The implementation of Balanced Scorecard in small firms:
insights from a case study

Paulo Afonso - psafonso@dps.uminho.pt
Jorge Cunha - jscunha@dps.uminho.pt
University of Minho – 4800-058 Guimarães - Portugal

ABSTRACT

Balanced Scorecard (BSC) is an approach promoted by academics and consultants and implemented in large companies since the early 1990s. It permits the balance between the objectives of short and long term, between financial and nonfinancial indicators, lagging indicators and performance drivers (leading indicators) and between internal and external perspective of performance (Kaplan and Norton, 1996). It permits also to translate firm’s operational and strategic complexity into manageable financial and nonfinancial indicators and to communicate goals, results and strategy amongst a large number of collaborators and hierarchical levels (Kaplan and Norton, 1996, Bible et al., 2006). Small firms have much less complexity and collaborators than large firms. The process followed, the reasons behind and the results achieved with the implementation of BSC in small firms are they different when compared with large firms? Little attention has been devoted to these issues in the literature. Based on the implementation of BSC in a small firm, this paper contributes to the understanding of this phenomenon. From the results obtained, two important conclusions were achieved. With a BSC, on one hand, small firms communicate better their strategy amongst collaborators and, on the other hand, they are more able to align operations management with their strategy.

KEYWORDS: Balanced Scorecard, Strategy, Small firms, Case study
1. INTRODUCTION

The primary function of management is to formulate and implement strategies for creating value for companies. However, this task is quite demanding and often is not successful, particularly for multi-business firms where complex activities proliferate (Nilsson and Olve, 2001). In the current environment, management is an activity increasingly difficult, given that the organizations, as well as the business environment where they operate, are constantly changing. Furthermore, these changes have become increasingly innovative, affordable, fast and difficult to predict (Michalska, 2005).

As such, managers have to continually assess, which implies the need to define/establish indicators (whether relating to market share, the lead time or profitability). In fact, the management function could not exist without an assessment process, which allows transforming a complex reality in a limited sequence of symbols that can be communicated and reproduced in similar circumstances (Lebas, 1995). In other words, it is necessary to conduct a performance evaluation. Performance evaluation should be understood not only on the grounds of what is associated with past events, but especially regarding future events and the ability of the business unit to be assessed (Lebas, 1995). Thus, a company’s objectives are quantified in terms of optimization of indicators (Olve and Nilsson, 2001). The performance evaluation (or management control) guides the implementation of the strategy and provides an improvement of individual and organizational performance (Jordan et al., 2002), and in a multi-business company, this control system has to fit and align with the competences of the business units in competitive markets and with corporate strategy (Nilsson and Olve, 2001).

Academics and practitioners have found the increasing irrelevance of traditional management control practices and performance evaluation (Johnson and Kaplan, 1987). This weakness is particularly reflected in accounting reports, since they are directed to the outside, rather than providing useful information for internal decision-making (Davis and Albright, 2004). Indeed, accounting does not reveal those elements that will lead to a good or a bad future financial result, being this one of the major problems of accounting systems, given that the consequences, financially speaking, of some actions extend far beyond the period of time of the analysis undertaken (Norreklit, 2000).

In the early 1990s, Kaplan and Norton proposed a new dashboard due to the belief that existing approaches to performance evaluation, primarily based on financial accounting, had become obsolete (Kaplan and Norton, 1996, Bible et al., 2006). They named it “Balanced Scorecard” (BSC) because such approach reflects the balance between the objectives of short and long term, between financial and nonfinancial indicators, lagging indicators and performance drivers (leading indicators) and between internal and external perspective of performance (Kaplan and Norton, 1996). According to Davis and Albright (2004), although many companies have performance appraisal systems that contain both financial and nonfinancial indicators, their use of the latter has, many times, a limited scope (e.g.
improvements in their front-line and customer facing). That is, their use merely considers the feedback and control of tactical short-term operations (Davis and Albright, 2004).

The BSC has been applied essentially by big consultancy firms in large firms. Little attention has been devoted to the impact of BSC in small firms. The implementation of BSC in small firms could by a very different process, guided by different reasons and with different goals than when it is implemented in large firms. Or, inversely, they could share a considerable number of aspects, conditions and limitations.

