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**STRATEGIC MANAGEMENT IMPACTS CAUSED BY BALANCED
SCORECARD AND THE ENTERPRISE RESOURCE PLANNING**

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Abstract

This study had as main objective to verify, analyze and describe the existence of synergies and difficulties between the methodology of strategic management BSC (*Balanced Scorecard*) and the integrated information system (ERP *Enterprise Resource Planning*) in companies that had already use these tools for the strategic management of your business.

This multiple case study research, focus on the relationship between these systems, contributing to a theoretical model that relates the features of both management systems within the situation in which they are inserted. Based on broad theoretical frame, which discusses various issues related to strategy, organizational system, ERP, performance indexes and BSC, five companies were visited, for the application of questionnaires which allowed identify synergies, benefits, problems and difficulties between the BSC and the ERP.

Keywords: Strategy management, Enterprise Resource Planning, ERP, Balanced Scorecard, BSC, information technology, Synergies and Integration difficulties.

Introduction

Business is characterized by a globalized and competitive world scenario, with rapid advances in production technologies, Informatics and telecommunications, and other transformations that suggest new ways of perception and interpretation of organizational structures (ANTUNES, 2000).

In this context, infers that obtain competitive advantages through adequate information is essential to the survival of businesses, and technology emerges as key factor of success, allowing differentiation from competitors.

One of the applications from the advance of these technologies is the development of integrated management systems-GIS or *Enterprise Resource Planning*- ERP- enterprise resource planning, which enable the integrated automation of information resulting from transactions made through the various processes of management and operation, carried out within the company.

According to Porter & Miller (1985), information technology-IT-is a powerful tool for this transformation because its ability of enterprises the activities connections.

Permanent checking of these competitive pressures, over the years, instigated a series of investigations, not only in the segment of integrated management systems, but also in the segment of strategic management systems for organizations.

Kaplan & Norton (1992) developed the concept of the BSC (literal translation: balanced scorecard), strategic management system initially used as a tool for monitoring the performance and control strategies.

In accordance with Herrero (2005), for the BSC methodology dealing with excellence and better effectiveness company's strategy, it must have the support of an "Integrated Enterprise Management" – ERP.

2. OBJECTIVE

This study set out to examine if the ERP system meets the requirements of strategic management BSC, according to the following specific objectives:

- Identify integration between ERP and BSC;
- Identify benefits that the ERP offers BSC;
- Identify problems and difficulties of ERP to meet BSC; and
- Identify implications for the Organization due to the problems and difficulties generated by ERP to meet BSC.

3. THEORETICAL FRAMEWORK

This chapter was segregated in 5 sub sections. The first one explain briefly the history of strategy. The second covers organizational systems. The third covers ERP systems. The fourth covers performance indicators and the last sub section covers BSC management system.

3.1 Strategy

Davenport (2004) pointed that appeared almost seventy new management tools, but two of them (ERP and BSC) have become very important for the implementation and deployment strategy in the organization.

Kaplan & Norton (1997, p. 38), creators of the strategic management system conceptualize strategy as the BSC choice of market segments and customers that the business units aim to serve, identifying the critical internal processes in which the unit must achieve excellence to realize their value propositions to customers.

In accordance with Canepa, Rigoni and Brodbeck (2008), it is seen as one of the corporate resources that support strategies at operational level, as the case of the BSC methodology, or direct the strategies at a higher level, supporting the business in obtaining competitive advantage.

For Brodbeck A.; Rigoni, e. & Hoppen n. (2009), grows the importance of it in all levels of decision-making organizations. It fosters communication and exchange of information between all areas of the Organization, enabling all levels of knowledge and operationalization of the strategy set by the organization.

3.2 Organizational System

For Brodbeck, a., Brodbeck, h. Cánepa, P & Bobsin, d. (2010), the life cycle of an ERP extended the phases of the life cycle of systems, such as Treaty by systems theory.

According to Porter (1991), although there is widespread trend by organisations for strategic use of information technology, it should be noted that the role played by systems and its strategic importance vary between organizations and between industry sectors.

According to Di Serio & Vasconcellos (2009), there is no hierarchy between the types of information systems interconnected by TI. The need for information is different for each organizational level, but cumulative, i.e. decision-making at each level depends on the quality of it architecture developed for each level, in addition to the lower levels.

