EMBEDDING SUSTAINABILITY INTO BUSINESS STRATEGY: THE ROLE OF THE BALANCED SCORECARD

Anna PISTONI

University of Insubria 2 Ravasi St., Varese, Italy anna.pistoni@uninsubria.it

Lucrezia SONGINI

University of Eastern Piedmont 8 Perrone St., Novara, Italy lucrezia.songini@eco.unipmn.it

Abstract. This paper aims to analyze the relationship between the firm business strategy and its social strategy, highlighting the role played by performance measurement systems (PMSs), in particular the balanced scorecard (BSC), in favoring the alignment between the two aspects of the company life. Actually, PMSs play a fundamental role for the implementation of a social strategy: in the organizations those objectives are pursued and those actions are implemented which managers are responsible for and upon which they are evaluated and rewarded. PMSs also deal with the identification of the drivers of past and future performance and the related indicators, favoring the alignment between the business strategy and the social strategy. The design, implementation and use of PMSs focused on CSR and sustainability ask firms big efforts in order to redesign traditional PMSs. This paper aims to present and discuss the different approaches that can be adopted by firms on the relationship between business strategy and social strategy and its impact on PMSs, in particular on the BSC. The research method is based on the analysis of two case studies of European firms that made different choices with regard to the relationship between the business strategy and the social strategy. Moreover, they follow different decisions with respect to the structure and content of the sustainability BSC, the process of implementing it, the relationship with traditional planning and control systems, and the role of different organizational departments. Research findings show that a life cycle of the BSC seems to emerge. At the beginning, when sustainability has to be embedded into the organization and it has to be perceived as a corporate priority, the BSC seems to be the more effective tool. Afterwards, when the new approach has come into use and sustainability has been gradually incorporated into organizational culture, systems and actions, the routine can be managed by some simpler tools, like a set of KPIs.

Keywords: balanced scorecard; social strategy; business strategy; performance measurement systems; case studies; sustainability; corporate social responsibility.

Introduction

The relationship between the business strategy and the social strategy has become more and more relevant, due to the financial and economic crisis, which asks for a new strategic paradigm. However, a firm that intends to embed CSR and sustainability into practice needs to use managerial mechanisms to influence worker's behavior and to align individual objectives with company's goals and strategies (Dixon, Nanni & Vollmann, 1990). Performance measurement systems (PMSs) play a fundamental role, because in the organizations those objectives are pursued and those actions are implemented which managers are responsible for and upon which they are evaluated and rewarded. Dealing with the identification of the drivers of past and future performance and the related indicators, PMSs can also favor the alignment between the business strategy and the social strategy.

The design, implementation and use of PMSs, focused on CSR and sustainability, ask an enterprise big efforts, to integrate the actual financial PMSs. The critical performance areas to be monitored have to consider the relevant stakeholders, the business strategic objectives and the triple bottom line (TBL) perspectives; the indicators, the measurement rules and the relationship among different KPIs have to be redesigned. The frequency of measurement should favor timely and reliable analysis. Finally, traditional

systems focused on financial indicators need to be integrated with new accounting systems, such as environmental and social accounting. A trade –off exists between the number of indicators which can be regularly and timely elaborated and communicated and the costs of their measuring and processing. The described efforts may explain the limited diffusion of PMSs oriented to CSR and sustainability.

Among the different proposals developed by scholars, one of the most appreciated framework is the Sustainability Balanced Scorecard. In this paper, we concentrate our attention particularly on this tool, analyzing the characteristics of its design and implementation and the relation with firm strategy. Two case studies are presented, about firms that have introduced the Sustainability Balanced Scorecard. More in depth, paper's main objectives are as follows:

- 1. to explore the relationship between business strategy and social strategy;
- 2. to analyse and discuss design choices of the balanced scorecard (structure and content) that guarantee the consistency between the business strategy and the CSR/sustainability approach;
- 3. to identify points of strength and weakness underlying the implementation of a balanced scorecard oriented to CSR and sustainability.

Business strategy vs. social strategy: the missing link?

