

The Road to a Responsible and Sustainable e-Business

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Keywords: Corporate Social Responsibility, Business Ethics, Computer Ethics, Information Systems, Big Data.

Abstract: This paper introduces a definition of a responsible and sustainable e-business organization. Today every company has to take into account the growing role of the stakeholders (employees, suppliers, customers, and general society) and this has increased the importance of the Corporate Social Responsibility (CSR). Also, they have to expose the impact of their operations on the environment in terms of supply-chain, power consumption and waste management. Both these dimensions are becoming important also for organizations that concentrate their activities on electronic channels. For them, information systems and communication channels (ICT) represent the fundamental infrastructure. This paper concentrates on the questions: how to harmonize the CSR strategy with the important decisions that has to be taken in the computing areas? How to keep aligned the Business Ethics with the Computer Ethics strategies?

1 WHAT IS AN ETHICAL AND SUSTAINABLE ORGANIZATION?

One of the missions of corporations is to do the interest of shareholders but in doing this they interact with other actors: employees, customers, suppliers, society in general and people different from shareholders. They are called "*stakeholders*", that is, all the entities that have some relationship with the enterprise.

1.1 1919, Michigan, Dodge Vs Ford

Probably one of the most famous milestones in the history of business management is the Dodge v. Ford Motor Co. case. By 1916, the Ford Motor Co. accumulated a capital surplus of \$60 million. The company's President, H.Ford, decided to stop dividends for shareholders in favour of massive investments in new plants that would enable to improve the production, and the numbers of employees, while continuing to cut the costs and prices of his cars. In defence of this strategy, he declared: "*My ambition is to ... spread the benefits of this industrial system to the greatest possible number ... To do this we are putting the greatest share of our profits back in the business.*" While Ford may have believed that such a strategy might be in the long-term benefit of the company, the

minority shareholders objected to this strategy, demanding Ford to continue to pay out dividends to them instead of his proposed investments. Two brothers, J.F.Dodge and H.E.Dodge, owned 10% of the Company, the largest shareholders after Ford. In 1919 the Michigan Supreme Court was called upon to decide whether the minority shareholders could prevent Ford from pursuing his long-term strategy. The Court held that a business corporation is organized primarily for the profit of the shareholders, as opposed to the community or its employees. (Henderson, 2007)

1.2 Shareholders Vs Stakeholders

This (short-term) view of the role of business, also known as the "*shareholders view*", was reinforced up to the famous "Chicago School" article "*The Social Responsibility of Business Is to Increase Its Profits*" (Friedman, 1970). This traditional "*shareholders view*" is nowadays facing enormous challenges: defence of "*commons*" by local/national communities, fair-trade organizations, financial disasters, and limits of the planet. The need for transparency and new relationships with all stakeholders are pushing organizations to develop, *beyond* the legal constraints, also a *social and an environmental balance*. A new "*stakeholders view*" is becoming mandatory (Freeman, 1984). In this *longer-term* view fundamental questions arise for corporations like: "*Morally, how or in whose*

interests ought the corporation to be managed?". There is a growing need for an active compliance not just with laws and international standards, but also with "ethical standards". CSR proponents argue that corporations make more long-term profits by operating with a perspective: a *sustainable organization* (Freeman, 1984). This is the core of the "stakeholder theory" and of *business ethics* (an applied ethics that examines ethical problems in a business environment). They articulate the view that a business firm ought to be managed in a way that achieves a *balance* among the interests of all stakeholders. The economic crisis has revived the old debate about whether firms should focus most on their *shareholders* or on their *stakeholders*. Even J. Welch, the famous General Electric's CEO, formerly a stronger supporter of shareholders theory, has recently expressed doubts discussing about the financial crisis: "...On the face of it, shareholder value is the dumbest idea in the world". (The Economist, 2010)

