Abstract

In this article, we will make an inventory of significant research on the Balanced Scorecard. We note that, twenty years after its conception by Kaplan and Norton, this model of performance measurement operationalized as a tool of control is still a matter of controversy and raises many questions in academic research.

Keywords: Performance, Balanced Scorecard, management control

1. Introduction

The Balanced Scorecard is an emerged in the early 1990s in the writings of Kaplan and Norton instrument. The originality of the Balanced Scorecard reflects two major principles: the multidimensional nature of the performance, as measured by a set of indicators grouped into four perspectives and the existence of an underlying model linking these indicators them (Ponssard Saulpic and 2000). The aim was to address the lack of relevance of management control tools found by Johnson and Kaplan (1987).

The Balanced Scorecard has the advantage, compared to other performance assessment models mentioned above, to be a management tool used by more and more companies and studied by a wealth of scientific and professional literature and varied.

We present in this section, methods of structuring the Balanced Scorecard and the problems of its design and its implementation in the light of the literature of the past twenty years.

2. Presentation of the structure of the Balanced Scorecard

The Balanced Scorecard is presented as a strategic management tool. It should allow, first, to articulate local action and the goals of the company. It must then be the meeting point of control processes: the breakdown of objectives, communication, operational planning and feedback (Meric, 2003).

To this end, the scorecard should contain measures impact on performance and the factors underlying these impacts, linked together by relations of cause and effect (Kaplan and Norton, 2001a). This leads to the definition of a set of financial and non-financial indicators directly linked to the business strategy. These indicators are grouped around four predetermined areas: financial, customer, internal process and organizational learning & innovation. Strategic management and operational management are embedded in the different axes, with a link between strategic indicators and historical indicators (Kaplan and Norton, 1992, 1996). These
indicators are chosen according to a vision of the organization as a process, and thus are bound by a chain of causation.

Thus, building performance indicators on each of the four dimensions of the Balanced Scorecard, based on the business strategy should enable it to be guided to achieve the desired performance. Thus Kaplan and Norton (1996) put the Balanced Scorecard into the heart of "strategic management system" as a materialization of the evolution of "an improved measurement system to a core management system" in the aim to be the coordinator of the strategic alignment of business units. Later, the authors state that the "Strategic Linkage Model" which represents the causal links between strategic objectives, is one of the foundations of the conceptual mechanism of the Balanced Scorecard.

Figure 1: The Balanced Scorecard of Kaplan and Norton (1992)

At first, the four dimensions of the Balanced Scorecard are as follows: The axis innovation and organizational learning focuses on internal capacity and skills in order to align with the strategy of the organization. This is the perspective that seeks to identify the determinants of growth and progress of the company in the long term. Through selected indicators, the leader must be able to monitor the skills of its employees as well as the progress made in the field of information systems and procedures. Identifying gaps between current capabilities and desired skills and those will take action to correct these deviations (Morraj and al., 1999).

Atkinson and al (1997), argued that the company should be able to increase employee satisfaction, which would lead him to improved performance on the primary objective. She also joined a perspective contained in the model of Morin and al. (1994), which discusses the value of human resources in terms of climate labor mobilization, efficiency and competence of staff.

Moreover, the concept of organizational learning plays a fundamental role in any process of co-construction and ownership of the goals and objectives of the Strategy. Bessire et al. (2000) note that the ownership of a purpose turns out to be a slow, difficult and still uncertain process, then it is a cornerstone of control of the organization. This indicates the importance of the role that management tools are expected to play.

The internal business process involves both the degree of control of production processes, potential changes in these processes and the quality of after-sales service. These Mendoza and
Zrihen (1999) identify critical internal processes that must control the organization, that is to say, the process having the greatest impact on customer satisfaction and compliance objectives financiers. This amounts according to Gumbus and Johnson (2003) to meet four objectives: to deliver new products, delivering what we say and when we say, identify new opportunities in products and processes and finally reduce our costs. Kaplan and Norton (1992) note that increased competition requires companies to favor a process of continuous improvement of existing products and have the ability to introduce new products to meet demand. The client axis reflects the concern of managers as to the attractiveness of their business and its ability to retain its customers. Indeed, Kaplan and Norton (1992) state that the Balanced Scorecard application that leaders express their strategy customer a number of specific measures. The construction of the Balanced Scorecard should also lead the manager to question the couples market where customer's business grows. Indeed, it is interesting for the company to develop other measures relating to the evolution of the market share, the proportion of new customers, or profitability by segment (Mendoza and Zrihen, 1999).