The relationship between the business strategy and the social strategy represents an issue underdeveloped by the literature. Authors who dealt with this topic often seem to consider the social strategy and the business strategy distinct and parallel issues. According to Minoja (2008) various theoretical streams on the relationship between the firm's economic and social objectives have been developed by the literature. Some authors state that the firm does not have any other obligation than the merely objective of maximizing shareholder value (Levitt, 1958; Friedman, 1970). Other studies recognize the social and ethical responsibilities of the firm. According to Minztberg (1983) being committed to ethics is not in conflict with financial, strategic and operational concerns. According to Coda (1988, 2004) the relationship between the financial, competitive and social goals of the firm is circular, and not rival; each dimension influences reciprocally the other ones. The stakeholder theory affirms that social issues are comprised among firm objectives, consistently with the following principles:

- the firm's decisions and actions imply not only economic, but also social impacts;
- organizations inevitably involve social as well as economic consequences, inextricably intertwined;
- the firm uses resources and competences which allow it to proactively and effectively cope also with social issues (Porter & Kramer, 2002; Margolis & Walsh, 2003);
- dealing with the stakeholders' needs and issues is not inconsistent with the shareholders' value.

Another research stream recognizes that the firm has obligations towards stakeholders, but consider social issues as instrumental and subordinate to the objective of maximization of profit and shareholders' value. Giving attention to social issues and stakeholders' interests improves the firm legitimization, and its reputation, strengthens the consensus from stakeholders, generates intangible assets, and reduces the firm's risk profile (Wartick & Cochran, 1985; Wood, 1991; Godfrey, 2005; Mackey et al., 2007).

To sum up, the relationship between the business strategy and the social strategy has been analyzed by the literature according to three main perspective. The first one considers the sustainability strategy and goals instrumental and subordinated to the business strategy and the competitive and financial objectives. The second one recognizes that the firm has obligations towards stakeholders, because it has to follow ethical principles and behaviors. However, such perspective may consider the social strategy as a distinct one from the business strategy. According to the last perspective, CSR and sustainability are strictly integrated into the company goals and mission, defining a long-term convergence among financial, competitive and social objectives, and a coincidence between the business and the social strategy.

The role of PMSs in implementing social strategy

A company pursuing a strategy based on CSR and sustainability needs to define objectives and programs, and to measure their achievement adopting a new perspective. However, the impact of sustainability and CSR on PMSs has recently gained some interest by the academic world, while the business world shows a more cautious approach.

The practice highlights that different choices are undertaken by enterprises, in order to revise their performance measurement systems, considering a CSR and sustainable approach. Some companies integrate the managerial reporting systems with a few social and environmental indicators (KPIs) (Keeble, et. al, 2003; Searcy, et al., 2005; Chee Tahir & Darton, 2010; Ramos & Caeiro, 2010). Other firms develop and use new performance measurement frameworks, focused on CSR and sustainability (Milne, 1996; Rouse & Putterill, 2003; Norris & O'Dwyer, 2004; Kaplan & Norton, 2004; Durden, 2008). Starting from the beginning of '90s, some authors signaled the importance of having specific managerial tools devoted to measure and represent the sustainable and CSR performance, deployed into both the environmental and the social perspectives (Epstein, 1995; Schaltegger et al., 1996; Elkington, 1997; Epstein & Manzoni, 2006). All such frameworks are multi-level and multi-stakeholder. The most popular proposals are summarized in table 1.

Table 1. PMS frameworks oriented to CSR/sustainability

Framework	Authors	
Value Reporting	Wright and Keegan (1997)	
Intellectual Capital Model	Edvinsson and Malone (1997); Sveiby (1997); Stewart (1999)	
Comparative Business Scorecard	Kanji (1998); Kanji, Moura and Sa (2002)	
Ethical Performance Scorecard	Spiller (2000)	
Performance Prism	Neely et al. (2002)	
Sustainable Balanced Scorecard	Epstein and Wisner (2001); Figge et al. (2002); Epstein and Roy (2003a, 2003b)	
SIGMA Sustainable Scorecard	www.sigmaproject.org	
Integral framework for performance measurement	Rouse and Putterill (2003)	
new Balanced Scorecard	Kaplan and Norton (2004)	
Responsive Business Scorecard	Woerd and Brink (2004)	
Thematic Balanced Scorecard	Dias-Sardinha and Reijnders (2005)	
Corporate Sustainability Performance Pyramid	Epstein and Wisner (2006)	
Dartboards and Clovers of Sustainability Model	Bonacchi and Rinaldi (2007)	

Agreeing with such scholars, we state that the implementation of the social strategy finds an important driver in the PMS that favors the alignment among decisions, actions and attitudes. Next paragraph deals with design choices to be applied in order to develop a Sustainability Balanced Scorecard, as an effective mechanism to implement social strategy.