1.3 Can It Pay to Be Ethical?

According to Ethisphere Institute, being ethical has also some economic rewards: looking at the performances of the companies and organizations defined as WME (World's Most Ethical companies) compared with the generic Standard & Poors 500, it is evident that WME are performing 20-40% better (Ethisphere, 2012). Despite the current economic outlook, environmental sustainability is at the top of the agenda of many organizations. According to a recent study from MIT Sloan Management School, "sustainability now occupies a central and permanent place in corporate boardrooms". It describes that 66% of managers see it as necessary to being competitive in today global marketplace, and that for 31% of them it is contributing to their profits (MIT-SMR, 2012). There are international standards for CSR like the ISO 26000 and the United Nations Global Compact (UNGC, that defines principles in the areas of Human Rights, Labour, Environment and Anti-Corruption).

2 HOW ICT COULD CONTRIBUTE TO AN ETHICAL AND SUSTAINABLE E-BUSINESS?

There are at least "five moral dimensions of the information age": a) information rights and

obligations (e.g. privacy); b) property rights and obligations; c) accountability and control; d) system quality; and e) quality of life (Laudon and Laudon, 2007). If we focus on the area of *privacy* we can see that an organization based on e-business has the power of collecting immense amount of data. This "Big Data" enables to work for identifying new opportunities and trends but, on the other side, it can also scaring off customers. The so called NORA (Non Obvious Relationship Awareness) technology enables deep data analysis by collecting information about people from different sources and find "non obvious relationships" ("mosaic" effect). A recent example of Big Data application to elections is the "Narwhal Project", a gigantic data-analysis project used for the 2012 US President elections (Issenberg, 2012). In this area an e-business aiming at a consistent ethical and sustainable CSR strategy have to manage this kind of technologies very carefully and to provide transparent evidence of a *minimalist* (and legal) use of customers' data.

2.1 The Role of Computer Ethics

ICT are the new critical infrastructure of our society and in particular for e-business. If organizations want to consistently develop their CSR strategy, they need to align them with the ICT strategy, they need to "bridge" *business ethics* and *computer ethics*. Probably the first example of reflexivity in ICT is due to a MIT professor, N. Wiener, in 1948. He was the first at identifying the connections between Ethics and ICT, and the social and ethical impacts of computers in the society (Wiener, 1948). He introduced the fundamental concepts of the discipline that today we call "Computer Ethics". After him, D. Parker, a computer scientist working at Stanford Research Institute, wrote: "It seemed, that when people entered the computer centre they left their ethics at the door." (Parker, 1968). He contributed on the elaboration of the first *Code of Ethics of Professional Conducts* of ACM (Association for Computing Machinery), a basic reference worldwide, a good example of code that could be adopted by an ethical and sustainable e-business. In 1985 D. Johnson published his fundamental book, "Computer Ethics" (Johnson, 1985). In the 1990s' became clear the need for a new *applied ethics* that could help organizations in: reducing the probability of disasters deriving from computers and in preparing guidelines and codes of ethics for designers and employees. In particular D. Gotterbarn introduced the concept of *computer ethics* as a *professional ethics* that should develop

codes of conduct for computing professionals (Gotterbarn, 1991). Internet and the Web put humanity in front of ethical issues at global scale. Think about the problem of laws in cyberspace, where are the borders? Or all the issues related to e-business where financial transactions are taking place in global networks; or the effects on cultures and traditions of a global education; not to mention the *digital divide* among different areas of the planet. Also, a growing attention is now dedicated to the environmental impact of ICT: how to select environmental-friendly hardware platforms? How to minimize their power consumption? How to manage the disposal of hardware devices at the end of their life?

