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CONTENTS

THE BALANCED SCORECARD OPERATING AS A RISK MANAGEMENT TOOL

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Abstract: *Balanced Scorecard (BSC) and Enterprise Risk Management (ERM) are useful concepts to the management that pursues methodical business awareness and pays attention to uncertainty and its risks. Very little research has examined the BSC usefulness as an ERM framework. This paper aims to contribute to the debate related to risk management concepts that may be found in the BSC method. Classifying different areas of uncertainty and establishing a hierarchy of risks, the Balanced Scorecard identifies the most important aspects for management concern. It is recognized that BSC's risk management thinking involves some operational difficulties (mainly linked to information collecting, processing and analysis) that make construction of realistic strategic maps a hard process. However, research literature supports our main assumption that the BSC is a good path of approaching a committed and realistic risk management. The paper is considered an innovative framework to understand and design research on BSC.*

Key words: *balanced scorecard; management control; risk management; strategic management*

JEL Classification: *M49*

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1. Introdution

Managers are nowadays as concerned with information on performance and growth as on uncertainties and risks (IBM BCS, 2005). However, recent studies have indicated a lack of confidence in organizations' ability to assess and manage their risks (Protiviti Inc., 2005).

Thus, the "risk managers specialists" (Mikes, 2009), also known as "uncertainty experts" (Arena *et al.*, 2010) assume a growingly crucial role. Among them we find the management accountant, essential to the consciousness of performance variations. He has been encouraged by its own professional associations (Pollara, 2008) to play an increasingly active role in risk management, incorporating it in performance management. However there is no structure that integrates the management of operational risk with corporate strategies; and that presents a systematic approach to the identification, evaluation, planning and control of risks (Wang *et al.*, 2010).

It is important to induct management techniques that introduce risk management to the routines of the organizations. The BSC can be the way to start it. The adaptability and internal control that the BSC implies enables it to be a development base for a management aware, capable and prone to accept business uncertainty.

This paper takes on two distinct concepts, BSC and ERM, having as subject the way the first can improve the risk management, trying a creative approach of the BSC considering its theoretical premises. We analyse the BSC as a management control framework and propose it as a tool for business risk awareness. We see that the main assumptions for enterprise risk management (ERM) are common to the BSC`s assumptions. Accordingly, the BSC may be a congenial way to incorporate risk management in the organization's management order. This will involve difficulties associated with the design of a strategic map, to the lack of risk management techniques and to the information overload and treatment. Yet we consider the BSC as a good opportunity to integrate risk management in an organization.

This paper is organized as follows. The first section analyzes the BSC concept. The second section, considering the BSC as a risk management integrating tool, addresses a critical analysis of that function and highlights some of its difficulties. The third section covers the presentation of our study's conclusions.

2. The balanced scorecard

The BSC is an organizational management theory (Kaplan and Norton, 2001) based on five pillars: appointment of the fundamental perspectives of analysis in an organization; consideration of how these perspectives, and their constituents, are related - outlined in a strategic map; sense of continuity; valuation of intangible assets, enhancing the learning ability (Kaplan and Norton, 1996); and alignment of the various organizational interests.

Any business management develops a financial perspective (survival is based on financial aspects), always the result of how the company is organized and works. This organization and work is observed under three other perspectives: customer, internal processes, ability to learn and grow. With these four perspectives the entire organizational activity spectrum is covered. For each of the perspectives are selected performances monitoring points. Management looks for the company's critical competitiveness factors: those which seem decisive to achieve its strategic interests. These factors, named as performance or success indicators, are related to others – lead factors – that management must know how to address.

For each perspective, drivers and respective lead indicators are pointed out, allowing objective evaluation and comparability (qualitative (eg customer satisfaction) and quantitative factors (eg number of defective materials)). Consequently, with critical factors and leads identified, processes and practices are deployed up so to deliver the necessary information for their observation and control. This performance's motorization is already an essential standard action for auditors (IIA - The Institute of Internal Audits).

