

## The use of Sustainability Balanced Scorecard as a Tool for management global performance in Corporate Social Responsibility strategy

Nabil OURINICHE<sup>1</sup>, Zahra BENABBOU<sup>1</sup>, Hassan ABBAR<sup>1</sup>

<sup>1</sup>Laboratory of Information and Decision Support Systems, Hassan 1st University Settat, Morocco

<sup>1</sup>Email: [nabil.ouriniche@gmail.com](mailto:nabil.ouriniche@gmail.com)

### Abstract:

Company's mission nowadays is not only limited to financial objectives, but it has been expanded to achieve social goals. This vision leads to participation in a corporate social responsibility strategy to achieve three fields of sustainable development: social, economic and environmental. Indeed, several studies showed that the global performance management is difficult for a company, since it is a question of managing the company's three main dimensions of social responsibility in parallel. This article aims to study the management of global performance in a corporate social responsibility strategy based on the concept of a balanced scorecard, with a view to integrate social and environmental aspects into construction of a Balanced Scorecard using the Sustainability Balanced Scorecards approach. The analysis of a case study of a Moroccan cement company shows that Sustainability Balanced Scorecards can be a powerful tool to fulfill a global performance management. This sustainability is not a process of separate consecutive steps, but a complex and systemic process requiring a high level of cooperation among company's stakeholders.

**Keywords:** Corporate Social Responsibility, Balanced Scorecards, Sustainability, Global Performance, Management.

### Introduction

Over the years, the concept of corporate social responsibility "CSR" has gained interest, and this concept, developed by Bowen (1953), reflects the evolution of our society, that perceives a company not only from an economic and financial point of view, but also as an actor that takes into account its human resources, protect the environment and contributes to a balanced society. Indeed, managing global performance is difficult, as it involves dealing simultaneously with economic, social and environmental responsibilities to reach global performance goals or objectives. Good performance management is required for a successful "CSR" strategy. In fact, the Balanced Scorecard is a management control tool developed by two American economists Robert Kaplan and David Norton. Its aim is to measure and improve the company's performance by identifying financial and non-financial indicators directly linked to the strategy of the company. These indicators are of four axes: financial, customer, internal process and organizational learning. In addition, the Sustainability Balanced Scorecards method allows us to integrate the Corporate Social Responsibility into the classical balanced scorecard according to several possibilities to measure and manage global performance. The results presented in this paper were derived from a specific "SBSC" project adopted by a Moroccan cement company in 2019. The empirical results show not only how the development of "SBSC" can be pursued, but also the supporting factors and challenges in this process. We're trying to find answers to the following research questions:

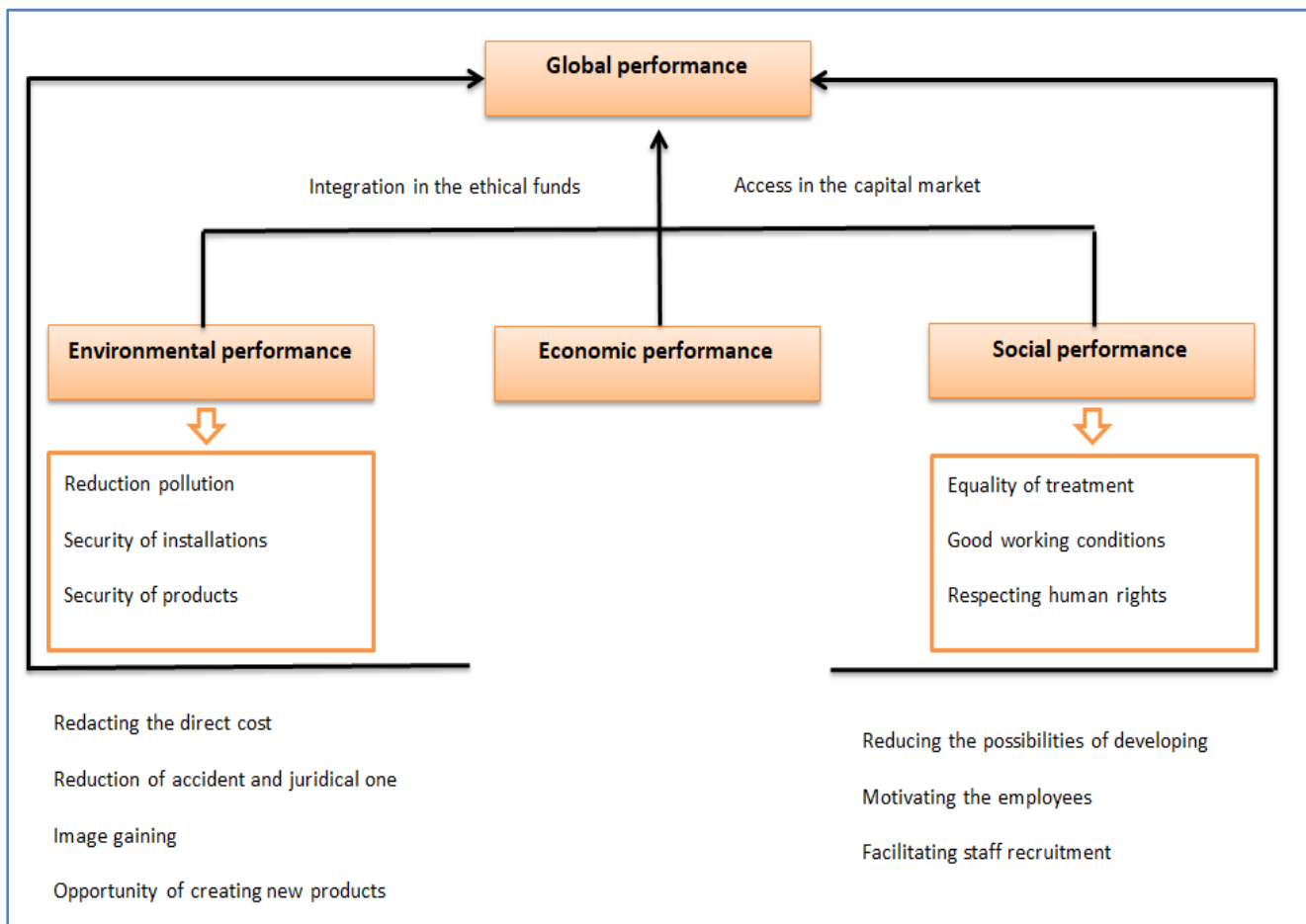
- Based on an analysis of a single case study, how does the "SBSC" development process in industrial cement company labeled "CSR"?
- What are the challenges and obstacles in "SBSC" development?
- According to our case study, is "SBSC" able to manage global performance in the "CSR" strategy?

The rest of this paper is structured as follows. In Section 2, the theoretical framework relating to our research is presented. Section 3 describes the research methodology and the case company, and Section 4 presents the results. Section 5 offers a discussion based on earlier results and analysis. Finally, the conclusions are summarized shortly in Section 6.

## 2. Theoretical Framework

### 2.1 Corporate Social Responsibility and management of global performance.

According to the European Commission, the application of the principles of sustainable development at corporate level must be translated into a corporate social responsibility strategy [1]. It defines corporate social responsibility through the voluntary integration of social and environmental concerns into business activities and relations with stakeholders. This responsibility stipulates that companies are willing to contribute to environment and society protection along with stakeholders. According to Freeman, "stakeholders" are determined by any group or individual who can influence or be influenced by the activity of the company, expect companies to report on how they conduct their business and assume their responsibilities, towards their employees, shareholders, residents, the environment, etc...[2]. In this context, the concept of global performance is used in management literature to evaluate the application of the sustainable development strategies of companies and to report their social responsibilities to the various stakeholders [3]. The global performance is determined by the aggregation of economic, social and environmental performances (Fig.1) [4], [5], [6].