This paper is based on a case study conducted in a small firm where the BSC approach was implemented between 2008 and 2009. The case study approach allows examining, in depth, many aspects of a real situation. More specifically, it was adopted the exploratory case study, since there was little knowledge about the reality under study and because it allows to define hypotheses that could be later tested. Regarding the data collection process, analysis of documents, direct observation, semi-structured interviews and questionnaires were used.

The reminder of the paper is organised as follows. Next section presents a brief review on balanced scorecard, namely its origin, its relation to strategy, and its implementation within companies. Section 3 describes the research methodology undertaken in this study. In section 4 the case study is presented and discussed. Finally, section 5 draws the main conclusions and perspectives of future work.

2. LITERATURE REVIEW

The BSC translates mission and strategy of an organization in a comprehensive series of performance indicators that provide a framework for a strategic evaluation of the management system. Although continuing to place emphasis on the achievement of financial targets, also includes performance drivers of those financial objectives. The performance of the organization is measured by balancing four perspectives: financial, customer, internal process and learning and growth. Allows organizations to the achievement of financial results, while simultaneously evaluate and monitor progress in building skills and the acquisition of intangible assets they need for future growth (Kaplan and Norton, 1993). The BSC requires a combination of performance indicators and performance drivers, because the former without the latter do not transmit how the results can be achieved, nor provide timely information on the effectiveness of strategy implementation. In the reverse situation (where performance drivers are not related to indicators of results) the firm might achieve operational improvements in the short term, but would not be able to ascertain whether these improvements would allow reaching customers and financial objectives (Martinsons et al., 1999).

According to Davis and Albright (2004), objectives and indicators of the BSC are the result of a top-down process, starting from the mission and strategy of the business unit, both being translated into measurable objectives and indicators. These represent the "balancing" between external indicators for shareholders and customers, and internal indicators of critical business processes, innovation and growth and learning. The indicators are "balanced" between performance indicators – that are the
result of past efforts and which are objective and easily quantifiable - and indicators that induce future performance - performance drivers, which are subjective and judgmental.

As emphasised by Martinsons et al. (1999), strategy is nothing more than a set of hypotheses of cause and effect. The system must make explicit the relationships (hypotheses) among objectives (and indicators) from various perspectives, in order to be managed and validated. These relations should be reflected throughout all perspectives. Therefore, one can conclude that those cause-effect relations allow understanding that financial results are a consequence of pursuing customers objectives, which in turn depend on the internal processes that are subordinated to the learning and growth perspective. Thus, the strategy of the firm should be perceived from the firm’s BSC, in which each indicator is part of a chain of cause and effect, communicating the meaning of the strategy for the overall organization (Martinsons et al., 1999).

Overall, according to Davis and Albright (2004), the Balanced Scorecard (BSC) has emerged from the need to improve planning, monitoring and evaluation performance functions. The BSC has enjoyed great acceptance, whether in practice or in theoretical terms. However, despite numerous studies have reported their extensive use in industry, companies that have implemented are mostly large, with few studies of implementations in SMEs (Fernandes et al., 2006). As noted by Bognanno (2008), the question is not so much whether the BSC methodology is appropriate or capable of being managed in an SME as it is beneficial to any organization regardless of its size. The problem lies in believing that a system like the BSC is too complex for companies of this size and that require resources beyond their means.