2.2 The Challenges for Information Systems Management

Information Systems (IS) Management is a very young area compared to other fields that have developed well defined "*Code of Ethics*" (law, medicine). Also, here we have an "ethical gap": ICT are evolving at such a speed that we had no time to develop guidelines for addressing the social and ethical issues that ICT creates. In order to develop a consistent framework that could help IS Managers in dealing with ethical dilemmas in their daily life, we propose to develop a "bridge" between the corporate "*business ethics*" and "*computer ethics*" strategies starting with a collection of guidelines. An information system is relatively easy to use and access, so committing a "*victim-less crime*", is easy. If you have the credentials to access some applications, then you better have a strong ethical background otherwise the temptation to just click on a screen is too higher: many computer crimes are from insiders. E-business is global by definition and now we have a world of more than 2.2 Billion users interconnected (Internetworldstats, 2012). In many areas we have difficulties in defining what law to apply. For example *privacy* has very different legislations in US and EU, so we need special agreements for data crossing global networks (Garante, 2012). Without an ICT infrastructure an e-business simply does not exist, it cannot operate. In this perspective the responsibility of IS managers is evolving and escalating towards the highest levels. The complexity and rapid evolution of ICT put the management in front of true ethical dilemmas where the decision between "*right*" or "*wrong*" is difficult and now it is clear the need for a "*computer ethics*".

2.3 A Collection of Guidelines

A basic recommendation could be to have a good knowledge of computing infrastructures inside an e-business organization: a good knowledge of computing solutions and of the related social, environmental and ethical impacts can provide the skills for a good responsible and sustainable e-business, an alignment between business ethics (*know-what*) and computer ethics (*know-how*). In the following we provide a collection of guidelines.

1. *Participatory design*: the design of ICT applications should start from the involvement of people that will daily use the systems. The persons that actually know and implements the business flows and processes should be involved since the beginning in the design of ICT solutions. This will also ensure a good acceptance of the new working environments;
2. *workplace*: a responsible e-business will give particular attention to the design of the working environment, to its safety and ergonomics. It will provide also flexible solutions to information workers like: tele-working and flexible working time. Another hot issue is the personal use of corporate computing resources;
3. *hardware and the environment*: here the organization can really *make a difference* by carefully selecting the hardware suppliers that minimize the environmental impact;
4. *software*: free or proprietary? It is now well recognized the role of free and open source software in the development of "local" software companies (for customization and maintenance) and a responsible e-business strategy should be aware of this dimension. If the organization is going towards "cloud computing" solutions, then it should ask to *cloud providers* evidence of their choices (for example, in the direction of Green IT);
5. *open formats*: are data models based on open standards? (in case of an e-business working also with public authorities this "open data" approach is becoming mandatory);
6. *privacy*: a good strategy could be to adopt a "*minimalist*" approach to the use of data; for example to use only the *minimum amount of data* required to process transactions. All personal data should be available to their owners (the "*habeas data*" approach) (Rodotà, 2004), and this is more and more important also on mobile platforms (Van Sinderen, 2006);
7. *a responsible customer relationship management*: clear policies about *data mining* and the use of customers' profiles should be defined and published;
8. *security and reliability*: these two issues should be among the top priorities for a responsible e-business. For example a proper use of "*ethical hackers*" (security experts that help

organizations in improving their security and in minimizing risks) should be triggered by critical situations or events (also important is a definition of appropriate *risk management* plans, internal code of ethics for computer professionals and managers); 9. accessibility: to provide a *universal access* to computing applications, a great attention should be taken in the design of interfaces' accessibility in particular to people with disabilities. The EU Commission is taking particular attention to this area of "eInclusion" that should drive the design of all human-computer interfaces. An e-business with an accessible Web interface has a strategic competitive advantage and could show this "*sensorial-barriers free*" approach as a core part of its CSR strategy; 10. *towards a knowledge-based society*: a strong effort should be put in knowledge management strategy, the continuous cultural and professional update of employees (lifelong education), the development of "*community of practices*", the proper internal use of Web 2.0 technologies (wikis, social networks) should be fundamental choices for *talents attraction and retention*.

3 CONCLUSIONS

Any enterprise that would like to be *responsible* and with a *sustainable* strategy, needs to have also a robust "*business ethics*". Organizations that develop an e-business strategy should be aware that they are doing business in a global computing platform. If they really want to be "*future-proof*" organizations they need a "*business ethics*" and a "*computer ethics*" strategies that are consistently converging.

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