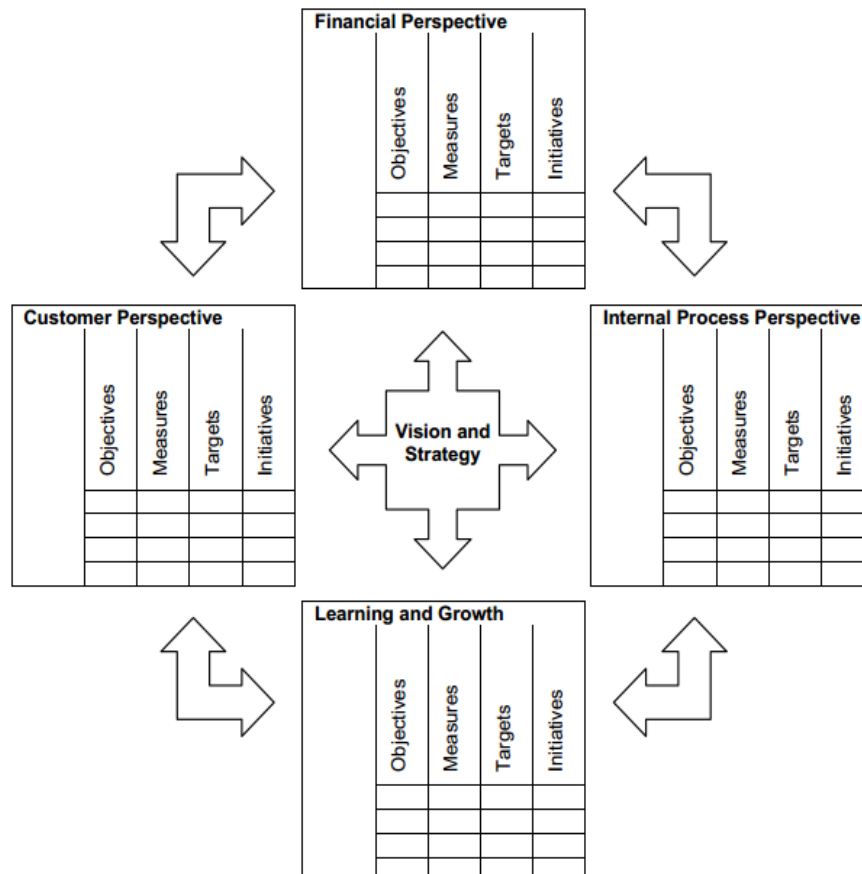


*Fig.1. The components of Global Performance [5]*

### 2.2 The “Classic” Balanced Scorecard

A balanced scorecard is a management tool that enables performance measurement to be linked to a strategy that uses financial and non-financial indicators. In 1991, Kaplan and Norton described the concept of a balanced scorecard and extended it further in the Balanced Scorecard (1996) (Fig.2). The traditional model includes four dimensions related to corporate strategy and core values. These dimensions include financial, customer, internal business processes and organizational learning and growth. In practice, many managers refer to any set of financial and non-financial measures that link performance indicators with corporate objectives by a balanced scorecard[7].

- The four perspectives in the balanced scorecard represent four key components of corporate value:
- The financial perspective focuses on shareholders' interests and shows the link between strategic and financial objectives.
- The customer perspective focuses on actions that show the company's strategy and actions to create customer value.
- The perspective on internal business processes includes measures that indicate a company's performance in key internal dimensions.
- The learning and growth perspective highlights how well the company is prepared to respond to future challenges by exploiting their organizational and human resources.



**Fig.2. The model of the Balanced ScoreCard[8]**

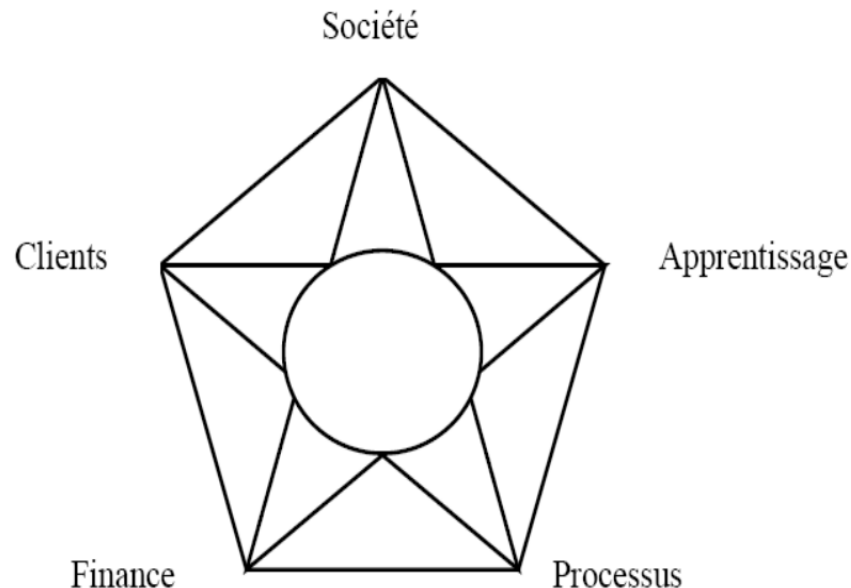
### 2.3 Integrating Corporate Social Responsibility And Balanced Scorecard