Finally, the financial center is one that is at the heart of the device. The creation of shareholder value must be a constant concern. Because if the chain of underlying value, which consists of key factors of success ordered according to a specific logic, is supposed to reflect the specifics of the company, its structure and its men, it has top indicators of financial performance. The Balanced Scorecard is based in fact on a classic design value chain whose central element is a good material production must satisfy the customer and ultimately shareholder, thanks to income generated. It is an instrument specifically designed with reference to the objective of maximizing value for shareholders. To Kaplan and Norton, financial performance is what determines its survival. Which may limit the worn other three dimensions, which are perceived only as a means to financial recovery look.

Van Caillie (1999) considers that the financial center is the origin and the conclusion of the consistency of the Balanced Scorecard in its purpose modeling performance measurement. It is causing it represents the vision of the performance. What shareholders (stakeholders must the company), and the mission and general long-term goals they assign him. To this end, indicators of financial performance tasks will include helping the organization to survive, succeed, and prosper. It should be noted that all actions and strategic or operational decisions that mark the life of the company result in monetary and financial terms after a certain time. Reflecting the impact of decisions taken in the past, this perspective "finance" is invested with a special mission: to enable to reconcile as well and as quickly as possible once the company and its future, with two consequences:

- performance indicators included in this perspective should allow simultaneously closely reflect the mission and goals of the company;
- Integrated information in these performance indicators should be as reliable and as recent as possible.

Lorino (2001) explains that if Kaplan and Norton conduct a proper conclusion (of course it can happen that actions oriented towards quality, innovation and customer satisfaction, result in economic failure for the company), they draw erroneous conclusions. Indeed, he finds that such failures are not due to lack of financial goals, but simply unfortunate strategic choices. He also questions how to individualize the effects of a financial operating performance results when causal relationships are complex and involve a large number of related factors.
The Balanced Scorecard also relies on a traditional static sense of the strategy based on the rule of an external analysis (opportunities / threats), then coupled to an internal analysis (strengths / weaknesses) (Wegmann, 1999). This justifies the coupling of strategic indicators (that is to say, a priori indicators that reflect the strategy deployed by officers) and outcome indicators (or indicator post, which measure the performance of the company). But that does not mean that the Balanced Scorecard is a static or universal model. Rather, these dimensions form a backdrop or a general framework that allows us to understand the performance indicators of the business system in a context of increasingly competitive where performance is no longer expressed only in terms of financial performance (Bergeron, 2002). Thus, the model does not specify the indicators that should be found in each of the four axes as these will vary from one company to another. Every business, every organization will develop indicators that will be based on specific goals and strategies that are specific to it, and given the various characteristics of its environment. Kaplan and Norton suggest, however, elements of various content areas to assist in the design of the model.

With regard to its formulation, the Balanced Scorecard should appear on a single document summarizing the series of indicators to shape the global vision of business performance, and closely connected to the enterprise information system (Epstein and Manzoni, 1998). It may nevertheless be built cascaded throughout the organization like the conventional instrument panels. Two logics are then taken: consider the Balanced Scorecard possible specific objectives to operational units of the organization and align these goals to the overall business strategy. In the synthesis phase, the Balanced Scorecard provides a framework to visualize the strategy like a card. The Balanced Scorecard is presented as an integrated product that aims to facilitate communication, understanding, and therefore the use of measures at any level whatsoever in the organization (Meric, 2003).