3.3 Systems ERPs-integrated management systems/business management Systems

Souza & Zwicker (2003) define a ERP system as *software* a package of computer applications that support most business processes and information needs of an organization's operations, such as production, supply, human resources, accounting,

administration, sales, etc. The goal of ERP is to integrate all areas and functions of the Organization into a unified system for information effectively and timely.

As Brodbeck a. et al. (2010), the choice of an ERP *stakeholders* affects all or social groups that participate in the market, the choice a critical point to ensure the transparent and reliable information to support decision-making in strategy and organization.

3.4 Performance indicators/Performance indicators

The indicators are quantifiable representations shapes the characteristics of products and processes. Are used by the Organization to control and improve the quality and performance of their products and processes over time (TAKASHINA et al .1996).

Balanced Scorecard -the BSC, according to Kaplan and Norton (1997, p. 173), needs to be more than a combination of 15 to 25 financial and non-financial measures grouped into four perspectives. The BSC have to tell the story of the business unit strategy. The indicators help organization to direct their efforts towards strategy and test the progress of the organization.

3.5 Balanced Scorecard – BSC

The term BSC was defined by Robert Kaplan and David Norton in a joint article *Harvard Business Review* in in 1992 (*HBR on Measuring Corporate Performance: Measuring performance in the Organization of the future*).About eleven years later, the methodology was employed by some of the largest corporations in the world and gained increasing acceptance, therefore, is the target of our study, in conjunction with the ERP.

In good measure, the acceptance and global growth of the use of the BSC methodology should apply to it areas, that automatized the method, thus enabling its implementation with greater ease.

Exactly to help organizations determine what deserves to be measured and how to do it efficiently to the strategy of Corporation strategic management system emerged *Balanced Scorecard*. named Second César (2003, p. 18), the BSC is corporate management method in which strategic goals are established and monitored through the definition of performance indicators. For Lunkes & Schnorrenberger (2009), the BSC complements financial measurements with evaluations on clients, identifies internal processes that must be enhanced and analyzes opportunities for learning and growth, as well as investments in human resources, systems, and training that would change substantially all the activities.

Kaplan & Norton (1997) propose a standard structure through forms that facilitates the understanding of the goals of the Organization, because the BSC methodology is supported by four prospects around the mission, vision and strategy of the organization.

4. SURVEY METHODOLOGY

The main goal of this research was to verify and analyze the existence of synergies and difficulties between the strategic management system BSC (*Balanced Scorecard*) and the integrated information system (ERP *Enterprise Resource Planninng*). The survey was conducted in five companies, focusing on synergies, benefits, difficulties and problems between these systems and their consequences for the organization.

The interviews were made from theoretical reference with directors, IT managers and managers of the users areas.

The case study method is appropriate in this work because, in his empirical research, will describe and analyses the integration and synergy between the BSC and

the ERP, taking into consideration the business context in which they occur. Part of that context the reasons for the need for integration between the BSC and the ERP associated with implementing the company's strategy at all hierarchical levels.

According to Yin (2010), in research conducted using the method of case studies, two dimensions should be considered: the number of cases that make up the study and the focus that will be given to the unit of analysis.

For interviews was used questionnaire with open-ended questions. Some interviews were recorded, and the end was asked the interviewee a new contact for clarification or additional issues if they are necessary.

5. FINAL CONSIDERATIONS

In summary, for managers of enterprises, the ERP information are generated in real time, systematized, with clarity and transparency, in summary or detailed, sequential and designed, numerical narratives or graphics, easy to understand, and that meet the needs of each area, and offer financial and managerial reports still serving BSC and consequently to decision-making through the planning, implementation and monitoring of company strategy.

Therefore, the information provided by ERP are used for making strategic decisions, and that the systems existing in companies surveyed ERPs can be taken as very advanced technology, generating information regarding performance indicators, information on tangible and intangible investments, characterizing them as efficient systems for the generation of information for strategic decision-making.

The companies surveyed, realizes that the ERP brings the possibility of real gains for business efficiency, by the control provided and synchronization of activities requiring your best planning. Its integration with the BSC provides efficiency gains of

the company. The respondents indicated improvements in efficiency and competitiveness gains, whether by the integration between the ERP and the BSC or extension of their functionality.

These companies use ERP as a fundamental part of its strategic development, in addition to the satisfaction of primary activities and support activities. However, beyond the BSC, there are other systems and strategic management tools that could be studied with the use of ERP business management system that supports the management of information aimed at their processing efficiently, transparent, healthy and reliable, to describe, implement and manage the strategy at all levels of the company, linking objectives, initiatives and measures with the company's overall strategy.

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