The Balanced Scorecard as a tool for implementing social strategy

Among different PMSs frameworks devoted to drive the implementation of the social strategy, many scholars suggest the use of the Balanced Scorecard as an effective tool (Kaplan & Norton, 2001). With reference to this specific topic, different are the proposals coming from the literature.

Epstein and Manzoni (2006) contended the introduction of the sustainability perspective into the four traditional perspectives of the BSC. According to this proposal, the enterprise should maintain its business BSC, but adding new objectives and indicators aimed at capturing sustainability inside each traditional dimension (Figure 1)

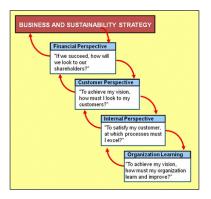


Figure 1. Integration between business strategy and social strategy: sustainability embedded inside traditional BSC dimensions

This alternative should be appropriate when the management believe sustainability playing a relevant strategic role for the firm's success, and so it has to be embedded into business strategy. Such BSC framework is useful in order to pursue an integration between the business strategy and the social strategy.

Figge et al. (2002) suggest the opportunity to add a new dimension of performance to the four ones of the BSC, the so-called "non-market" perspective, devoted to hold the sustainability objectives and performance indicators (Figure 2). In the evaluation process, this fifth dimension should have a different weight related to the importance that the sustainability has among organization priorities.



Figure 2. Social strategy distinct from business strategy: a fifth perspective inside BSC

According to this approach, the sustainability join the firm business objectives without a complete integration with them. This kind of solution is particularly effective, either for firms that have just begun to deal with the sustainability issues or for those organizations that prefer to maintain separate the business and the social strategy.

Epstein and Wisner (2001) propose the design of a specific scorecard devoted to the sustainability. They argue that a new performance measurement framework should be developed, in addition to the business BSC, which considers sustainability and stakeholder satisfaction: both a triple bottom line (TBL) approach, and a stakeholder focus, which articulates goals and indicators into relevant stakeholder categories, are recommended (Figure 3).

Figure 3. Social strategy distinct from business strategy: two separate BSCs

As the sustainability BSC operates as a separate tool from the business BSC, the social strategy is considered as separate and distinct from the business one.

Finally, Kaplan and Norton (2004) in the framework developed in 2004 pay attention to sustainability perspective, stating that all stakeholders' interests have to be included into the BSC, if this is useful to the business strategy. They suggest the introduction of some sustainability objectives and measures inside the "Internal processes" perspective, specifically in the "Environment, Health and Safety" area (Figure 4). According to their proposal, social strategy is instrumental to business strategy.

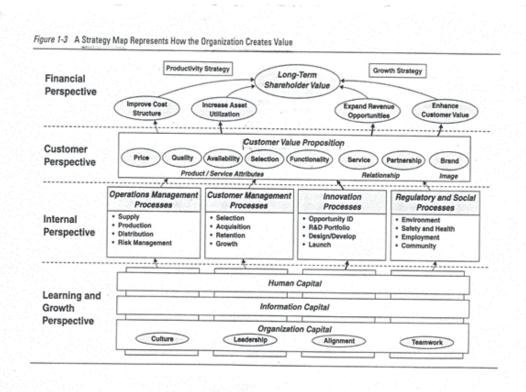


Figure 4. Kaplan and Norton Sustinability BSC (2004)

To sum up, sustainability and CSR are embedded into the BSC following four main design choices, depending on the relationship a firm adopts between its social and business strategy:

- if social strategy and goals are considered as instrumental and subordinated to the business strategy and competitive and financial objectives, we can expect that Kaplan and Norton's framework (2004) is applied;
- if social strategy is considered distinct from business strategy, two different design choices can be made. The former one is the addition of the sustainability perspective to the traditional BSC model (Figge et al., 2002); the latter one is the development of a specific sustainability BSC as a separate tool from the traditional BSC (Epstein & Wisner, 2001);
- finally, when CSR and sustainability are strictly integrated into the company goals and mission, and a coincidence between social strategy and business strategy occurred, CSR and sustainability objectives and measures are deployed pervasively into the four perspectives of the traditional BSC.

