Sustainability of Balanced Scorecard: An Analysis in the Context of Brazilian Higher Education Institutions

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Abstract
It is noticed that the Brazilian HEI’s feel enormous difficulties in maintaining sustainable competitive advantages when achieved through still little known businesses strategies or used in the national context as the BSC. We propose the following question: how to make the BSC a sustainable strategy in the context of Brazilian.

Keywords: Balanced Scorecard, Higher Education Institution, Managerial sustaintability.

Introduction
The need to adapt to changes brought about by the expansion of the educational system of Brazilian higher education in recent years (Inep 2014) made the Higher Education Institutions (HEI’s) to appropriate business strategies adopted by organizations in other segments, among them highlight the Balanced Scorecard (BSC). Despite initial difficulty to adapt to the different reality of HEI's Brazilian, the BSC is presented as a methodology capable of bringing benefits to these institutions to enable them to translate into tangible measures its mission and strategy.

However, the literature shows that the HEI's Brazilian have encountered difficulties in the implementation and use of the BSC mainly due to the complexity of its implementation and the need for constant revision (Galvão et al. 2011, Ulyssea et al. 2013). So a question shown relevant: how to make the BSC a sustainable strategy in the context of IES's Brazilian? Thus, this study aims, to analyze the context of IES's Brazilian, find measures that make the sustainability of BSC.

Theoretical Background
Because of their success with the private companies, the BSC model is expanded so that universities, nonprofit organizations and government agencies also glimpsed in the adoption of this method the opportunity to optimize their management processes (Ulyssea et al. 2013). Note also that due to their efficiency in converting metric (scorecards) business
strategy, the BSC has also become used at lower levels than those originally proposed, as in sectors and departments (Galvão et al. 2011).

Despite this remarkable expansion in the use of BSC by many scholars segments organizations have pointed frequent cases of failure in the use of this management tool (Lima et al. 2012). According to Kaplan and Norton (1992) some factors may be associated with failure in the operation of the BSC: a) lack of senior management commitment; b) low involvement of company employees; c) concentrating the development of BSC only senior management; d) very long development process; e) hiring inexperienced consultants.

In Brazil, Ulyssea et al. (2013) point out in their study that the main difficulties associated with the sustainability of the BSC can be concentrated into two distinct groups: organizational factors and factors related to the use, itself, of the method. The first factor refers to the organizational structure of the organization that intends to implement the method and its processes, its culture, its goals and its mission. The second factor, in turn, refers to the efforts made by both employees and by senior management during the process of implementation and operation of the method.

When analyzing the IES's Brazilian one realizes that the frequent cases of failure in using the BSC can be credited predominantly the lack of managerial knowledge demonstrated by many of the professionals who run these organizations (Lima et al. 2012). According to Galvão et al. (2011), most of these institutions are managed by professionals coming for education issues hampering the sustainability of the method before the initial challenges posed by the deployment process and the need for constant revision to allow its operationalization.

Method

This study is part of a deductive research method, common in research in the field of applied social sciences, as it takes a quantitative approach in the data analysis (Rodrigues 2012). This approach has shown its use in investigations that bother to analyze large samples and intend to work with statistical data in order to understand certain phenomena of the social environment (Maanen, 1979). Thus, in this study, using a quantitative approach, we sought to understand how to make sustainable BSC in HEI's Brazilian.

The literature on BSC in HEI's Brazilian showed his greatest notoriety phase in the early 2000s, however, in the last decade studies on this subject are becoming increasingly rare (Lima et al. 2012). It is believed that due to the expansion of the HEI's in Brazil, in quantitative and qualitative terms, to study this issue becomes relevant again. Thus, it is emphasized that this study has exploratory objectives.

According to Piovesan and Temporini (1995), exploratory research is one that seeks to provide greater knowledge and familiarity about a topic about which additional skills are desired. To Cervo and Bervian (1978) exploratory research, as part of the main research is a preliminary study in order to better tailor the measuring instrument reality that remains to be learned, that is, the exploratory study is objective know the reality studied as presented in the context in which it is part.

For the development of this study we considered the 151 Brazilian federal IES's (Inep, 2014). To get the number of institutions to be analyzed has crafted a sample calculation with a confidence level 95% and sample error of 5% where the "n" calculated, i.e. the number of HEI's to be addressed in the study for representativeness statistic was 109 HEI's. As for the procedures, were collected institutional data that allowed analyzing the context of these institutions in their electronic sites. After this stage, the data were analyzed with the aid of statistical software (Statistical Package for the Social Sciences) for the formulation of descriptive statistics and correlation analysis (Pearson).
Results and Discussion

The analysis of institutional data (report of the committee for assessment, annual results records and financial statements of the institutions), allowed the identification of favorable and unfavorable factors to the sustainability of BSC's Brazilian HEIs. In this section these assumptions were verified statistically using descriptive statistics and correlation analysis (Pearson). Thus, this section will be divided into two distinct parts. In the first part were listed and discussed some factors that favor the sustainability of the BSC in the context of that organization. In contrast, in the second part were listed and analyzed aspects related to the BSC maintenance difficulty, that is, factors internal and external to the organization, which are presented as unfavorable sustainability of this methodology.

Enabling factors for sustainability of BSC

a) Centralized power

Among the HEI's analyzed 56.32% were found to have a centralized power in decision-making. For Lima et al. (2012) one of the factors responsible for making the process of operationalization of the BSC complex is decentralization of authority of some organizations, strategy adopted by 43.68% of the analyzed institutions. These authors point out that the process of decentralization, on the one hand, it is beneficial to organizations because it allows decisions to be made more efficiently and therefore the problems are resolved without senior management intervention is required. However, one of the main disadvantages of decentralization of authority is the risk of "subobjectification", and Lima et al. (2012) is precisely this problem that discourages the operation of the BSC.