The limited number of indicators that make up the tool is supposed to avoid information overload which may hide vital information. Thus, Kaplan and Norton (1996) suggest a maximum of twenty indicators in the composition of the management tool, which joined the recommendations of Atkinson and Epstein (2000) and Lorino (2003) on the need a limited number of indicators. But this information’s issue overload that joined the inadequacy of essential flight information of the organization. Indeed, Oriot and Misiaszeck (2001) warn against the risk of the tool lose its relevance due to its limited membership face a business environment more complex. Instead, Amans (2004) suggests that the degree of simplicity of control systems in terms of number and synthetic character must be proportional to the complexity of organizations.

Once the Balanced Scorecard built, will it always consists of the same indicators, regardless of the position of the company? Or will it adapt to changes in the situation of the organization? A first answer is given by Oyon and Mooraj (1998) under which the Balanced Scorecard is a system that will live and who must change in response to changes in the business and its environment. This joined about Kaplan and Norton (2001), who emphasize the need to continually renew indicators Balanced Scorecard. For Lorino (2003), "strategic contingency of the control system requires it to be scalable and it adapts to changes in strategy." Bessire et al. (2000) note that the main contribution of this tool lies in its ability to stimulate organizational learning, particularly through its role in the processes of ownership of the strategy by the stakeholders of the company. Thus Choffel and Meysonnier (2005) propose the idea that companies have developed a complex strategy to fit their turbulent
environment and have a control system that models the learning process are led to adopt flexibility indicators.

3. Issues relating to the design and implementation of the Balanced Scorecard

According to Kaplan and Norton (2001a): only 5% of the operational elements of a business know or understand the business strategy; only 25% of managers feel motivation to implement their business strategy; 60% of companies do not bind their strategy and budget; and 85% of board members spend less than one hour per month to discuss the strategy of the company. This has led to questions about the articulation of the Balanced Scorecard with the strategy, in time, through the study of the role of the tool in the development of the strategy, and in space, student the role of the tool in strategic animation. Mouritsen et al. (2002) noted that the primary objective of the Balanced Scorecard would succeed strategic alignment. Kaplan and Norton (1996) already emphasized, indeed, the necessity of the presence of a well formulated for the launch of Balanced Scorecard assuming that the conditions of success of a company resident in "ability to execute strategy". They confirm their position in their second book in 2001, stating that "the Balanced Scorecard is, strictly speaking, a policy enforcement tool." Its design and implementation are from a given in advance that will bring the best strategy. This approach to implementation of the Balanced Scorecard intervenes in a deterministic and formalized process (Choffel and Meysonnier, 2005), which positions the tool downstream of the design strategy.

Other authors have studied the role of the Balanced Scorecard in the development of the strategy, promoting its interactive operation in the emergence of a new strategy (Mooraj et al.1999; Chabin et al. 2003). Regarding deployment of Balanced Scorecard in space, that is to say, the organizational dimension of the tool, Kaplan and Norton (1996) emphasize its role in aligning operational behavior on strategic objectives by mechanical and down logic. For these authors, the definition of the strategy is the prerogative of management of the company as well as the definition of the object indicators. The process of deploying the strategy defined must follow a logical top-down to different levels of the organization, with the support of substantial communicative media. It is then that each business unit is set within this context its own strategy. Bourguignon et al. (2002) criticize this approach, noting that the deployment is a process both heuristic and participatory. These authors note that there can be no single model of dashboard in the business since the explanation of the strategy results from the interaction between the different actors. The vision of Anglo-Saxon authors seems, indeed, too prescriptive for Wegmann (2000, 2001) in view of the mechanics and top-down design strategy. Mendoza Zrihen (1999) also point out that the assumption that the strategy of the organization would be perfectly known and explained by the leaders, assumed a normative vision of the strategy, which would develop from a diagnostic and rational approach, which suffers from its theoretical and simplistic nature. Thus, for these authors, far from being a linear representation, strategy in business is the result of an incremental and collective construction. All these difficulties may have adverse effects on the understanding and ownership of the scorecard by different stakeholders of the organization, although a good communication strategy is implemented to support its implementation as suggested by Kaplan and Norton (1996).
Starting from the assertion of Kaplan and Norton (1996) that "each measure selected for the Balanced Scorecard should be an element of a value chain of cause and effect expressing the strategic direction of the company," Saulpic (2003) explains that there is an underlying contradiction to the purposes of the Balanced Scorecard. This tool is intended to model the key factors of success (that is to say, the relations of cause and effect, the coordination of representations and learning) but also to deploy the strategy (that is to say, strategic alignment and accountability of actors), which is not easy. This leads us to ask, like Choffel and Meysonnier (2005), the temporal and spatial dimension of the joint with the Balanced Scorecard strategy: is it a strategic alignment tool in a process of accountability and incentives? Is there a tool for modeling the process of creating business value in a logical learning and coordination? Or is it both at once, that is to say, combining both forward and backward logic? These questions are not the only ones that are needed at this level. Indeed, instead of the Balanced Scorecard in the devices business management and the relationship he should have with the remuneration of managers are also issues that are debated in the literature. For both Kaplan and Norton (2001) than for others (Epstein and Manzoni, 1997; Fernandez, 2003) Balanced Scorecard must be a central tool of the control device.