If the financial perspective observes data related to the financial situation (cash flows, profitability, and ratios) the other three perspectives will focus over the company's ability to create value and mean three distinct fields of research. The customers' perspective inquires up everything that is related to them (satisfaction level, brand perception, customer loyalty). In the internal process perspective, the operational management is analyzed: execution times, process reliability, management capacity, innovation (in products, services, ways of work and organization) and regulatory and social aspects (such as legal constraints). The learning and growth perspective addresses the primordial factors: human capital (human skills, talents, know-how); informational capital (infrastructure, work practices and procedural systems that allow to know the momentum of the organization and encourage the construction and knowledge sharing); organizational capital (capacity for change, flexibility of organizational processes and people, the organization's values, aligning the diverse organization interests with strategic decisions) (Kaplan and Norton, 2004).

After identifying the drivers and the lead indicators in each perspective, achievement goals are named. Examples include market share, sales growth, stock rotation, number of defectives, production time, training investment, absenteeism, disclosure of the organization interests.

The indicators appear in a network of causality, translated by a strategic map. That represents the idea (strategic hypothesis) (Kaplan and Norton, 2005) of how perspectives interrelate and conclude in financial terms. The objectives are proposed given the relationships assumed between the various perspectives and its indicators. Although the univocal network of relationships, established by the original model (learning and growth → internal processes → customer → finance), the reality is inter-relational. Everything affects everything in a complex system (Norreklit, 2003), whereas good design and adaptation is proof of a competent management.

The proposed goals should be broken down: from the general to the specific, from a strategic direction to a tactical, from organizational to departmental and finally to individual - allowing the alignment of those diverse interests in the organization. This means that the goals proposed to the workers, to their departments and to the company are all aligned. Control references are settled to the several aspects of the organization. The BSC becomes a mechanism of coordination and organizational control, a strategic management facilitator (Kaplan and Norton, 1996a).

The creation of the strategic map is an obvious testimony of a systemic thinking which encompasses the company in its various dimensions. Any company is interested in clarify its strategic option in a plan, scrupulously and conscientiously designed that works as a control model - an organizational reference is set up (Osbourne and Gaebler, 1992). The adoption and implementation of the BSC, through the strategic map, allows the managers to do so. Norreklit (2000) expresses some doubts about the effectiveness of such a map in a dynamic environment.

The BSC defines four fields to tackle and its outcomes should be monitored in order to measure the organizational performance. It is important considering actions if the results are not the expected, as well to understand unexpected successes. The BSC becomes a way of strategy enforcement. We know where to direct attention whenever there is a lag between the target and the budget. It also enables the control called of feed forward (Kleingeld and Haas, 1999). Sometimes, when we compare the budgeted with what happened, we verify that the presumed relationships between the various factors were not correct and we have to reformulate the strategy (Kaplan and Norton, 1996a). In this case, new or different relationship patterns are perceived. Management based on BSC points to a control as updated as possible. In an ideal scenario, threats and opportunities would be detected in a timely manner allowing opportune actions.

Some defend the BSC for their implementation processes and not for the tool per se (Mooraj *et al.*, 1999). Understanding them is a necessary condition to realize the true nature and the implications of this management theory. The communicational and organizational needs are complex in practice (Olve *et al.*, 2004), not as easy as the simplicity of the concept seems to induce.

Its implementation involves four processes (Kaplan and Norton, 1996): translating the mission, vision and goals of the company; establishing a good internal communication network; develop specific plans for each individual and business sector; develop control processes with learning concerns. An overall consistency for the company is wanted.

The first process settles the unequivocally destination of the organization. Financial success will be the final reason. The ways to achieve it are picking up, conditioned by the nature and principles of the organization. The clarification of the mission, vision and objectives of the company is crucial to create a consensus point of view. It is important to take a realistic and clear vision for creating a well-articulated organizational environment and establish an organizational culture recognized by all elements in a company.

