators, as evidenced by Enron. This includes failure of an actor owing to war in one country. The global consequences of war in any member country of a global supply chain have resulted in corporations reminding the concerned governments of the global economic costs of war (Fort & Schipani, 2002; Friedman, 2006). Both mention that the Indian IT industry exerted diplomatic pressure on the US and Indian governments to avoid an India-Pakistan war in 2002, mentioning clearly that India’s presence in the global supply chain could create economic disruptions and costs well beyond India’s borders. The Indian IT industry did this fearing that their customers would go elsewhere if there were a political risk in doing business within India. Thus the CSR in the age of connectivity goes much further than the internal security risk of virus attacks and robbing banks expressed by Holzinger, 2000.

Fort and Schipani (2002) find that the global corporation has power over the developing States because they pay local taxes and provide jobs, education, skills and transfer of technology. Therefore, they argue that a firm’s Social Responsibility includes leveraging these to support the establishment of democratic regimes wherever they do business and, to set a model, establishing democratic regimes in its own internal governance structure. In this line, Hoekstra (2003) indicates that IT industries have invariably transported stakeholder-sharing concepts, such as stock options and performance incentives to reward employees and partners, to developing countries in advance of other industries. Fort and Schipani (2002) also add that the corporation should structure itself in a way that develops small communities working together with face-to-face interaction and consensual decision-making, with should lead to sustainable peace.

Government Social Responsibilities may mean providing continuing education, disseminating information on new technologies, making infrastructure such as bandwidth accessible to all, and promoting environmental safeguards from virus attacks as well as military attacks (Friedman, 2006). Government responsibility would also include creating new legal institutions to adapt to the new economic relations, such as intellectual property right protection for software and intangible music and books, which help add to the trust necessary to collaborate, as well as transparency and disclosure requirements from corporations. The latter is especially important in an information age to limit losses from asymmetric information, and thus permit collaboration between distant stakeholders (Fort and Schipani, 2002).

NGOs play a role as pressure groups to impose ethical guidelines, stimulate voluntary codes of conduct and warn away terrorists: for example, the existence of associations like ATTAC (advocating a Tobin Tax) may deter financial speculators. These NGOs use information technology to disseminate information and they would not be such powerful stakeholders without this tool (Waddock, 2005). NGOs also serve as venues for discussions of issues of citizenship between the spreading forces of corporate globalization and the pressing desires for individuality (Fort & Schipani, 2002).
Arguments for Corporate Social Responsibility | Arguments Against Corporate Social Responsibility
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Long-run self-interest | Profit Maximization
Public Image | Costs of Social Involvement
Viability of Business | Lack of Social Skills
Avoidance of government regulation | Dilution of Business’s Primary Purpose
Sociocultural Norms | Weakened International Balance of Payments
Stockholder interest | Business has enough power
Let Business Try | Lack of Accountability
Business has the resources | Lack of Broad Support
Problems can become profits | CSR idea is grounded on economics, and ignores history, religion, culture, etc.
Prevention in better than curing | CSR idea is based on fixing capitalisms woes; this is too conservative

Extracted from Davis (1973) and Freeman & Liedtka (1991)

The Global institutions have the primary responsibility to ensure harmonization of essential business laws so that the necessary infrastructure for trading across nations is created. They also have the responsibility of deciding what the global CSRs are. For the moment, a voluntary set of principles, such as UN Global Compact and Global Reporting Initiatives, have been initiated. However, voluntary efforts lack the stamp of legitimacy. At the same time, there are now a number of agencies which rate CSR of the world’s leading firms. These include, for example, Accountability, FTSE-4good, Business in The Community, Dow Jones Sustainability Index, Business Ethics 100 (Hopkins, 2005) and Vigeo. However, none of these considers whether the firm takes into account the dynamic nature of supply chain relationships in the IT world and the responsibilities of firms to each other.

Having discussed the evolution of the new information age and seen how it has affected the social responsibility of different actors, the next section sees how the theoretical discussion of the concept of CSR has evolved to take into account the new needs of dynamic interconnectivity.