To reinforce this assumption, through the Pearson correlation analysis was realized that there is a degree of strong positive correlation ($p = 0.874$) between the variables, the BSC sustainability and centralized decision-making. This indicates that the adoption of a centralized decision-making favors more the BSC sustainability than a decentralization strategy for the decisions to be made (Rodrigues 2014a, Rodrigues 2014b). Lima et al. (2012) already no deferred to this aspect in their study. For these authors, when many professionals have the power to make meaningful decisions can be incompatibility of goals or decisions, as these professionals tend to put the objectives of their departments forward the overall goals of the company which compromises the company's strategy, as well as the engagement of employees the philosophy of BSC.

b) Reduced functional table

For Kaplan and Norton (1992) the low involvement of the company's employees towards the BSC implementation process may represent an unfavorable factor for the sustainability of this method. Thus stands out that 65.76% of the analyzed institutions have difficulties in keeping employees motivated to engage in strategic plans of the company. This high number, 72 HEI's, highlights the importance of analyzing more precisely this variable in the operation of the BSC. The correlation analysis showed that there was a strong negative correlation ($p = -0.811$) between variables, number of employees and sustainability of BSC. This indicates that the more employees the company keep its smaller workforce will be the sustainability of the BSC or even more difficulty find to keep this method.

The explanation to this bias can be found in the study of Galvão (2011). For these authors, the higher the functional part of a larger organization is possibility that employees are not motivate and distance themselves from their stated objectives. Thus, it is suggested that the reduced workforce of a company favors the sustainability of the BSC, as this reduced structure enables managers to have more control over employees identifying signs of not motivate and low commitment to objectives and their task. Thus, specific actions can be performed to ensure the effectiveness of management strategies adopted.
c) Implementation of key activities in specific sectors

When analyzed data on the management structure of the HEI's Brazilian, considered in this study, it was observed that 52.97% of these institutions have a heightened amount of activities. Pearson analysis showed that there is a degree of negative strong correlation ($p = -0.761$) between variables, number of activities or prospects and sustainability of BSC. These figures highlight that the greater the number of views of lesser institution involved in the activity sustainability of the BSC.

The BSC is a strategic management tool that assesses, using metrics, different perspectives, or activities involved in the business environment (Kaplan and Norton, 1992). Thus, the more activities are under the responsibility of an organization the more complex the operation of BSC and hence its sustainability becomes an even greater challenge. When proposed a performance evaluation model HEI's, Galvão et al. (2011) pointed out that a major factor in the success of this undertaking would be to eliminate positions and unnecessary sectors and condense homogeneous activities to streamline the organizational structure so that the number of prospects is reduced and the BSC management process will become less complex.

Unfavorable factors to the sustainability of BSC

a) Attention focused on the teaching perspective

Data analysis indicated that 86.32% of HEI's analyzed, totaling 94 institutions, have a tendency to focus its strategy on education perspective. This was also emphasized by Lima et al. (2012). For them the HEI's Brazilian has shown a negative trend and unfavorable to the sustainability of BSC: attention exacerbated the teaching perspective. The Pearson correlation analysis demonstrated a strong negative correlation ($p = -0.823$) between variables, exclusive emphasis on education and sustainability perspective of the BSC, which indicates that when greater emphasis exclusively granted to smaller teaching perspective is the sustainability of BSC in the context of the institution, or even harder this organization will have to keep this method.

For Borges et al. (2014) there is no doubt that the teaching is the main activity performed by an IES's at the same time, that is the activity which is, however, that questioned is that by giving attention to this activity many managers end up forgetting the other prospects of the organization such as finance, processes and learning and growth. There is no method to sustain a BSC while focusing only in relation to a perspective, since in the context of this tool should work as perspectives of a system.

b) Managerial inability demonstrated by managers

According to Borges et al. (2014) there is a tendency in Brazil that educational organizations are run by professionals coming from education. It is felt that these professionals, in many cases do not have technical and scientific knowledge in the area of management, which substantially compromises the operation of managerial strategies such as the BSC. The study of Lima et al. (2012) also points out that in organizations that do not have professionals specialized in the management area the sustainability of BSC becomes more costly, because these organizations need to hire consultants to accomplish the reviews that the method requires. The correlation analysis proves the assumption Lima et al. (2012). In relating the variables, managerial capacity and sustainability of BSC gave a strong positive correlation ($p = 0.882$). This indicates that the greater the capacity of the largest management institution can sustain the BSC. When analyzing the variables, operational costs and managerial capacity, it was realized that the greater the knowledge management in smaller
institution are the costs associated with the sustainability of the BSC, which indicates a strong negative correlation \( p = -0.765 \).

**Conclusion**

In this study, were highlighted the existence of various factors that influence positively and negatively on the sustainability of BSC. In view of these considerations it is noticed that some information that were brought to light allow practices to be undertaken in order to make the BSC implementation process less complex and therefore less costly, which favors its sustainability.

As for the aspects favorable to the sustainability of BSC is noticed that the vast majority is linked to the organizational and managerial structure of HEI's. The results indicate that a leaner organizational structure with more centralized power decisions reduce the risk of strategic objectives do not find support in the context of these organizations. In turn, the unfavorable aspects are more related to managerial deficiencies arising from difficulty demonstrated by administrators to conduct, effectively, certain strategic tools. This lack of preparation in terms of technical and scientific knowledge, helps to make the operation of more costly BSC, because you need the expensive services of consultants in constant revision. According to the results posted in later studies, researchers can try to formulate alternatives that contribute to make the BSC a less costly and expensive method HEI's Brazilian.

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