Another process is to create a good communication network in the company - which encourages the dialogue and not criticism. The poor communication is an important cause of poor organizational performance. Effective communication system encourages and allows the sharing of experience, ensures processes of knowledge creation and exchange. The design of the management control framework determines this informational ability. It is important to motivate the dialogue in the company, providing information beyond the routine. The communication of the strategy to all members of an organization will be facilitated, fostering curiosity, creating feedback and ideas on these members. The BSC has been sustained with a demanding and comprehensive information system, which depends on the flexibility of the management control framework.

It is also important to develop action plans, targets for each individual and for each sector of the company. Setting targets is a key factor for the success of organizational strategy (Kaplan and Norton, 1996). It is collaboration that is intended, not internal competition: departmental and individual programs are defined. Individual objectives are intended to be articulated with the general, so that everyone understands how to participate in the company's success. Every department, every person recognizes own objectives - translating the company's strategic objectives in individual order, the personal scorecard.

A final process is to encourage control processes for learning (feedback and feed forward), seeking to develop the capacity to monitor the most immediate results in non-financial perspectives, and evaluate their impact on strategic objectives. This is learning in real time. This collection of information requires the company to determine rules - processes and frequency - to the extent of the various performances: individual and general (meeting objectives for each perspective). The analysis of the information will reveal problems or opportunities that should be tackled within the team.

The adoption of these rules promotes the integration of various processes and organizational functions, favoring the gathering and processing of data to produce concise, relevant and timely information. This prevents some organizational risks and promotes informal control forms. The BSC establishes an organic discipline in business management. It obliges certain standards and procedures for operational and strategic monitoring, favoring the necessary conditions for effective internal control. Accordingly, studies such as Olhager and Winer (2000) and Wu and Olson (2007) present the BSC as the most effective tool in the planning and monitoring of performance measures, associated with good risk management in some companies (Kaplan and Norton, 2006).

3. The balanced scorecard integrating risk management

It is since the mid 1990's that the idea of risk in management has been further studied and developed the concept of risk management (Scapens and Bromwich, 2009). This is a natural evolution in a competitive environment, increasingly complex and unstable (Arena et al, 2010). That brought the so-called risk society (Beck, 1992). Competition and uncertainty are inseparable and need to be appraised.

According to Ackerman (2001), risk management always runs the following steps: search and identify key risks, select measurement techniques and evaluate their relationship, finding ways to limit those risks and to decide of the strategies, in a process continuously under control and evaluation. Those steps define a process that is easily identified with the BSC, suggesting a relationship.

The diversification of the business risks reflects the real complexity of economic life and must be accepted as an unavoidable business strategy condition (Dickinson, 2001). The profit possibility is associated with acceptable risk (Alquier and Tignol, 2006). The risk is obviously considered in strategic management, but this doesn't mean that a risk management exists. This involves looking to the risk as an opportunity window, not assuming an over-cautious position, but instead acknowledging the uncertainty as a definitive competitiveness factor. The risk analysis should not be focused on its negative consequences. Uncertainty concept would be more appropriate than risk. Internal auditors are no longer restricted to risk control; they are guided by the business strategy (Lindow and Race, 2002) and their interests (Rivenbark, 2000).

A common definition of risk management is described by the CAS (Casualty Actuarial Society) in the ERM concept: monitor, asses, control and exploit risks from all sources, for the purpose of increasing the organization's value for its stakeholders, according with the defined risk level.

For that we must consider: financial risks (interest rates, stock market breaks); operational risks (damage, insufficient product development, poor personal performance, internal collapse, marketing risk (D'Alessandro, 2001), poor organizational learning, and doubtful debts); strategic risks (legislative changes, market trends, technological innovations, etc.); pure risk (fire, theft, earthquakes, etc.).

All that might imply failure can be fitted in those four risk classifications (Calandro, 2006). We also include issues not controllable or even accidental (such as unpredictable legal changes, fires), and others related to abilities (everyone makes mistakes). ERM is not a risk in a strict sense. Instead, it is everything that causes the loss of the company's value with practical implications: the risk assessment implies a consequent behavior accordingly to the strategic direction of the company, so that the corporate performance can be improved (Beasley *et al.*, 2008; Gordon *et al.*, 2009).