Empirical evidences

Research design

The research method was based on the analysis of two case studies of European firms, which embedded sustainability and CSR in their strategic goals, organization and managerial mechanisms. Case studies were performed through semi-structured interviews, and the analysis of secondary sources. Informants included: the chief executive officer, the managing director, the chief financial officer, the controller, the CSR manager, and the Communication department director. Data collection focused on research variables describing the company, the CSR and sustainability strategy, the business strategy, and the impact of CSR and sustainability on the organization, managerial mechanisms and PMSs.

The several informants, direct observations, different data sources and the analysis of secondary sources, such as company documentation and corporate website, allowed for triangulation, to check the internal consistency of data. A comparative analysis across the two cases was carried out, after an explanatory and descriptive analysis of each company.

Case study 1: Alpha

Alfa is a multi-utility that provides energy (gas, electricity), water and waste management services to a total customer base of approximately two million users. Alpha aims to guarantee an innovative corporate model based on a multi-business approach with strong roots in the community. It places sustainability as a key element of company strategy. The business strategy is developed along three lines: energy, networks and environment. Such strategic priorities are supported by some strategic sustainable objectives: reduction of environmental impacts, increasing service quality and safety, involvement and dialogue with stakeholders, communication and workforce involvement, career advancement and efficient use of skills and know-how, alignment with code of ethics principles, sense of belonging and corporate culture, promotion of the quality, safety and environmental policy.

Alpha has published the Sustainability Report since 2003. In October 2010, the Balanced Scorecard System Management department within the Corporate Social Responsibility Department was established. Alpha's BSC articulates the corporate strategy and social responsibility policies into specific operational projects managed by managers and periodically monitored. Such projects are an integral part of the management bonus system. The innovation of this approach consists of considering the achievement of strategic objectives of social and environmental sustainability as a condition for the achievement of the company's economic and financial objectives over the medium and long term. The objectives are articulated into four areas: development, quality and corporate social responsibility, organizational integration, efficiency upgrading. The commitments to stakeholders are also considered in the BSC. Each year, the strategic map, updated consistently with the contents of the business plan, provides a summary of the strategic objectives and Alpha's commitment to stakeholders. To achieve strategic objectives of increasing the company's long-term value, many priority projects are selected during the budgeting process. Members of the Executive Committee are in charge of such projects. Each project within the BSC system is assigned to a manager and is part of his/her bonus system.

Case study 2: Gamma

Gamma is one of the largest European listed utility. It has been listed on a European and the New York stock exchanges since 1999. In 2002, the corporate social responsibility (CSR) project was launched, directly sponsored by the CEO. In order to foster the integration of respect for the environment and society into its business activities, Gamma ensured that its Board of Directors assumed responsibility for sustainability and for the integration of planning and audit processes with sustainability objectives and indicators. In 2002, two new organization departments were established: the Corporate Social Responsibility unit, within the Corporate Communication Department, and the GammaDATA unit, within the Corporate Administration, Finance and Control Department. The latter was in charge of the CSR planning and control process, defining CSR objectives, evaluating CSR projects and compiling managerial reports for top management. Within the Corporate Administration, Finance and Control Department, a new role was also established: the CSR controller. Many data owners were identified to be in charge of and manage KPIs for the Sustainability Report and rating agencies' questionnaires.

In May 2003, the 2002 Sustainability Report was published. In July 2003, social and environmental questions arising from business activities and relations with stakeholders were translated into a set of corporate social responsibility objectives. They were incorporated as an integral part of the Company Business Plan as well as the budgeting and reporting systems.

