Expert Systems with Applications 40 (2013) 150–161

Contents lists available at SciVerse ScienceDirect

Expert Systems with Applications

journal homepage: www.elsevier.com/locate/eswa

A multidimensional approach for CSR assessment: The importance of the stakeholder perception

Roberta Costa *, Tamara Menichini

Department of Enterprise Engineering, University of Rome Tor Vergata, Via del Politecnico 1, 00133 Rome, Italy

ARTICLE INFO

Keywords:
Corporate social responsibility (CSR)
Fuzzy linguistic approach
2-tuple
Balanced scorecard (BSC)
Stakeholder orientation
Multi-criteria decision-making (MCDM)

ABSTRACT

"If a tree falls in the forest and no one is around to hear it, does it make a sound?" and, paraphrasing the proverbial philosophy question, if a company has a strong CSR commitment but nobody recognizes it, does it produce any benefits? Business returns from corporate social responsibility (CSR) practices, such as customers loyalty and company reputation, depend heavily on how stakeholders perceive the company social behavior, making the measure of stakeholder perception a key issue in the process of CSR assessment. In this paper the analysis of CSR activities, as perceived by stakeholders, is realized utilizing global reporting initiative (GRI) indicators structured under balanced scorecard (BSC) perspectives and sustainability dimensions. We utilize a multi-criteria approach combined with fuzzy linguistic variables, in the variation of the 2-tuple, creating a hierarchy of CSR components with the purpose of integrating financial and non-financial sustainability dimensions and strategic perspectives. The hierarchy provides a multidimensional model that allows to evaluate the multifaceted social behavior of a company: the same company can be perceived simultaneously as responsible or irresponsible depending on the considered dimension and perspective.

1. Introduction

The enterprise is an organ of society and its management has to consider the impact of every business decision in order to promote the public good and to contribute to society strength and harmony (Drucker, 1954): this is what CSR is about. In an era where planetary emergencies and need for social justice are increasing, CSR can help companies to find a way to realize real sustainable businesses in view of their central role in the global economic and financial stability. In this respect, CSR is a business approach that considers how firm activities impact on society and that companies have a broader range of obligations besides economic and financial ones, taking into account also legal, ethical and philanthropic responsibilities (Carroll, 1979, 1991, 1999; Van Marrewijk, 2003). Therefore, CSR involves not only the business and the economic dimensions, but also the social and the environmental ones, in a way that aims to benefit the people, the communities and the overall society (ISO, 2002). Following this lead, "the triple bottom line" (Elkington, 1997) or "triple Ps" (profit, people and planet) managerial orientation aims to measure the financial, the social and the environmental performances of a company over a period of time, considering that when companies measure their social and environmental impacts, they progressively become socially and environmentally responsible organizations (Hindle, 2008). For these reasons, a new multidimensional approach is necessary in order to evaluate a company CSR, according to the economic, the environmental and the social issues that a company has to face in the Modern Economy (Menguc & Ozanne, 2005; Sharma, 2000; Wood, 1991).

A social responsible behavior should benefit a company in many ways, like customer loyalty or a good reputation. On this behalf, some studies (Becker-Olsen, Cudmore, & Hill, 2006; Greening & Turban, 2000; Peterson, 2004; Turban & Greening, 1996) highlight how the stakeholder perception of a responsible behavior influences the possibility to obtain benefits from CSR practices, to the point that the measure of CSR perception becomes a key issue in the process of CSR assessment. Moreover, stakeholder orientation mitigates a company irresponsible behavior and offers guidelines to decision-makers for CSR management (Armstrong, 1977). For these reasons, CSR measurement cannot neglect the stakeholder perception of the company CSR commitment, since the return on CSR investments is strictly linked to the public recognition of the company social responsible behavior. Nevertheless, CSR literature lacks of state-of-the-art solutions to this problem.

To this aim, we propose a methodology that considers the unavoidable subjectivity of perception measurement by utilizing a fuzzy logic approach for linguistic variables, in the variation of 2-tuple (Herrera & Martinez, 2000). With the purpose of assessing CSR activities, we hierarchize GRI indicators under BSC strategic

* Corresponding author. Address: University of Rome Tor Vergata, Faculty of Engineering, Department of Enterprise Engineering, Via del Politecnico 1, 00133 Rome, Italy. Tel: +39 0672597799; fax: +39 0672597951.

E-mail addresses: roberta.costa@uniroma2.it (R. Costa), tamara.menichini@uniroma2.it (T. Menichini).

0957-4174/$ - see front matter © 2012 Elsevier Ltd. All rights reserved.
http://dx.doi.org/10.1016/j.eswa.2012.07.028

perspectives and sustainability dimensions, through a Multiple Criteria Decision Making approach (MCDM).

The paper is organized as follows: a critical review of CSR measurement methods (Section 2) is followed by a discussion about the stakeholder centrality in CSR assessment (Section 3), then a methodology for CSR evaluation through stakeholder perception is presented (Section 4) and applied to a real case study (Section 5), finally conclusions are discussed (Section 6).

2. CSR definitions and CSR measurement methods

In the Green Book CSR is defined as "a concept according to which companies voluntarily decide to contribute to the attainment of a better society and a cleaner environment" (European Commission, 2001).