These concepts of risk management are very much related with the fear of loss value, the purely negative aspect. This idea doesn't assume the richest concept of uncertainty and adaptation. The risk is not only related with control and fear, it's also related with a creative bet that is never certain - that is why we prefer the term "uncertainty".

The BSC seems to be able to build a management order that absorbs the concept of risk assumed in the ERM. This is integrated in the strategic management in a way that considers risks also as opportunities.

The BSC provides a framework that helps the consideration of risks in all its diversity. It allows to identify the company's main perspectives and to define fields, where related risks shall be studied. If these perspectives go through the entire spectrum of the company's activity – from customer to suppliers, including the economic environment – we can look for the principal business risks through this structure.

For each perspective, objectives are established, as well as the critical factors for their achievement. Control standards are established as well. This can be complemented with the analysis of the aspects that affect each critical factor the most. Other criteria for monitoring and evaluation are introduced. So the BSC scope will also consider the possible risks. The risks identification and control helps to define better strategies and assign resources according to priorities (Kunkel, 2004) - condition to considering risk management.

By imposing organizational, departmental and individual goals, the BSC introduces variables and control criteria. Many of them reflect risk management already (e.g. customers or employees satisfaction rate). By association with other goals it is possible to distinguish the most relevant risk factors - this is a part of the ERM.

One of the most important features of the BSC is the relational character, systematized in a strategic map. When risk factors are introduced we must address this aspect. The design of the strategic map faces uncertainty, risks. For the defined relationships a risk assessment is also required. Therefore the BSC is dynamic: there is flexibility, permanent and continuous reassessment, in the design and implementation of the strategic map.

The undertaken level of risk can be defined through the design of the strategic map (a risk map): the strategic objectives are defined considering the risks involved. But not only the risks as obstacles to avoid (pure risk), but also as a given conditions to success opportunity (speculative risk) (Kawamoto, 2001).

The BSC, as a way to communicate the company goals, facilitates the alignment with employees' interests and an easier internalization of the organizational culture. Thus, if a culture of risk management throughout the organization is more crucial than technical issues (Bruno-Britz, 2009), the BSC becomes an obvious interest.

Each organization is a particular entity. The enterprise risk management can be different things in different organizations (Arena et al, 2010); it might even differ within the same organization (Mikes 2009). Some systems of risk management, such as that proposed by the Committee of Sponsoring Organizations (COSO), are overly rational and consider the organization in a very simplistic way (Power, 2007). The BSC recognize the complexity and uniqueness of each company, always proposing specific and adapted solutions - looks at the specificities of organizations. The systems designed specifically for risk management are often insufficient: they have a premature codification and standardization of risk management practices (Kaplan, 2011), being ineffective in risk management (Paape and Speklé, 2012). A complementary tool like BSC, developed by managers concerned with organizations specifies, will be helpful.

Risk management implies a continuous assessment of risks involved in managing (O'Regan, 2002; Maynard, 1999; Marks, 2001) to learn how to act (ERM according to Funston (2003)). The BSC is an adaptive framework that allows a constant assessment and readjustment of all organization's conditions, and fulfils the requirements of risk management. For that, it can be developed as an integrating risk management tool.

There is an example of the BSC properly considering the risk management when there is an internal perspective named of "risk management" (Kaplan and Norton, 2004; Nagumo, 2005). Also, organizing a department for risk management under the assumptions of the BSC is possible.

Considering all these arguments, the assumptions for risk management appliance are consistent with the essence of a BSC.

Although some difficulties arise when BSC and risk management are associated.

The main problems are related with intrinsic character of uncertainty (addressing the unknown is always problematic), and not to a matter of linkage. Some problems arise from the formulation of the BSC: technical difficulties regarding the identification of risk factors (Franco-Santos and Bourne, 2005); the appropriate measurement and assessment techniques (according to the techniques chosen, the explanatory capabilities may differ - Sedatole, 2003); and the subjectivity of information (satisfaction levels) or statistical problems.