Gamma has created a system of data collection that compiles information at quarterly intervals and, using specific key performance indicators, is able to: illustrate the main actions being undertaken for improvement; highlight deviations from corporate goals so that prompt corrective action may be taken. The specific planning and control mechanisms are:

- the Sustainability Data: it contains the annual guidelines for the CSR planning and control activities
- the CSR Plan: it is devoted to formalize the objectives and the action plans required for the development and implementation of the sustainability strategy during the specific budget period and the following five years.
- the Quarterly Scorecard: it contains some highlights on the most relevant CSR facts of the quarter;
- the Business Review: every six months, it presents to the CEO the current situation of the CSR projects, and the planned initiatives for the following twelve months.
- the Sustainability Scorecard: it was first realized in 2006. Each of the 100 KPIs reported in the Sustainability Scorecard is linked to a specific critical success factor. A set of objectives, ranging from a minimum of two to a maximum of eight, is linked to each critical success factor. The actual value, target and trend of each KPI are measured by means of a score that reflects the degree of variance between the target and the actual value. The Sustainability Scorecard has been developed by the Business Planning and CSR Control manager with the help of IT resources. It is organized according to a TBL structure. Recently the sustainability scorecard has been called in question.

It is noteworthy that the sustainability planning and control systems and process have not substituted traditional planning and control systems, but represent a parallel, but distinct system.

Conclusions

The impact of sustainability on PMSs has traditionally been studied with reference to the external reporting. Only more recently proposals on the sustainability BSC have emerged in the literature. According to how the relation between business strategy and social strategy is considered, authors suggest different design choices to embed sustainability and CSR into the BSC.

The analyzed cases highlight different design choices with respect to the structure and content of the sustainability BSC, the process of implementing it, the relationship with traditional planning and control systems, and the role of different organizational departments (table 2).

Table 2. Strategy and PMSs in Alpha and Gamma

	Alpha	Gamma
Relationship between business strategy and social strategy	Social strategy and business strategy are linked	The two strategies are distinct
Planning and control systems	Sustainability embedded into planning, budgeting, reporting and incentives	Sustainability planning and control systems are distinct from the traditional/ financial ones
Sustainability balanced scorecard	Sustainability embedded inside four areas of the balanced scorecard: development, quality and corporate social responsibility, organizational integration, efficiency upgrading	The sustainability balanced scorecard is distinct and parallel with respect to the traditional planning and control systems, and it is organized accordingly to a triple bottom line approach
Department involved in CSR / sustainability planning and control	The unit in charge of sustainability BSC is inside the CSR department	Two organizational units in charge of sustainability: the first one is in charge of external communication and it is under the Communication department, the second one is in charge of sustainability planning and control systems and it is inside the accounting, finance and control department

We can say that Alpha considers social strategy and business strategy highly linked. Consequently, it has adopted the traditional BSC where sustainability KPIs are inside the four different areas. This choice could be the consequence of the fact that Alpha is owned by local municipalities and operates in energy, water and waste management, delivering public services to local communities. On the contrary, Gamma considers social strategy distinct from business strategy. Being a listed company, sustainability has been adopted mostly for communication and image purposes, and to be admitted to social indexes, in order to attract social investors.

As suggested by Riccaboni and Leone (2009), we can say that the analyzed companies have adapted rather than adopted the concept of sustainability. Integrating financial, social and environmental goals, pre-existing values and paradigms (such as shareholders' interests and profitability) have been not questioned. Rather than against traditional concepts, sustainability is treated as something complementary to them. However, the analysis of the two cases allows to identify two different profiles of the meaning of sustainability:

- the first profile, implemented in Gamma, is market oriented. According to this perspective, sustainability is a vehicle for improving the company's attractiveness for customers, and investors: social strategy can be considered as instrumental to business strategy;
- the second profile of sustainability, implemented by Alpha, is corporate value oriented. Sustainability is viewed as a key point of the company's culture; it strongly directs the decision processes and the activities. Thus, social strategy and business strategy are coincident.

In all case studies sustainability has been introduced within the organization through formalized mechanisms and tools. In fact, PMSs have played a relevant role in the implementation of the new strategic guidelines. New organizational units and roles in charge of sustainability BSC have been established. Sustainable targets and objectives for the organization as a whole, as well as for divisions and departments, have been identified, and a sustainability plan, budget, managerial reporting and incentives have been adopted. A clear and well-framed definition of strategic objectives in terms of sustainability and their translation into specific and measurable targets have been defined, which represent fundamental guides in embedding social and environmental issues in organization management practices and day-to-day operations.