Social and environmental aspects are taken into account in the literature's balanced scorecard. Decoupling or integration of economic and social aspects into the company's management control system can be used. On the one hand, as some authors advocate the establishment of a specific sustainable "BSC" and unrelated to the traditional "BSC" is essential. It consists of the management and independent measurement of the company's social footprint. This decoupling involves a significant risk that social and environmental concerns are secondary concerns used solely to enhance the company's image. On the other hand, most authors prefer to integrate social and environmental aspects into the classical "BSC". There are mainly two main ways of integrating social and environmental aspects into the "BSC":

In the first place, it is necessary to deal with social and environmental aspects with four traditional perspectives of the "BSC"[8],[9]. These later authors proposed to include social and environmental aspects in other dimensions by integrating indicators, measures and objectives. This integrates social and environmental aspects fully into the traditional "BSC". Therefore, they are automatically integrated into their cause-and-effect relationships and oriented towards a successful translation of the company strategy. According to Kaplan and Norton[8], the company's ability to be a citizen must

be an integral part of performance measurement must be an integral part of performance measurement and must be reflected in the presence of social indicators in an internal process's axis. They also suggest extending the customer axis to all partners of a company[8].

Secondly, [10] proposes a "Sustainability Balanced ScoreCard" approach, adding an additional perspective to the four traditional perspectives. According to this author, it is mandatory to add an additional "non-market" dimension to explicitly solve the social problem and the five dimensions must be given the same importance. In general, the financial and social dimensions must be treated simultaneously and in the same way (Fig.3).



**Fig.3. The model of the “Sustainability Balanced ScoreCard” [10]**

### 3. Methods

#### 3.1 Research Design

According to the nature of our research questions and their explorative character, in general, unique case study approach of action research has been sequenced for the current analysis [11], [12]. Indeed, a case study is not a specific method, but rather a process which combines various methods of empirical social research [13]. The case study approach must be seen in an action research context, which means that researcher's participation in the project was useful for understanding what practitioners are doing and helps practitioners to improve their thinking and actions. [14],[15]. Thanks to the method used for the case study of action research, an interpretive perception could be adopted [16], interpretivism(interpretivist) researchers understand “the world of human experience” [17]. According to this view, the interpretive researcher discovers reality through the views, background and experiences of the participants [18].

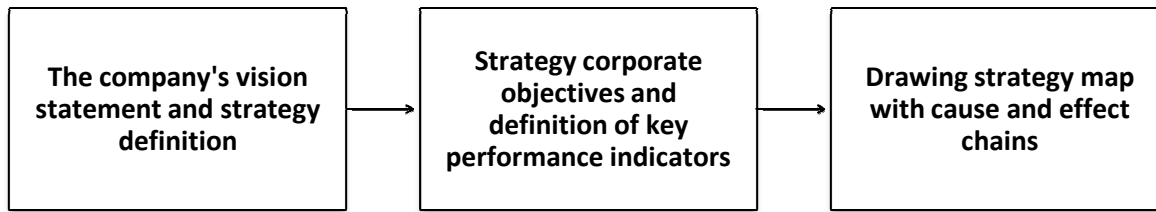
#### 3.2. Selection of case

This study describes the process by “SBSC” which is established in a multinational cement industry in Morocco. For two reasons the company was chosen. Firstly, it would seem ideal for such a “SBSC” analysis on account of their important in Morocco. Secondly, the company is a pioneer in sustainability and environmental management and could actually be considered an example of best practice on the ground. Indeed, years of practice in integrating sustainability into a company have already enabled “SBSC” to be created with the necessary structures and management systems.

#### 3.3 Data collection and Analysis

The data collection was performed by reading thoroughly the documents and by means of interviews (Unstructured and semi-structured) with managers of each departments. The data analysis was performed to document and continuously integrate the results achieved during the various events in the following steps (Fig.4). The documentation also includes information related not only to

“SBSC” and its content, but also to learning and reflection process in developing and implementing a “SBSC” within a company.