BSC stands out for the design of a strategy map, a way to discipline management. It will be very difficult to balance the concept of risk with the creation of this map. Requires a subtle combination between strategic decisions and the notion of uncertainty in a strategic map just credible as long as is questionable and dynamic – trademark of a good management. It is important to design a strategic map not just for the formal principle but also to address the reality, acknowledging as much as it can. The defining relations of cause and effect in the BSC are questionable; it will become more difficult to define when associated to risks. These relationships are often apparent in practice may not exist; the outlook may not be directly linked.

Another problem relates to information overload. Under the BSC design, scattered and overwhelming information may as well happen. The manager might be incapable of an advantageous use of the information that may require maintenance features that are not worth for. It is not possible to manage all the information, there must be a careful selection and accurate information needed to align all departments and achieve strategy. This is something intangible that will depend on the ability of the manager in making this selection. The acquisition of information is costly. It is therefore necessary to consider a balance between the collection of relevant information and its costs. It is also difficult to deal with so many measures, at the same time.

Some researchers refer to an obese BSC, with a large number of measures. The implementation of this type of BSC can potentially generate risk of performance management (Neely, 2005). Many measures in a BSC system are not consistent with psychological studies. These studies suggest that individuals have difficulties in dealing with more than seven measures simultaneously (George, 1956).

Too much information can lead to skew the results, the organization can´t spend too much time on irrelevant information. It is important to adopt mechanisms that promote the integration of various processes and organizational functions, with obvious benefits in collecting and processing data, producing information concise, relevant and timely.

Considering the BSC integrating risk can lead to some interest conflicts. To avoid them people addressing issues related to risks shouldn't be the same that address the performance issues (Sammer, 2006). Establishing analytical divisions, with two separate BSC's (risk and performance) can be a solution (Calandro and Lane, 2006). They both should be related to the global strategy, with the same construction structure and following the same methodology.

4. Conclusions

The economic environment is increasingly competitive, seeded with risks, unpredictable threats and opportunities. Because of this uncertainty, management techniques that consider business risk management in the daily business arise. Risk is considered as everything that can affect the success of entrepreneurial actions, so the concept of risk management means a more comprehensive approach of business activity. BSC can be taken as a tool to develop practices of management account that subsumes such concept.

The BSC aims to observe the entire spectrum of the business activity. Furthermore, it selects what matters most and creates a model for assessment and control. If the diversity of risks is a factor inherent in the business strategy, it can be fully addressed by the BSC concept. For that, the most critical risk factors must be identified, according to the perspectives chosen and their indicators, developing monitor and assessment processes, always with the aim of a timely adaptation of the company's actions to its strategic interests. In the end, there will be a real risk management.

Classifying different areas of uncertainty and establishing a hierarchy of risks, the BSC identifies the most important aspects for management concern. This order, according to the BSC nature, isn´t static. The organization is a constant process of change and learning. The BSC will help organizations to reach the ideal of a learning organization (Oliveira et al, 2012), facing all the risks involved.

The ideals of the BSC provide a good risk management but there are some problems and difficulties. Some associated with the development of the strategic map and their relations, others relating to handling information techniques and risk assessment. The information overload can be a big problem and can counteract the benefits of the BSC.

The BSC is a way to discipline the organizational management. It identifies areas of uncertainty that call for the manager's attention, helping management in the search of solutions and purposes through its own problems. It helps companies to face the complexity of the business and all the involved risks. Assuming that there are many solutions, the BSC is just a way to help finding the better ones.

The BSC was considered an effective process for an integrated, committed and realistic risk management, but whose effectiveness has some problems. The success of this management model depends on how these are addressed.

This is an approach of a possible application of BSC to risk management. Still, it is for now a theoretical study that lacks empirical validation. Studies of this nature are scarce, so there is space and interest for developing the BSC and Risk Management concepts in the context of management accounting.

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