The integration of sustainable strategies with the traditional planning and monitoring system seems to be one of the key elements of the successful embedding of sustainability within the organization. As argued by Riccaboni and Leone (2009) the integration rather than the replacement of existing tools and practices

looks like a facilitator of the progressive internalization of the sustainability principles within the organization.

However, the findings of case studies show also some differences between the two firms. In fact, Gamma considers the sustainability strategy mostly as a separate dimension from the business strategy. Thus, consistently with Epstein and Wisner (2001) it has arranged a sustainability balanced scorecard separate from the financial and traditional managerial reporting. Such findings seem to show an incomplete integration between the business and the sustainability strategies, which are viewed as two distinct aspects of the firm's life, and not completely integrated. Partially different is the approach adopted by Alpha. The traditional balanced scorecard integrates the sustainability objectives and indicators, as supported by Epstein and Manzoni (2006), showing a more strict coincidence between social strategy and business strategy.

It is noteworthy that in Gamma the sustainable balanced scorecard has been recently called into question. The reasons explaining such choice can be summarized as follows:

- the balanced scorecard is considered too much complex in relation to the achievable benefits;
- the balanced scorecard is considered less flexible than other performance measurement tools such as a set of KPIs;
- the maintenance of the balanced scorecard requests costly interventions for the design and maintenance of the information systems.

To conclude, we can say that a life cycle of the BSC seems to emerge by the analyzed case studies. At the beginning, when sustainability has to be brought into the organization and it has to be perceived as a corporate priority by the employees, the BSC seems to be the more effective tool. Afterwards, when the new approach has come into use and sustainability has been gradually incorporated into organizational culture, systems and actions, the routine can be managed by some simpler tools, like a set of KPIs.

References

- Bonacchi, M., and Rinaldi, L. (2007). DartBoards and Clovers as new tools in sustainability planning and control. *Business Strategy and the Environment*, 16(7), 461-473.
- Chee Tahir, A., and Darton, R.C. (2010). The process analysis method of selecting indicators to quantify the sustainability performance of a business operation. *Journal of Cleaner Production*, 18(16-17), 1598–1607.
- Coda, V. (1988). L'orientamento strategico dell'impresa. Torino: UTET.
- Coda, V. (2004). Responsabilità sociale e strategia dell'impresa. Working paper, Bocconi University, Milan.
- Dias-Sardinha, I., and Reijnders, L. (2005). Evaluating environmental and social performance of large Portuguese companies: A balanced scorecard approach. *Business Strategy and the Environment*, 14(2), 73–91.
- Dixon, J.R., Nanni Jr., A.J., and Vollmann, T.E. (1990). *The New Performance Challenge: Measuring Operations for World-Class Manufacturing*. Homewood, ILL: Business One Irwing.
- Durden, C. (2008). Towards a socially responsible management control system. *Accounting, Auditing & Accountability Journal*, 21(5), 671-694.
- Edvinsson, L., and Malone, M.S. (1997). *Intellectual capital: realizing your company's true value by finding its hidden roots*. New York: Harper Collins.
- Elkington, J. (1997). *Cannibals with Forks: the Triple Bottom Line of 21st Century Business*. Oxford: Capstone.
- Epstein, M. (1995), Measuring Corporate Environmental Performance. Chicago: Irwin.
- Epstein, M.J., and Manzoni, J.F. (2006). *Performance Measurement and Management Control: Improving Organization and Society*. London: Elsevier Science.
- Epstein, M.J., and Roy, M.J. (2003a). Making the business case for sustainability. Linking social and environmental actions to financial performance. *The Journal of Corporate Citizenship*, 9(Spring), 79-96.