Several studies indicate that the BSC has become widely used in large companies in the U.S (Chow and Haddad, 1997), specifically in 40% of companies in the Fortune 500 and 60% of the Fortune 1000 (Speckbacher et al., 2003). Cohen et al. (2008) reported that a survey conducted in Germany, the UK and Italy, showed that 98%, 83% and 72% of the companies, respectively, who responded were familiar with the concept of the BSC. In Holland, this approach is very popular (both among academics and between professionals), according to a study by Braam et al. (2007), without, however, being seen as a case of "management fashion". A study by Speckbacher et al. (2003) in European countries of Germanic language, with a response rate of 87%, concluded that 26% of companies had implemented the BSC and 13% were at an early stage of implementation. In Sweden, the data were even more impressive given that, in 1999, 28% of manufacturing firms had already implemented the BSC or other similar approaches (Dabhlilkar and Bengtsson, 2004). Across all the Nordic countries (Denmark, Finland, Norway and Sweden), Kald and Nilsson (2000) found values even more expressive for the largest companies, not particularly by the number of firms that had already adopted the BSC (27%), but by the fact that in two years range it was expected that 61% of them could be using the BSC. As these authors mention, given the few years of the methodology, represents a very rapid and effective dissemination. This reality can be explain, at least in part, according to Ax and Bjornenak (2005), by the fact that Sweden companies have implemented a modified version of BSC, developed by Olve (1997). This approach, which aims at obtaining a better control of strategic performance, resulted from the pooling of three other components (related to budget, intellectual capital and employees).
An opposite finding was obtained for French companies, where the development and spread of this methodology in business firms is relatively insignificant (Bourguignon et al., 2004). The explanation likely lies in the fact that in this country there has been developed an alternative tool – the Tableau de Bord, so it is natural to expect a low penetration rate of the BSC. Cohen et al. (2008) showed, based on data from 90 major Greek companies, that the BSC perspectives are in fact correlated, i.e. there is a sequential dependency between the different perspectives, validating the cause-effect relationships advocated since the beginning by Kaplan and Norton (1992, 1996). According to research results of Braam et al. (2007), the use of BSC as a complement to the organizational strategy positively influences competitive position and business performance. A similar result was obtained by Atkinson and Epstein (2000). After having analyzed several cases of BSC implementation in Canadian companies, concluded that the model has proved very relevant in the implementation and coordination of the strategy. Already Malmi (2001), in his study using Finnish companies, found that some employed the BSC as a mere decision-support system for managers, while others regarded it as a strategic management system.

Chow and Haddad (1997) emphasised that, although the BSC has been applied mainly in large companies, the model can be shown effective in the management of SMEs, according to their study. A similar finding was obtained in the study of Gumbus and Lussier (2006), where they concluded that SMEs can also benefit from the adoption of BSC, specifically regarding the link between strategy and operations and to continuous improvement. Similarly, Fernandes et al. (2006), noting that the implementations in companies of this size were in much smaller number and that the existence of information about these events was scarce, undertake a case study in a SME firm. They found that the SME increased its capacity to adapt and respond to its market environment, has optimized its operation, the flow of information, throughout its value chain, increased in speed, and its image to customers improved. McAdam (2000), through twenty case studies in SMEs, could demonstrate that the BSC can be regarded as way to link strategy and operational plans, providing an increase in customer satisfaction. However, alert to the fact that the model is best suited to large companies, so it has to be cautious on their suitability for SMEs, otherwise it may prove to be too bureaucratic and inflexible, which could lead to a wrong or inadequate implementation.

3. RESEARCH METHODOLOGY

In the study undertaken, the research methodology adopted was exploratory in nature and based on the case study approach. An exploratory approach usually produces conclusions and assumptions that could be tested or used in future investigations (Ryan et al., 2002). For Bonoma (1985), a case study is, generally, a “description of a management situation.” It is an approach that allows analyzing in depth several aspects of a real situation: the case study. Yin (1981) argues that the case study does not involve the use of a specific test and can be based on both the quantitative and qualitative evidence. The test (or findings) may result from fieldwork, archival documents, comments, or a combination of the three. The case study does not also require a specific methodology for collecting data. Furthermore, there is a
Given the purpose of the study and time constraints for implementation of BSC, it was decided that a small size SME would be suitable for the case study (i.e. with a small number of employees, with a slight hierarchical structure, without industrial processing, and preferably, with simplified business processes). In July 2008, after preliminary contacts, the company used for the case study was chosen. At the outset it was established that the company name as well as of the employees, would be to remain anonymous. The access either to the documentation and information that was necessary, either to all employees, would be full. Nevertheless, financial and/or accounting information would have to be kept in confidentiality.