Other authors support the contrary view that the Balanced Scorecard should be one tool among others because it is not comprehensive enough. Meric (2003), for example, argues that it is absurd to let the Balanced Scorecard phagocyte managerial "innovations" to it earlier. Mendoza Zrihen (1999) ensure that reporting cannot be replaced by the Balanced Scorecard. Zécri (2000) argues, conversely, that it is not feasible to run a business without budgets. For Meric (2003), the Balanced Scorecard should be considered as a complementary tool to other methods or approaches calculations as Activity Based Costing (ABC) or Economic Value Added (EVA) to take full advantage of complementarities between methods. Berland et al. (2005) also perceive the Balanced Scorecard as complementary methods such as EVA in a control device combining interactive and diagnostic procedures within the meaning of Simons (1995). Regarding the logic of accountability contained in the Balanced Scorecard through coupling compensation systems with performance indicators, there are again two opposing visions.

According to Bescos (2001), to encourage managers and staff to work in the direction of the strategy, it is common for systems sanction-reward introduce a variable part in pay which would be based on objective and verifiable criteria and rewards decisions that have clearly positive effects on financial and strategic variables. Arise here issues related to link the remuneration policy with monitoring tools including the Balanced Scorecard (Bourguignon and al, 2002. Choffel and Meysonnier, 2005), and the relevance of collective or individual assessment on objective (relative to external standards) or rather subjective criteria (relating to qualitative criteria assessing more or less the judgment of a supervisor depends) (Berland and al. 2005).

To answer the first question, Kaplan and Norton (2001) cite the findings of a study by Mercer compensation practices announcing that 88% of 214 companies considered deemed effective liaison indicators Balanced Scorecard systems rewards. Grapnel and Josserand (2003) argue that the Balanced Scorecard is often used as tools to control, with frequent corollary a direct impact on earnings. This impact may be collective, in the case of Balanced Scorecard overall, and used, for example the determination of the profit on the basis of collective performance indicators. But relating to Bescos (2001) explains that there are a variety of tools that can play this role in encouraging managers to achieve the objectives. This makes the choice of a complex tool.
One of the other benefits of having the binding of compensation Balanced Scorecard is, in fact, to ensure the consistency of short-term objectives with long-term ones, that is to say, to ensure consistent financial performance with the strategy of the organization.

In contrast, Ittner and al. (2003) demonstrate the Balanced Scorecard suffers from a high level of subjectivity that has led companies to seek objectivity turning to incentive systems linked almost exclusively to financial indicators. Indeed, these indicators appear more objective to everyone because they are based on standardized systems widely accepted. Morisawa and Kurosaki (2003) speak about them in a vicious circle in which the non-financial indicators are left with a feeling of lack of reliability and trouble obtaining. The facility is then to continue to measure the performance of financial indicators. The authors believe that the weight of financial data in the measurement of organizational performance through the Balanced Scorecard is extremely important. 60-70% of the indicators used in business and fall into this category. If financial data is satisfactory, then the strategy and internal processes are not questioned, indicating the supremacy of the financial dimension. But entering the vicious circle occurs when financial data are not satisfactory.