Scientific literature presents other CSR definitions, each referring to a different issue of society: the economic, the politic, the social and the ethic ones (Bowen, 1953; Carroll, 1979; Friedman, 1970; Kotler & Lee, 2005; Maclagan, 1998). Garriga and Melè (2004) propose to categorize the numerous CSR theories into four groups: instrumental, political, integrative and ethical. In the instrumental category fall the theories which consider the achievement of economic goals as the only social responsibility for a company, so that CSR is viewed only as a way to create wealth through the company image enhancement. The political group describes CSR mainly as corporate social commitment, which implies fostering stakeholder rights and social cooperation as a company duty. The integrative theories propose the integration between society and company demands, on the consideration that business success depends on society welfare and vice-versa. Finally, the ethical category considers CSR as an ethical issue, recognizing the social responsibility as an ethical obligation for the corporate.

Maon, Lindgreen, and Swaen (2010) deepen the analysis of CSR definitions, observing that the nature of CSR commitment can differ from a voluntary practice to a moral obligation for the company, and that different CSR definitions reflect different kinds of considered stakeholders (internal stakeholders, external stakeholders or the overall society). The authors observe that an increased CSR commitment should transform a reluctant adoption of CSR practices in an embedded culture, where organizational activities are directly influenced by CSR principles. The more a company is able to realize this cultural renovation the more benefits it receives from CSR commitment. In this scenario, CSR adoption must consider the satisfaction of all the stakeholders, deeming the stakeholders as the source of a value creation process that considers the economic, the environmental and the social perspectives equally relevant. Then, the "responsible company" gains competitive advantage from its acknowledged ethical conduct: productivity efficiency, company reputation, customer loyalty and an easier access to financial resources (Aravossis, Panayiotou, & Tsousi 2006; Garriga & Melé, 2004; Murray & Vogel, 1997). Indeed, the CSR approach is a voluntary commitment more than a simple compliance with government regulations (Menguc & Ozanne, 2005; Sharma, 2000) and a multidimensional perspective is necessary to evaluate the company CSR behavior, according to the economic, the environmental and the social aspects that are perceived by stakeholders.

So far a large number of standards, codes of conduct and guidelines were created in response to the accountability necessity to appraise business impacts on society and natural environment. Standards are norms aimed to standardize social responsible initiatives, reducing the differences in international laws and norms, in order to create an accountability system for external stakeholders, based on the adoption, monitoring and auditing of corporate compliance to CSR standards. Koerber (2010) states that there are about 300 CSR standards as: UN Global Compact, ILO Standards, OECD Guidelines for Multinational Enterprises, ISO 14001, GRI (Global Reporting Initiative, 2006), Global Sullivan Principles, SA 8000, AA1000. In particular, Social Accountability 8000, which concerns working condition, has increased its number of certifications from 881 in 2005 to 1776 in 2008, representing 67 countries and almost 1 million workers (Social Accountability Accreditation Services, 2008; Social Accountability International, 2005). Moreover, about 75% of the Fortune Global 250 used the GRI reporting guidelines for their sustainability report. The main criticism to this practice is that companies can adopt CSR standards without a real social responsible conduct in their activities (Koerber, 2010). It is important to underline that there is not a direct implication between the adoption of CSR standards and CSR commitment, especially for the business impact on the environment, as the study of Rivera and deLeon (2008) demonstrates. The implementation of CSR standards represents a relevant cost for the firm and the main incentive for their adoption is the public recognition of the company CSR commitment by both internal and external stakeholders (Downing, 2003; Khanna, 2001). Nevertheless, CSR standards adoption alone cannot grant stakeholder recognition of CSR commitment and consequentially it is evident that new approaches for CSR evaluation are required.

Besides standards, CSR literature provides several CSR evaluation methods. Turker (2009) proposes a critical review as an extension of Maignan and Ferrell's work (2000), providing a classification into five categories: reputation indices or databases; single and multiple issue indicators; content analysis of corporate reports; scales measuring CSR at the individual level and scales measuring CSR at the organizational level. The first category includes, for example, Kinder Lydenberg's methods and Domini Database (KLD), the Fortune Index and Canadian Social Investment Database (CSID), while the second group consists of indicators as the pollution control performance reported by the Council of Economic Priorities (CEP). Both the first and the second categories do not consider the multidimensional nature of CSR, according to the economic, the environmental and the social aspects that are perceived by stakeholders. Moreover, these two methodologies are often designed to evaluate companies only in certain countries or certain business sectors, thus limiting their effectiveness and versatility. The third approach has the strong limit to depend on the information reliability of CSR reports. Moreover, the empirical evidence demonstrates that there is no significant correlation between the contents of these reports and the actual performance of companies (Christmann & Taylor, 2006; Darnall & Sides, 2008; Freedman & Wasley, 1990; Koerber, 2010; Rockness, 1985). The individual scales of measure focus on managers' and workers' social behavior but not on the social responsibility of the entire organization. The fifth and most relevant category tries to overcome this limitation and to measure CSR at the organizational level. Maignan and Ferrell (2000) propose one of the most known methodologies of this group, utilizing the concept of corporate citizenship, defined as the economical, legal, ethical and discretionary responsibilities imposed on the company by its stakeholders. The limit of this application is that not all the possible categories of stakeholders are taken into consideration. Finally, Turker (2009) identifies a scale that takes into account the perspective of a larger number of stakeholders like employees, customers, government, competitors, natural environment, future generations and non-governmental organizations, but he does not consider the shareholders point of view, excluding the CSR economic dimension.

The cited literature addresses the central role of stakeholders in CSR assessment and, in particular, the European Commission (2011) suggests that "companies should have in place a process to integrate social, environmental, ethical and human rights concerns into their business operations and core strategy in close collaboration with their stakeholders".