After the selection of the company (September 2008), its organizational process, business units and departments were characterised. Afterwards, the scope of implementation of BSC was defined, in order to determine whether it was confined to single business unit or to the entire organization. It was later identified, through direct observation, the Executive Team (ET) which would be in charge both of the internal leadership of the implementation process, as well as the strategy formulation. The next task was to identify what were the procedures used to assess and monitor the strategic performance of the firm (a task that began even during the month of September, but held mainly during the months of October and November 2008). This task began with a review of internal procedures, documents and information used in the evaluation of strategic performance. From the documents reviewed/analysed, should be highlighted the Management Manual (MM), prepared under the accreditation process of the company’s Integrated System of Quality and Environmental Management (ISQEM). Noteworthy was also the consultation of Management Reports, Year-end Accounts, Models, Procedures and Work Instructions.

In November, two types of interviews (both individual and semi-structured) were made. One was conducted with each member of the ET and another with each of the Directors. From the information obtained was possible to gauge the quality and usefulness of the data being collected and whether there was any feedback from employees/staff throughout the process. It should be stressed that none of the interviews was recorded given the requisite of confidentiality demanded by the company. To measure in what extent the company’s strategy was communicated and understood by the remaining levels of the organization an anonymous questionnaire was conducted, later that month, to each of the remaining employees. From this point onwards, the direct observation methodology was followed.

In this research project, the main purpose was the understanding of the use of BSC in small firms. It was an exploratory study with interesting findings which permit the formulation of hypothesis to be tested in future research. Next section presents and discusses the results of the case study.

4. CASE STUDY

4.1 The company
The OilPurification firm was founded in 1982. Nowadays, only one of the initial partners remains in the company. He is the operations manager. The company's main activity is to provide services of oil purification and oil recovery in industrial plants. Since 2002, the company is also the official representative of a high quality international brand of silica gel for transformers, rectifiers, hydraulics systems, injection molding machines, etc. The company intends to be a national leader in the purification and recovery of industrial oils. The process of purification and recovery of industrial oils which represents the core business of this company can be presented in eight or nine steps according to the type of oils (lubricating or insulating). The production process is very linear, i.e. it follows a set of eight well-defined operations according to a predetermined order. In the case of lubricating oils, there is an additional operation (centrifugation/separation) after the three initial operations, followed by the remaining five operations which are applied in the purification and recovery of insulating oils. After the purification and the recovery of the oil, the residues generated are separated and placed in containers in the client’s industrial plan and the place is cleaned. At the end of each service a note of service is provided in which may be registered process parameters, or even a detailed report. The machines used in this process were completely designed and built by the OilPurification company. All the equipment is transported to the industrial plant where the operations are performed.

The oils purified and recovered are from different types and have various applications including lubricants, hydraulic turbines, compressors, gears, etc. The OilPurification company has clients in various industries including, paper and printing industry, electronic industry, industry of wood and cork, metals and metallurgy, chemical industry, textile and garment industry, transportation industry, etc. Additionally, the company performs other complementary services to the process of purification and recovery of industrial oils. For instance, the maintenance of transformers and replacement of oils are complementary services to the core business of the company. The analysis and laboratory tests and the sales of silica gel sealed filters are integrated into a different business unit. In the latter case, the business process is different and clients are generally different from those clients associated with the main service offered by the company. However, this business only represents around 5% of the company's turnover.

This small company has only 10 employees but has a complete and well defined functional structure. Some employees have responsibilities in more than one function and they are distributed as follows: top management (1 person), financial and administrative function (2 collaborators), engineering (1), operations (5) marketing (1), environment, quality and safety (1). In this firm, only 20% have a university degree and only one is post-graduated.

4.2 Previously to the implementation of BSC

Since January 2004 the company has in place an integrated environmental and quality management system (EQMS) accredited standards NP EN ISO 14001 NP EN ISO 9001:2000. In this context, a Management Manual (MM) was produced with the goal of supporting all business processes and to define the operating principles of the EQMS. This Management Manual results from a clear desire of the
administration to define not just an environmental and quality policy but a complete management policy to the extent that they are covered aspects related with the environment, quality, safety and strategy. In fact, due to the relevance of the strategic perspective for the EQMS was changed to “IMS”: Integrated Management System. But even after this change, in practice, the management system continues to have a little strategic emphasis and the attention continued to be placed on environmental and quality management. The concern focuses on the definition and monitoring of indicators of environmental and quality management. In practice, only an annual report on the evolution of the indicators of environmental and quality management was regularly produced by the firm.