- Epstein, M.J., and Roy, M.J. (2003b). Improving sustainability performance: specifying, implementing and measuring key principles. *Journal of General Management*, 29(1), 15-31.
- Epstein, M., and Wisner, P.S. (2001). Using a Balanced Scorecard to implement sustainability. *Environmental Quality Management*, 11(Winter), 1-10.
- Friedman, M. (1970). The social responsibility of business is to increase its profits. *New York Times Magazine*, September 13, 32-33, 122, 124, 126.
- Godfrey, P.C. (2005). The relationship between corporate philanthropy and shareholder wealth: a risk management perspective. *Academy of Management Review*, 30(4), 777-798.
- Kanji, G.K. (1998). Measurement of business excellence. Total Quality Management, 9(7), 633-643.
- Kanji, G.K., and Moura e Sa, P. (2002), Kanji's Business Scorecard. *Total Quality Management*, 13(1), 13-27
- Kaplan, R.S., and Norton, D.P. (2001). *The Strategy Focused Organization*. Boston: Harvard Business School Press.
- Kaplan, R.S., and Norton, D.P. (2004). Strategy Maps. Boston: Harvard Business School Press.
- Keeble, J., Topiol, S., and Berkeley, S. (2003). Using indicators to measure sustainability performance at a corporate and project level. *Journal of Business Ethics*, 44(2/3), 149–158.
- Levitt, T. (1958). The dangers of social responsibility. Harvard Business Review, 36(5), 41-50.
- Mackey, A., Mackey, T.B. and Barney, J. B. (2007). Corporate social responsibility and firm performance: investor preferences and corporate strategies. *Academy of Management Review*, 32(3), 817-835.
- Margolis, J.D., and Walsh, J.P. (2003). Misery Loves Company: rethinking Social Initiatives by Business. *Administrative Science Quarterly*, 48(2), 268-305.
- Milne, M.J. (1996). On sustainability, the environment and management accounting. *Management Accounting Research*, 7(1), 135-61.
- Minoja, M. (2008). Responsabilità sociale e strategia. Milano: Egea.
- Mintzberg, H. (1983). The case for corporate social responsibility. *The Journal of Business Strategy*, 4(2), 3-15.
- Neely, A.D., Adams, C., and Kennerley, M. (2002). *The Performance Prism: the Scorecard for Measuring and Managing Business Success.* London: FT Prentice Hall.
- Norris, G., and O'Dwyer, B. (2004). Motivating socially responsive decision making: the operation of management controls in a socially responsive organization. *The British Accounting Review*, 36(2), 173-196.
- Porter, M.E., and Kramer, R.M. (2002). The Competitive Advantage of Corporate Philantrophy. *Harvard Business Review*, 80(12), 56-69.
- Ramos, T.B., and Caeiro, S. (2010). Meta-performance evaluation of sustainability indicators. *Ecological Indicators*, 10(2), 157–166.
- Riccaboni, A., and Leone, E.L. (2009). Implementing strategies through management control systems: the case of sustainability. *International Journal of Productivity and Performance Management*, 59(2), 130-144.
- Rouse, P., and Putterill, M. (2003). An integral framework for performance measurement. *Management Decision*, 41(8), 791-805.
- Schaltegger, S., Muller, K., and Hindriksen, H. (1996). *Corporate Environmental Accounting*. Chichester: Wiley.
- Searcy, C., Karapetrovic, S., and McCartney, D. (2005). Designing sustainable development indicators: Analysis for a case utility. *Measuring Business Excellence*, 9(2), 33–39.
- Spiller, R. (2000). Ethical Business and Investment: a model for business and society. *Journal of Business Ethics*, 27(1-2), 149-160.
- Stewart, T.A. (1999). Intellectual Capital. The new Wealth of Organizations. New York: Doubleday.
- Sveiby, K.E. (1997). *The new Organizational Wealth. Managing and Measuring Knowledge-based Assets.* San Francisco, CA: Berret Koehler.
- Wartick S., and Cochran, P. (1985). The evolution of the Corporate Social Performance Model. *Academy of Management Review*, 10(4), 758-69.
- Woerd, F., and Brink, T. (2004). Feasibility of a responsive business scorecard. *Journal of Business Ethics*, 55(2), 173-186.

Wood, D.J. (1991). Corporate Social Performance Revisited. *Academy of Management Review*, 16(4), 691-718.

Wright, P.D., and Keegan, D.P. (1997). *Pursuing Value: the Emerging Art of the Reporting on the Future*. PW Papers, Price Waterhouse LLP.

Websites:

www.sigma-project.org