*Fig.4. The process followed for developing and implementing a “SBSC”*

## 4. Result

### 4.1 The company's vision statement and strategy definition

The company studied is an international leader in the field of cement production. It’s a visionstatement is "Bringing greater solutions for building Morocco tomorrow” whicharticulates around five strategic ambitions. In fact, this company has the firm conviction and the desire to be:

- The safest Moroccan company for its employees, customers and stakeholders, and a model for the national economy.
- The national corporate citizen and the preferred employers.
- The most successful company, cost leader.
- The preferred company of its customers offering innovative and adapted solutions with the best quality of products and services.
- An agile, creative and sustainable development model.

### Strategy corporate objectives and definition of key performance indicators

#### ✓ The Financial perspective

The financial perspective plays a dual role in the “SBSC”.The first one is known as the financial performance of a strategy and the second as the endpoint of the causal and effect chains that refer to the other perspectives of the BSC. Otherwise, the company recognizes that growth and productivity are two key strategies in the financial axis. These strategies aim to increase turnover, improve the cost structure and increase the use of the asset.In addition,the most appropriate performance indicator was awarded with identified objectives such as turnover, percentage of cost savings, return on capital employed, cash flow, return on investment and return on equity (Table 1).

*Table 1. Financial perspective strategies, objectives and KPIs*

Perspective	Strategy	Objectives	KPIs
Financial	Growth	Increase Turnover	<ul style="list-style-type: none"> <li>• Turnover</li> <li>• Cost Savings Percentage</li> <li>• Return on Capital Employed</li> <li>• Cash flow</li> <li>• Return on investment</li> <li>• Return on Equity</li> </ul>
	Productivity	Improve cost structure Increase asset utilization	

KPIs:key performance indicators

#### ✓ The Customer perspective

In the customer perspective, it defines which customer segment is intended to achieve the desired economic result and explains how the company plans to succeed in the market. It has to be apparent how all measures and objectives link to the fulfillment of the objectives of the financial perspectives [6]. For such customers, the company has a clear strategy to become their favorite company. This strategy has two main goals: (1) to reduce waiting time of customers to meet these requests quickly and it is measured by the waiting time, and (2) to prevent and reduce customer claims by measuring the number of complaining customers. This allows us to evaluate customer satisfaction(Table 2).

**Table 2. Customer perspective strategies, objectives and KPIs**

Perspective	Strategy	Objectives	KPIs
Customer	The favorite company of its customers	Reduce customer waiting Reduce customer claim	<ul style="list-style-type: none"> <li>• Waiting Time</li> <li>• Claim number</li> </ul>

KPIs: key performance indicators

✓ **The internal business processes perspective**

It is about questioning the essential processes that sustainably contribute to the competitive advantage of the company which innovation and maintenance are the best strategies for high quality solutions. Indeed, the company's main objective is to offer innovative solutions that meet the needs of its customers through the production of new LHR and PREFA+ products. Thus, the maintenance strategy adopted focuses principally on the reduction of oven and crusher failures. The performance of these objectives is measured by the mean time between failures (MTBF) and the Timing for product launch (Table 3).

**Table 3. Internal business processes strategies, objectives and KPIs**

Perspective	Strategy	Objectives	KPIs
Internal business processes	Offer innovative solutions	Launch new LHR and PREFA+ products	<ul style="list-style-type: none"> <li>• Timing for product launch</li> </ul>
	Improved maintenance	Reduce oven failures Reduce crusher failures	<ul style="list-style-type: none"> <li>• MTBF oven</li> <li>• MTBF crusher</li> </ul>

KPIs: key performance indicators.

✓ **The learning and growth perspective**

The learning and growth perspective describe the infrastructure which is necessary for the achievement of the objectives of other perspectives. In this case, the question is “How to manage change in the company?” It is about how to achieve the defined strategic objectives. The components of the learning and growth axis are essentially employee skills and safety improvement. Indeed, the skills development strategy within the company can be translated into two objectives: (1) skills development and (2) access to information facilitation. The performance of this strategy was measured by the number of training hours per employee and the availability of information. The strategy of improving the safety of the company is generally aimed at zero fatal accidents, for which the lost time injuring and the number of work accidents are used to measure the performance of this strategy (Table 4).