Thus, during this period, the firm was not monitoring and assessing the evaluation of its strategic performance. Although the company has established a management policy which includes vision, culture and business strategy, there were no actions and initiatives arising from it. The initiatives undertaken only have had an operational nature, with any concern with the implementation and evaluation of the form’s strategy.

The Executive Team did not include strategic issues on the agenda of its regular meetings. These meetings were very frequent but quite informal and not governed by any strategic model, document or procedure of the company. These meetings were essentially operational in nature, in which it could be addressed issues related to strategy and medium term objectives. However, never one of them resulted from the implementation plan and any of them were communicated and translated in objective goals. Informally and generally, managers agreed on the decisions related with the company. However, for most other employees, the strategy was not even in his vocabulary, as it was demonstrated by the results of a simple questionnaire undertaken during this research project. Table 1 shows some of the results obtained when collaborators were asked about the firm’s strategy.

<table>
<thead>
<tr>
<th>Question</th>
<th>No</th>
<th>Yes</th>
<th>No answer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Do you know the fundamentals of firm’s strategy?</td>
<td>4</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Do you follow the assessment of the firm’s strategy?</td>
<td>5</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Do you know how much you contribute to the firm’s strategy?</td>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Do you consider important the long range planning?</td>
<td>0</td>
<td>5</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 1: Partial results of the questionnaire on the perception of the firm’s strategy

Thus, in this company, before the implementation of the BSC, the strategy was not clearly defined, it was not truly monitored, completely assessed neither correctly communicated.

4.3 The implementation of the BSC
In December 2008, a report with an analysis carried out so far and a proposal for BSC implementation was presented to the ET. Later in December, and since the strategy was clearly defined, it was translated into a Strategy Map (SM), where strategic objectives for each of the BSC perspectives (financial, customers, internal process and learning and growth). After validation by the ET of the previous step, strategic issues (themes) were defined and a SM for each of them was built. At this stage, given the greater detail and specificity of the work the feedback of ET was very important. Based on these SM, there was the need to define indicators and targets that would translate the strategic objectives. Given the nature of this task, besides the ET, the remaining managers of the company were invited to cooperate, having been duly informed and integrated into the ongoing process.

After this step, a plan of action was designed, which contained the strategic initiatives that would facilitate achieving the goals set earlier. Accompanying this plan of action was a strategic budget which identified the monetary resources that would support the initiatives. It was, also, identified a responsible for the implementation and execution of each initiative. At this stage, there was the need to carry out the alignment of all employees with the strategy, which implied to define the necessary skills and to assess whether they exist in the company. Furthermore, it was also essential that employees understood the strategy and stay motivated to achieve it. In the next stage, the strategy was implemented. Therefore, it was necessary to link strategy to operations, which implied that BSC indicators and targets were translated into an operating plan. Finally, with the implementation of strategic and operational plans, follow-up meetings of strategic performance were scheduled, which would allow monitoring of results. Furthermore, operational monitoring meetings were formally established. In January 2009, the implementation of the Strategic Management System based on the BSC was put into action. From January until September, the monitoring of results was made through direct observation (of the ET, managers and other employees) and document analysis.

The implementation of a Strategic Management System based on the BSC covered the main business unit, i.e. the services of oil purification and recovery. Firstly, it was followed an approach accordingly with the Management Manual which permits to set out the firm in terms of its Mission, Values, Vision and Strategy. The implementation of the strategy was made through the development of "Strategy Maps", followed by BSCs and respective Action Plans accordingly each strategic theme. They were considered two strategies for creating value for the company: a productivity strategy and a growth strategy. The productivity strategy is mainly about reducing the cost of the service and the best use of resources. On the other hand, the growth strategy is supported in preserving firm’s value with the service provided to existing clients and adding value through new clients. Figure 1 shows the company’s Strategy Map in its four perspectives: Financial, Customer, Internal Processes, and Growth and Learning.
Then, four strategic themes were defined for which objectives would be identified in order to develop a specific strategic BSC. The strategic themes chosen were: operations management, customer management, innovation, environment and community. Thus, the strategic objectives were translated into strategic indicators for assessing the implementation of the strategy. In this model, it was obtained an alignment between the Strategy Map and the different BSCs four each strategic themes. Apart from the strategic indicators, each BSC had also the goals and action plans necessary for the execution of each strategic objective. For example, the strategic indicator "unit cost of service" had the goal: "decrease of 10%." A complete alignment between the SM, BSCs and the Plans of Action for each the strategic theme was achieved.