II. THE EVOLUTION OF CORPORATE SOCIAL RESPONSIBILITY IN A CONNECTIVITY MODE

A. Evolution of the CSR Concept

There is a debate on what CSR is. There are so many theories that there are now papers classifying the theories (Carroll, 1979; Garriga & Méndez, 2004) and we will just look at a few of these. The basic minimum in terms of CSR was set by Nobel laureate Milton Friedman (1970) for whom the only responsibility of business is to use its resources to increase profits while conforming to laws. All other responsibilities are for the government to deal with. Otherwise, there is an agency problem between a manager’s desire to instal his views of what is good for society by using corporate funds. This is tantamount to imposing an illegitimate tax on the corporation. At the other extreme are people who lobby for increased corporate philanthropy (Brammer and Millington, 2003) study the evolution of charitable contributions in the UK. Between corporate philanthropy and Milton Friedman’s “only profit” goals, there is Drucker’s (1984) definition of CSR: “to turn a social problem into economic opportunity and economic benefit, into productive capacity, into human competence, into well paid jobs, and into wealth”. While Friedman (1970) left these problems to governments, Drucker (1984) explained that government is not in a position to solve the problems because in any action it takes, it creates vested interests that keep it from realizing the option value of abandoning a course of action. Therefore, governments cannot experiment. Thus, he felt that NGOs would need to step in as they at least have competition between themselves. In most cases, the responsibility of corporations is to ensure that there is enough capital formation for their own survival. Additionally, companies may have certain capabilities and strengths which may make them more suitable to serve the community (Hoeckstra, 2003). This is fortunate in a world where the increase in information has led to harmful tax competition, reducing the government’s ability to provide services, thus renewing the call for Corporate Citizenship to mend society’s broken contracts (Waddock, 2005).

Davis (1973) resumes the reasons for and against social responsibilities of business, as summarised in figure 4, and suggests that a trade-off needs to be established. Many authors (Purcell et al, 1974; Carroll, 1979) feel that CSR means going beyond the legal minimum advocated by Friedman (1970), with a point to combining profitable activity with meeting the common good. Carroll (1979) summarises the different positions of different authors and concludes that there is a hierarchy (not mutually exclusive) between meeting economic responsibilities, meeting legal responsibilities, meeting ethical responsibilities and finally discretionary responsibilities (which would include philanthropy). This hierarchy can be for different social issues such as consumerism, environment, occupational safety etc. He adds a third dimension by suggesting that enterprises have different response mechanisms such as reaction, defence, accommodation and proaction. Wartiag and Cochran (1985) indicate how the Carroll (1979) model incorporates the challenges to CSR such as economic responsibility, public responsibility and social responsiveness. More recently, we have seen how CSR has been developed in cause marketing to marry promotional appeals with philanthropic giving (Smith & Alcorn, 1991) in order to attract customers for the firm (Irwin et al, 2003), thus creating connectivity between corporations and NGOs. This is a manifestation of the enlightened self-interest argument (Purcell et all, 1977; Besser, 1999); business benefits indirectly from socially responsible behaviour, for example from higher employee motivation and better reputation. Brammer and Millington (2003) indicate that charitable contributions may also result from a need to influence stakeholders. Negative reasons within this framework would include firms resorting to social responsibility for fear of punishment by consumers if they did not follow fairness standards (Kahneman et al 1986a and 1986b; Campbell, 1999). Desjardins (1998) argues that economic growth meets the economic and legal minima concepts but it also causes environmental degradation that would ultimately cause the business to be non-sustainable. Thus, there is a need for a business to look at its responsibility not only to the whole social body of stakeholders but also to the physical environment in which it is operating. While environmental waste has been discussed at lengths, the information waste discussion should go on similar lines. So far, we are not aware of the health hazards to the environment by storing so much information on line. However, the duplication and waste does cause psychological fatigue for researchers who come up with many pages providing the same information, and are led to the paradox of choice: when more is less (Schwartz, 2004). More recently, Garriga and Méndez (2004) have classified CSR theories into instrumental, political, integrative and ethical theories. For example, Friedman’s “economic and legal minimum” view is an instrumental theory, Davis (1973) is representative of a political theory, Carroll’s (1979) Corporate Social Performance model is an integrative theory and Freeman’s Stakeholder approach is an ethical theory. Figure 5 attempts to put some of these theories in Carroll’s perspective which itself is within the perspective of Garriga & Méndez (2004).