**Table 4. Learning and growth strategies, objectives and KPIs**

Perspective	Strategy	Objectives	KPIs
Learning and growth	Skill	Training Facilitated access to information	<ul style="list-style-type: none"> <li>• Training time per employee</li> <li>• Availability of information</li> <li>• Lost Time Injury</li> </ul>
	Improved security	Zero fatal accident	<ul style="list-style-type: none"> <li>• Number of work accidents</li> </ul>

KPIs: key performance indicators

✓ **Non-Market perspective**

The company follows a strategy to create value for its local community by creating an educational program, employability and sharing security practices, and supporting access to care. Indeed, the performance indicators for this strategy are children benefiting from the school drop-out program, actions taken for employability and the benefit of medical caravans. It is the first industrial company in Morocco to establish treatment and recovery platforms for industrial and household waste, the cement manufacturer whose water consumption is the lowest in the region. The company continues to advance and improve its processes every day to further reduce its environmental footprint through local actions to promote a circular economy and ecological protection, that's why the company aims to save water, reduce NO<sub>x</sub> emissions, reduce dust emission, reduce CO<sub>2</sub>, rehabilitate careers and recycle waste. We

measure the degree to which these objectives are achieved by water consumed, NO<sub>x</sub> emissions, dust and CO<sub>2</sub> emissions, and recycling rates. For the Non-Market perspective, the (Table 5) shows strategies, objectives and KPIs.

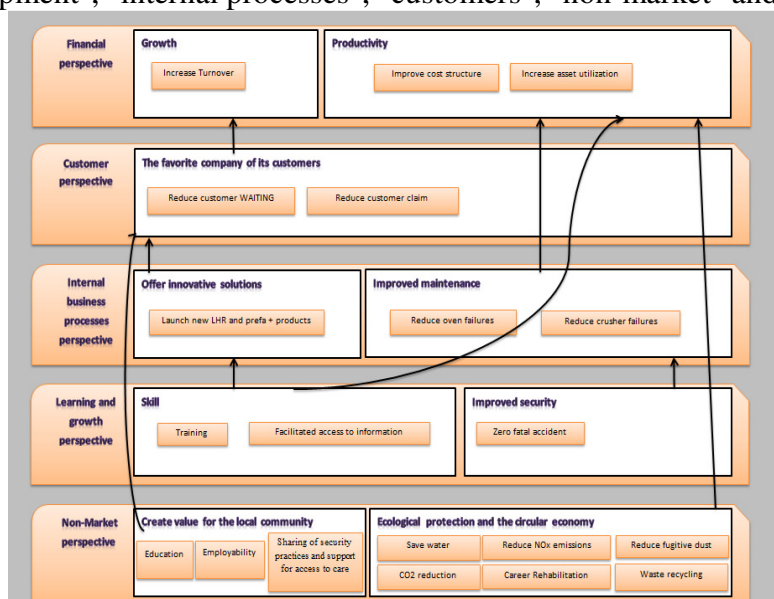
**Table 5. Non-market strategies, objectives and KPIs**

Perspective	Strategy	Objectives	KPIs
Non-Market	Create value for the local community	Education Employability Sharing of security practices and support for access to care	<ul style="list-style-type: none"> <li>Children benefiting from the</li> </ul>
	Ecological protection and the circular economy	Save water Reduction of NO <sub>x</sub> emissions Reduce fugitive dust CO <sub>2</sub> reduction Career Rehabilitation Waste recycling	<ul style="list-style-type: none"> <li>school dropout program</li> <li>Actions taken for employability</li> <li>Beneficiary of medical caravans</li> <li>Water consumed</li> <li>NO<sub>x</sub> emissions</li> <li>Fugitive dust emissions</li> <li>CO<sub>2</sub> emissions</li> <li>Recycling rate</li> </ul>

KPIs: key performance indicators

### Strategy map

According to [19] “the use of a “BSC” does not mean just using more measures; it means putting a handful of strategically critical measures together in a single report, in a way that makes cause-and-effect relations transparent”. Therefore, it is logical to assume that one of the strongest points of “BSC” is cause-and-effect relationships [20] and their description through the strategy map model. This shows that selected items are not distinct and unrelated, but are closely connected and dependent on one another. After selecting all the issues to be included in the “SBSC”, a strategy map showing the relationship between the objectives was created according to architecture following the “SBSC”'s additional approach, which consists of adding a fifth axis to the traditional “BSC” called "non- market" to solve the social problem. This strategy map represents the five dimensions of “SBSC”, namely "learning and development", "internal processes", "customers", "non-market" and "finance"(Fig.5).