Other authors as Gauzent (2000) argue that it is only in case of unavailability of factors recognized as objectives, in particular due to impossibility or high cost of identification, the use of physical indicators, less objective will be appropriate.

In the specific case of middle management, researchers Decoene and Bruggeman (2003) highlights the minimal effects on the motivation of the link between pay and the Balanced Scorecard.

Many researchers, Lipe and Salterio (2000) and Banker and al. (2004) show that employee evaluations are based primarily on collective action rather than individual measures. This is consistent with recommendations for the Balanced Scorecard of Kaplan and Norton (2001) according to which an individual compensation could affect the cooperative spirit teams, even if they provided previously (Kaplan and Norton, 1996) that it would be personal talents, and to improve alignment and accountability. Awards team have the advantage of stimulating cooperative behaviour and seeking resolution of collective problems (Drake et al., 1999). They encourage employees to think about solutions to the problems identified without their necessarily within their daily responsibilities. But this logic of collective responsibility may dilute individual responsibility in showing opportunistic behaviour of individuals acting as a stowaway.

Furthermore, the controllability principle, according to which leaders must be assessed solely by reference to the results under their control (Atkinson and al, 1997; Giraud and al, 2004).

Indeed, it must accurately evaluate the decisions and actions of managers and reduce the risk of demotivation.

This principle is, however, challenged by several studies based on the postulates of the theory of agency. Indeed, the work under this theory seem to converge towards the need to use tools that offer the possibility of evaluating the performance from financial and non-financial, long-term and short-term, such as the Balanced Scorecard (Choffel and Meysonnier, 2005). Thus, the research of Smith (2002), for example, show that overall indicators are most relevant for assessing leaders, even if all their dimensions are not controllable. These indicators will include limiting the asymmetry of information; provide solutions to problems of coordination and excessive consumption of resources and to cope with opportunistic behaviour. For Oyon and Morraj (1998), cause and effect that the Balanced Scorecard will highlight are likely to resolve coordination problems, which will eliminate opportunistic behaviour.
In contrast, proponents of controllability are more likely to use a standard tool of organizational control systems such as the budget. The latter is a single document that includes a significant number of key figures in the organization of synthetic manner in which performance is often defined through profitability. It is thus able to combine in each profit center measures output (income) with an input measure (cost), trying to define the appropriate level of spending based on a level of sales or income. Otley (1999) emphasizes that the main limitation of the budget comes from underpinned logic. The influence of this system for measuring the performance was, in fact, often at the will of the actors of the company to satisfy their superiors to be rewarded. The purpose of this tool is a measure of the activity of the organization on the basis of a set of financial documents that are supposed to understand their current impact. To represent the limits of the budget, the author uses the metaphor of a vehicle that is driven only by looking at the mirror.

This approach posteriori often has the effect of increasing user dissatisfaction of this type of performance monitoring, since changes in the organizational environment are that the budget is passed quickly in view of the frequency of realization. On the other hand, focusing the budget on the financial results does not capture the ways in which these results are achieved. It does not connect enough indicators to control the strategy of the organization, taking into consideration the value chain of the organization, and change is often incremental process of budget formation. Note that a study of Giraud and al. (2004) on the position of managers facing the controllability principle, in terms of impact on profitability, concludes that neither position is perceived as superior.

With regard to external variables that would influence the content control devices, many studies (Ouchi, 1979; Merchant, 1984; Fisher, 1998; Etc.) have shown that models of management control systems are influenced by a number of contingency factors. Various studies have shown the uncertainty of the environment as a contingent variable, decisive in choosing a management tool (eg, Fisher, 1998). Thus, Gordon and Narayanan (1984) argue that the perception of an uncertain environment fosters the development of organic forms of structure marked by the desire to capture the maximum amount of non-financial information collected to outside organizations.