Thus, the debate on the role of CSR and related concepts has moved in recent years to try to capture the changing economic and social relations caused by in-
ter-dependent connectivity, as can be seen by the addition of stakeholder theory to the CSR phenomena.

B. How Inter-Dependent Connectivity has impacted the CSR Concept

Within the CSR discussion, different authors have included connectivity from different perspectives in their models. Some of these are presented here to the extent they are required to bring out this paper’s perspective, and are illustrated in Figure 6.

The starting point to such an interconnected view comes from the Stakeholder approach (Freeman & Reed, 1983) which views the interests of all stakeholders (employees, customers, suppliers, governments; consumer groups, NGOs) as important and not just the shareholders. Thus, the enterprise owed a responsibility to all the people with which it was connected, internally and externally. The focus is on the enterprise.

Within this framework, a narrow view is that of Holzinger (2000) who looks at information security leaks and fixes a minimal social responsibility of business to its partners (customers, suppliers, etc.) to have good internal governance procedures to protect against hackers. This social responsibility could be reinforced by pressure groups such as insurance companies and governments. We note that in this view, we see shades of Friedman (1970) and this could be considered as a corresponding minimalistic CSR view in the age of inter-dependent connectivity.

Inspite of the continuing linking of the Stakeholder concept to CSR, Freeman & Liedtka (1991) insist that the “CSR” concept is not a good one. Their reasons overlap some of the reasons given by Davis (1973) and the others are incorporated in Figure 4. They suggest that Corporations be viewed as connected networks of stakeholder interests. In this network, human beings and communities aim for mutual support and unparalleled achievement. They would like to see corporations as the means by which human beings create their visions for self and community. From this work, the paper takes the focus on the individual human being. Therefore, in figure 6, we’ve added shapes for the stakeholders and shown interconnected people within the company.

More specifically to the Interconnectivity question, Wheeler, Colbert & Freeman (2003) look at CSR in a network world. After explaining Value-Based Networks and the importance of CSR (specifically ensuring that all stakeholders benefit and corporate philanthropy) in information technology companies using networks, they use a three level pyramid to classify corporate cultures from doing minimum harm to doing maximum good: Compliance Culture, Relationship Management Culture and Sustainable Organization Culture. These require, respectively, a close watch over societal needs and societal frameworks, ensuring all stakeholders are obtaining value in the short term, and that this is sustainable over time. Thus, figure 6 adds that the stakeholders also get some focus (and are shaded).

An associated stream dealing with Value Added Communities was “MetaCapitalism” started by Means and Schneider (2000). These authors predicted a radical transformation of the corporate world into scarcely capitalised, brand focussed, highly flexible, customer oriented firms engaged in on-line exchanges or networks, driven by the new information technology. This paper therefore assumes an expectation for business corporations to atomize with time. (In figure 6, this is manifested by the smaller corporation size).

The last viewpoint presented here to develop this paper’s perspective is the Inter-Systems Model of business proposed by Stormer (2003), in which the business cannot be taken as an independent system, but as a network of communities operating within the firm and the firm as an interdependent actor in a larger system. Thus, there is a need to analyse how changes in one part of the larger system can affect the corporation and vice versa. This viewpoint allows transcending the stakeholder theory (Freeman & Reed, 1983) where the central focus remains on the corporation in which all the stakeholders are interested. In the Inter-Systems model, each stakeholder becomes a separate system, and thus equally important. Stormer (2003) concludes that strategy becomes more complex because of the interdependence of the systems with which the firm is attached. (In figure 6, all the stakeholders are linked to each other with double-sided arrows).

Putting together what we have extracted from the above literature we can say that pushed to its limit, each inter-dependent stakeholder becomes an individual. Thus, the connectivity between individuals and their connected clusters (termed firms or governments, or NGO’s) and the connectivity between clusters becomes focused on the needs of the individuals, all of whom are equally important. In all these recent evolutions, therefore, one thing seems to be clear: the importance of the individual seems to be expanding and that of the corporation seems to be reducing. Thus, the focus is on what the individual is able to do. Hence, the rights and responsibilities are those centred on individuals as indicated in Figure 7 and not those centred on organizational types (corporate, government, NGO or global), as depicted earlier in Figure 3.