**Fig.5. Strategy map**

## 5. Discussion

In our research, we provided an example of developing and implementing a global performance management system in a “CSR” strategy based on the “SBSC” approach and a unique case study in an industrial cement company in Morocco. The process begins with a presentation of the company's vision and strategy, then the identification of corporate strategic objectives and the definition of key performance indicators, and finally the strategic map shows the causal chains between strategic objectives. The results show that the development of a “SBSC” is a complex and systemic process. For example, the discussion of the company's strategic objectives was addressed during the strategic analysis, which is the starting point and after determining the strategic objectives, we returned to the first step to check its compatibility with the company's vision.

The presence of a work plan and the clarity of the “CSR” approach are essential supporting factors [21]. Our study shows that collaboration between departments and employee involvement is an important precondition for “SBSC” development, and therefore our findings are supported by [22] and [23] results. Furthermore, limiting performance indicators and the number of strategic objectives (in our case two to six objectives per perspective, one or two indicators per objective) is an important factor in the formulation of “SBSC”, which improves efficiency and facilitates performance management [22] and [24]. The difficulty lies in the choice of objectives and indicators [22]. For a manager and his team, this involves selecting the objectives and indicators on which his team can improve in line with the company's strategic priorities.

Following the additional “SBSC” approach, a specific “non-market” perspective was added to the strategic map to demonstrate the impacts of social and environmental objectives in cause-and-effect relationships. Our case study pointed out that the fifth specific axis for distinguishing the “non-market” perspective in the design of a Sustainability Balanced Scorecard makes it easy to integrate social company policies in concordance with [10]. In contrast, [25] considers that adding a specific fifth axis to integrate social issues into traditional ‘BSC’ presents a risk that the additional perspective can be easily eliminated, for example due to changes in top management priorities, that's why our used architecture requires the “SBSC” Five perspectives to be taken into account in the same way and equally important.

Moreover, we have shown that the Sustainability Balanced Scorecard is a very powerful tool for manager for performance management in the corporate social responsibility strategy, with a great ability to integrate and treat the three dimensions of “CSR” (economic, social and environmental) simultaneously in view of the global performance confirmed by [7], [10], [26]. Furthermore, and in these circumstances, most management tools and methods are operational and therefore not linked to the long-term business strategy. Therefore, they are not involved in a broader strategic vision of sustainable development, not all of these tools simultaneously take into account the three issues of sustainable development and have rarely been integrated into the company's traditional management control system [10].

## 6. Conclusion

The “BSC” offers the opportunity to manage the company's performance from four perspectives: financial, customer, internal business processes, and learning and growth. Indeed, the concept of a “Sustainability Balanced Scorecard” offers a high potential for integrating environmental and social aspects and objectives into the classic “BSC”, which helps to manage the performance of a “CSR”. However, our case study shows that the “SBSC” is not simply defined as the perspectives, objectives, indicators and measures to be developed and implemented. This process is quite complex and requires a lot of patience, strength and persistence and a high level of collaboration between the various actors of the organization.

Since this research was conducted in a case study with one company, further research is needed. This paper focuses on development, focusing future research on issues such as validation methodology, practicality and implementation. Further research can also explore ways to control and ensure continuity in this type of management tools.