Bescos and al. (2003) question the use of budgets as a means of implementing strategic objectives in turbulent environments. It is the same for Gignon - Marconnet (2003) that environmental uncertainty could be fertile ground for a very tight fiscal management, or Berland (1999) notes the high level of difficulty when it comes set based on reliable information while the organizational environment is uncertain budgets.

Finally, Gul (1991) the use of more sophisticated systems management control budgets would be the way to improve performance in an uncertain environment.

Instead, work, such as Hopwood (1974), lead to conclusions rather advocate the use of budgets in an uncertain environment. Indeed, the author argues that it is not in a stable environment that companies feel the need to establish a budget - which would be a relatively easy exercise - but in complex and uncertain environment. The results of the empirical research, Ezzamel (1990) actually goes in this direction. Research such as Atkinson et al. (1997) or Oyon and Mooraj (1998) concluded, in effect, that the Balanced Scorecard excludes the external environment as an important dimension having an impact on business performance. To overcome this drawback, some companies set up a fifth axis 'environment'. But this issue is not resolved, however, and deserves to be explored in our research model.
Moreover, according to Merchant (1984), organizations with products mainly in onset phase tend to use less traditional financial control tools, such as budgets and are more willing to turn to tools with non-financial indicators, taking into account future performance. Hoque and James (2000) also showed that organizations with in-phase onset were more likely to use tools such as the Balanced Scorecard. Conversely, organizations with products that are predominantly phase of maturity and decline use more management tools using only financial indicators to monitor cash flow (when it comes to "milking the cow’s milk products").

Technology is another factor that can influence the configuration of a control system (Chiapello and Delmond, 1994; Edwards, 2001; Choffel and Meysonnier, 2005). Thus, the company will have a great need for information to fully repudiate its strategy and will therefore need to see make a change in mentality, a change that could be based on an evolution of information systems (Chiapello and Delmond, 1994). Edwards (2001) indicates that companies that implement a tool such as the Balanced Scorecard are also often those who use IT tools type integrated Enterprise Information System (EIS) or Enterprise Resource Planning (ERP), because it allows them to have real-time information about their individual indicators.

On the size of the company and the use of the Balanced Scorecard, some authors (Ahsina 2012) argue that the complexity of management systems is positively correlated with firm size. For example, Hoque and James (2000) demonstrated that larger companies are those that have established systems for measuring the performance close to the Balanced Scorecard. To Germain (2003), the larger the company, the greater the use of non-financial indicators would be massive control. These authors go in a different direction classic work of Lawrence and Lorsch (1967) recognize that the size effect on the choice of management control, and conclude that firm size is positively correlated with the presence of administrative management systems (such as budgets, for example).

Finally, the form of power that we are not going too deeply in our research also has an effect on the choice of a management tool. Indeed, for Reimann (1973) or Holdaway et al. (1975) formalization and centralization of control increase in external control. For Epstein and Manzoni (1998), the intrinsic characteristics of the Balanced Scorecard make it a better tool than the conventional instrument panels for organizations to system simple and centralized authority. Its purpose and its strategic deployment policy less design make it a better tool.

4. Conclusion

This overview of the literature dealing with Balanced Scorecard and issues driving organizations, we selected two questions that deserve to be explored. First is the question of the articulation with the Balanced Scorecard strategy. It is whether this tool is intended to model the key success factors or to deploy the policy or both at once? Then, as regards the incentive schemes for employees, are they related to control systems such as the Balanced Scorecard? Are they interested in individual or collective assessment?

Recent studies provide some answers to these questions. Indeed, a study that focused on the idea that the control devices that contain the Balanced Scorecard seek to promote more interactive exchange on the strategy reveal a non-significant relationship (Errami, 2012). This could mean that in the absence of the Balanced Scorecard other tools are vested in this interactive use. This confirms both the About Simons (1995) according to which, the same tool can be used interactively or diagnosis and illustration of the remarks made by Sponem (2004) on the budgets.
This rejection could have a heavier feel if one refers to the work of Tumola (2005). The experiment conducted by the author shows that the use of the Balanced Scorecard is an ongoing process consists of different phases. The tool will be used in a different way depending on the duration of its implementation.

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