4.4 Discussion of results

The first result obtained with the implementation of BSCs in this company was the clarification of the company’s strategy. On the other hand, they were made significant improvements at the level of strategic planning. As a result of the translation of strategic goals into a Strategic Map, it was possible to delineate a true strategic planning, accomplished through an action plan with appropriate initiatives which will permit to achieve the firm’s strategic objectives. By formalizing a strategic plan, it was possible to seize the responsibilities of each collaborator in the company, once again giving priority to communication and feedback. For the operational review meetings, unlike what happened earlier, they took a matter of form, both in terms of achievement, both in terms of documentation produced.
order to assess the strategic indicators and monitor the strategic initiatives contained in BSC and action plans, it was established to carry out a strategic review meeting monthly, involving those responsible for each initiative in conjunction with the ET.

The Strategic Management System was divided into six stages. In the first stage, the strategy itself is properly developed. In the second stage, the strategy is translated into a Strategy Map. In the third stage, the organization is aligned in terms of business units. The fourth step is based on the planning of the operations, linking them with the strategy. The fifth and sixth stages focus on monitoring and adapting the operational and strategic plan. The last step, which is held annually, is to review and adapt the strategy. If necessary, a new strategy is stated.

Thus, this case study showed that in small firms the use of BSCs permits to communicate better the firm’s strategy amongst collaborators and, on the other hand, that it turn the firm more able to align operations management with their strategy.

Mooraj et al. (1999) reported that the BSC rather than a system for assessing tactical or operational decisions, has been used by companies as a strategic management system, given that it allows to manage the strategy in the long term as well as critical management processes, such as: clarifying and translating vision and strategy; communicating and linking strategic objectives and indicators; planning, goal setting and alignment of strategic initiatives; and maximizing the strategic feedback and learning.

This same idea is advocated by Kaplan and Norton (2008), in defining the process that should be triggered for a company to implement a strategic management system based on BSC. In fact, the BSC is more than a set of critical indicators or key success factors, resulting in a series of targets and indicators related and consistent. Thus, Kaplan and Norton (1996) mentioned that become extremely important the cause-effect relationships between critical variables, including indicators of results, performance drivers and the feedback loops, which describe the trajectory of strategy.

5. CONCLUSIONS

The Balanced Scorecard (BSC) is an approach promoted by academics and consultants and implemented in large companies since the early 1990s. It permits to translate firm’s operational and strategic complexity into manageable financial and nonfinancial indicators and to communicate goals, results and strategy amongst a large number of collaborators and hierarchical levels (Kaplan and Norton, 1996, Bible et al., 2006). The origin of the Balanced Scorecard (BSC) dates back to the early 1990s, when the Nolan Norton Institute sponsored a yearlong study to be conducted in a number of companies, with the title "measuring performance in the organization of the future". The need for such a study was due to the belief that existing approaches to performance evaluation, primarily based on financial accounting, had become obsolete (Kaplan and Norton, 1996, Bible et al., 2006).

The case of the implementation of the BSC in this case, the OilPurification company, a small firm, contributes to the understanding of BSC in practice. The implementation of BSCs enhanced the firm
communication of its strategy amongst all collaborators. Furthermore, managers of OilPurification were more able to align the management of their operations with the firm’s strategy. The Balanced Scorecard has been mainly implemented in large companies since the early 1990s translating the firm’s operational and strategic complexity into manageable financial and nonfinancial indicators. Small firms have not such complexity and just have reduced number of collaborators. Reasons and implications of the implementation of BSC in small firms could be different. Further work with additional case studies and survey approaches should be made in order to test, complement and extend the findings achieved in this case study.

6. BIBLIOGRAPHY


CHOW, Chee W. e HADDAD, Kamal M. (1997) – Applying the Balanced Scorecard to small companies. – Management Accounting, Vol. 79, n.º 2, pp. 21-27.