**References**

- [1] Livre vert de la commission des communauteseuropeennes, 18 juillet. 2001.
- [2] Freeman R. 1984. « Strategic Management: A Stakeholder Approach ». Pitman, Boston.
- [3] Capron M., Quairel-Lanoizelee F. 2005. « Evaluer les stratégies de développement durable des entreprises: l'utopie mobilisatrice de la performance globale ». In Journée Développement Durable- AIMS – IAE d'Aix-enProvence, 1–22.
- [4] Baret, P. 2005. « Evaluation de la Performance Globale des Entreprises: Quid d'une approche économique » Colloque ». In ADERSE, IAE Lyon, 18–19. Novembre.
- [5] Reynaud, E. 2003. « Développement durable et entreprise: vers une relation symbiotique », Journée AIMS, Atelier développement durable, ESSCA Angers.
- [6] GERMAIN, C. et TREBUCQ, S. 2004. « La performance globale de l'entreprise et son pilotage: quelques réflexions », Semaine Sociale Lamy, Octobre.
- [7] Kaplan, R.S., & Norton, D.P. (1996). The balanced scorecard: Translating strategy into action. Boston: Harvard Business School Press.
- [8] Kaplan, R.S., & Norton, D.P. (2000). The strategy-focused organization: How balanced scorecard companies thrive in the new business environment. Boston: Harvard Business School Press.
- [9] HOCKERTS, K. 2001. « Corporate Sustainability Management: Towards Controlling Corporate. Ecological and Social Sustainability ». In Proceedings of Greening of Industry Network Conference, 21–24. Bangkok.
- [10] BIEKER, T. 2002b. « Managing Corporate Sustainability with the Balanced ScoreCard: Developing a Balanced ScoreCard for Integrity Management ». In Oikos PhD Summer Academy, 2002.
- [11] Yin, R.K. Case Study Research. Design and Methods; Sage Publications: Beverly Hills, CA, USA, 2009.
- [12] McNiff, J. Action Research: Principles and Practice, 3rd ed.; Routledge: London, UK; New York, NY, USA, 2013.
- [13] Brüsemeister, T. Qualitative Forschung; VS VerlagfürSozialwissenschaften: Wiesbaden, Germany, 2008.
- [14] Perry, C.; Gummission, E. Action research in marketing. Eur. J. Mark. 2004, 38, 310–320.
- [15] Wilson, H.N. Towards rigor in action research: A case study in marketing planning. Eur. J. Mark. 2004,
- [16] Flick, U. Triangulation: EineEinführung; Springer: Wiesbaden, Germany, 2011
- [17] Cohen, L., &Manion, L. (Eds.). (1994). Research methods in education (4th ed. ed.). London: Longman.
- [18] Yanow, D., & Schwartz-Shea, P. (2011). Interpretive Approaches to Research Design: Concepts and Processes. Netherlands: Routledge.
- [19] Hoque, Z. and James, W. (2000) 'Linking balanced scorecard measures to size and market factors: Impact on organizational performance', Journal of Management Accounting Research, Vol. 12, No. 1, pp.1–15.
- [20] Bourguignon, A., Malleret, V. and Norreklit, H. (2004) 'The American balanced scorecard versus the French tableau de bord: the ideological dimension', Management Accounting Research, Vol. 15, pp.107–134.
- [21] Von Bugoslawski, A.; Payer, T. Nachhaltigkeitim Unternehmen verankern—Die Sustainable Balanced Scorecard. In Proceedings of the Nachhaltigkeitsmanagement-Praxisorientierte Ansätze und Instrumente für Eine Nachhaltige Unternehmensausrichtung, Ulm, Germany, 27 January 2005; pp. 19–24.
- [22] Fernandes, K.J.; Raja, V.; Whalley, A. Lessons from implementing the balanced scorecard in a small and medium size manufacturing organization. Technovation 2006, 26, 623–634.
- [23] Rompho, N. Why the Balanced Scorecard Fails in SMEs: A Case Study. Int. J. Manag. Rev. 2011, 6, 39–46



- [24] Arnold, W.; Freimann, J.; Kurz, R. Grundlagen und Bausteine einer Sustainable Balanced Scorecard (SBS). Überlegungen zur Entwicklung einer SBS für mittelständische Unternehmen. In Werkstattreihe Betriebliche Umweltpolitik; Freimann, J., Ed.; Universität Kassel: Kassel, Germany, 2001; Volume 17.
- [25] Figge, F., Hahn, T., Schaltegger, S., & Wagner, M. (2002a). The sustainability balanced scorecard—linking sustainability management to business strategy. *Business Strategy and the Environment*, 11(5), 269–284.
- [26] Hansen, E.G. and S. Schaltegger, The Sustainability Balanced Scorecard: A Systematic Review of Architectures. *Journal of Business Ethics*, 2014: p.1-29.