However, Mickhail and Ostrovsky (2005) looked at the MetaCapitalism prophecy outlined above. They find little connection between the predicted outsourcing and the predicted boom in share prices. They offer various reasons for this including inability in a changing world to distinguish between core and non-core; inability to extract maximum from employees and stakeholders if relationships are perceived as short-term; the need for companies to retain facilities to retain flexibility; the inherent conflict of interest for sharing the cake that sets a limit to the model; dominant firms continue to control smaller firms and thus extract economic rent from their size and also determine the conditions necessary for entry into the VAC. Thus, reality requires viewing the IT as a continuum of unequal partners, competing and collaborating with each other at the same time.

Another view is a naturological view of the corporate community relationships and the extended skew selection theory proposed by Hill and Cassill (2004). In this view, the corporation is inter-dependent with its community, taking resources and energy from it and giving back goods, services and philanthropy. The sustainability

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Figure 6. New approaches to take into account interconnectivity

Figure 7. The person-centric vision relationships of social responsibility between actors
of an actor (the corporation) depends on its ability to produce income and capital in oscillating good times and bad, and in its ability to share it with its community to ensure the survival of the community. Without the community, the corporation cannot survive. Thus, the corporation would like to be larger and more powerful, but it also recognizes the biological viewpoint of safety in numbers. Thus, it needs to share part of its wealth with its community. Thus sharing offsets greed to some extent. Hill and Cassill (2004) state “Sharing a finite proportion of resources with others can help quell the impulse of advocacy firms, government agencies, and the judicial system to take a corporation’s resources by force”.

Thus, this set of authors would nuance our propos: we can see that neither the corporate centric view of figure 3 nor person centric view of figure 7 reflects the reality of today’s position. There is however a possibility that there will be an evolution from the former to the latter.

CONCLUSION

The Information age has caused an explosion of information through rapidly changing technologies. This technological change has been accompanied by an accelerating shift in economic and social relations, of which this paper focused on connectivity, interdependence and dynamism. A key observation found common in much of the literature is the increasing focus on the individual’s capacity to connect. This has created new information needs required for monitoring and controlling connectivity and the associated issues of trust and abandonment.

Along with this change in relations, new ethical cultures are evolving at different levels: individual, corporate, governmental, NGO and global to incorporate the needs of the information age.

This paper also looked at the work done in the CSR field to see how it has evolved to adapt to the new mode of inter-dependent connectivity in a dynamic environment of changing relationships. The role of the corporation is being questioned: is it the means (agency) to individual (principal) satisfaction or is it the principal, determining human (agency) roles?

While many of the theoretical concepts can be adapted, there is much more work required in the measures of the degree of connectivity and to associate appropriate responsibility. The determination of information needs required for strategic control in this age of dynamic inter-dependent connectivity is a possible area for future research. At the very least information required would need to come from a multitude of stakeholders or systems.

The Hill and Cassill (2004) study also opens up questions for future research, including the resource allocation decision between the organization and the community, member’s propensity for greed and sharing, and the impact of sharing on the quantity and quality of social capital available to the focal corporation with different levels of resource abundance.

Another area of future research is to establish what kind of responsibilities a firm has to its partners to reduce the tension between trust and leaftroggning. Although work in this area is being done by behavioural economists, an area to extend that work would be what responsibility one has to usher in trust and to make soften abandonment. Perhaps as a start, every actor needs to understand his own personal responsibility to evolve with the system and not to hold on to the old power syndrome inherent in hierarchical organizations.

There is also scope for studying the origins of the field of management thought: whether the recent application of systems approach are embedded in European or American roots.

The entire systems approach to social responsibility might also include research into the constituents of the social utility function to decide the gamut of areas which could be included. If a detailed Leontief type input-analysis is required, perhaps there are linkages to be looked at with this area of economics.

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