



PERFORMANCE INDICATORS: A COMPARATIVE ANALYSIS BETWEEN PUBLIC AND PRIVATE COLLEGES IN BRAZIL

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ABSTRACT

A comparative analysis between the use of performance indicators to public and private organizations have always been required to examine the scenario related to both. This study seeks to analyze the use of Balanced Scorecard (BSC) to identify and understand the main differences and similarities in public and private higher education institutions (HEIs) in Brazil in relation to the use of other organizations performance indicators. A quantitative and exploratory approach was adopted using institutional documents analysis. Data was searched on the websites of Brazilian higher education public and private organizations in order to accomplish this analysis comparative. The results showed that even reviewing few public institutions the use of performance indicators appears to be more efficient than those applied to the private ones. Private universities should observe and improve their processes and performance indicators based on those used in Brazilian public universities. This initial research still opens a horizon so that other studies be developed within this thought stream.

Keywords: high educational institutions, public education, Balance scorecard.



1. INTRODUCTION

There is a theoretical gap in relation to studies on the use of this measurement tool in the context of public educational organizations, especially in relation to the use of performance indicators.

Much of the research focusing on the application of the BSC in higher education institutions (HEIs) ignores the public sphere covering only the private institutions, then, this research shows its importance to broaden the discussion to new horizons of inquiry, not only addressing the BSC applied in public HEIs, given the aforementioned theoretical gap, but performing a systematic and linear comparison between these and the BSC adopted by private higher education institutions, in order identify the main similarities and differences between these two specific approaches.

This study aims to give greater significance to a topic still under construction, since much of the research dealing with the use of the BSC in higher education institutions (HEIs) to ignore the public sphere covering only private in nature.

2. LITERATURE REVIEW

2.1. Adaptation of the BSC nonprofit educational institutions

The methodology for measuring and assessing organizational performance known as Balanced Scorecard (BSC) has been widely used in the management of private HEIs system. However, initiatives aiming at the use of this tool within the public scope are still underdeveloped. Despite its focus on results, there are a few experiences where public higher education institutions use performance indicators to measure and monitor their activities in a systematic way (OLIVEIRA, 2001).

This factor is related to the initial design itself given to the BSC, which according to Steele (2001) is to meet the demand of private companies through strategic mechanisms for measuring and evaluating the activities and results. However, Kaplan e Norton (1997) argues that the propositions of the BSC should serve as a model and not as a standing instrument evidencing their adaptability to other types of organizations.

The adaptation of the BSC to other contexts is not simple. In current literature, authors Kaplan e Norton (1992) admits that the use of this tool in nonprofit



organizations is different and to make it suitable in this context changes, and adjustments must be performed (KAPLAN, 1994).

One of these changes relates to the replacement of a conditional business perspective view. Moreover, it has been observed that public HEIs operate in a more ambiguous, complex and unique environment (CHETKOVICH; FRUMKIN, 2003; KONG, 2007) and model BSC fails to account for this complexity (KONG, 2009). It is noticed that different from private institutions, the non-profit institutions primarily engaged in producing maximum results using the minimum possible resources, directs yours activities to achieve the organizational mission and not to obtain financial income (KAPLAN; NORTON, 1997).

2.2. The issues involved in measures of organizational performance

Most failures of the BSC approach are associated with poor management of performance metrics. According to the Hackett Group's researchers, less than 20% of companies those have invested in BSC implementations that are creating value. A common mistake that is discernible from the study of the BSC in universities is that they tend to rely on many metrics (NEELY, 2003). Companies often use metrics overused. In current literature Neely (2003), it is found that the current administration is in crisis because it is "drowning in data" Bourne (2002) adds that the design of performance measurement systems focuses on how many engines will use instead of focusing on the quality of these mechanisms.

Interestingly, unlike for-profit companies, the performance measures of public universities reveal very little about their internal business data. Furthermore, the number of steps does not present a balanced approach. Studies show that just over 10% of the measures relate to the business perspective, being most prevalent measures for the stakeholder view (BOURNE, 2002).

Some universities have implemented the BSC in individual units, resulting in performance measures, which take into account only the performance of the unit. Although it seems logical, it can result in sub - optimization. Not relate to the key performance indicators with metrics often universities tend to measure only a small part of what really matters (KONG, 2009).



2.3. Methodology

This study was guided by the following question: What are the main differences and similarities between the approach of the BSC in public and private institutions of higher education regarding the use of performance indicators? We believe that this study might identify and understand the main differences and similarities between the approach of the BSC in public and private HEIs in relation to the use of performance indicators.

In order to enable a better understanding of the facts to be presented, this work will be organized in four sections, in addition to this it is, evident. It begins with a critical review of the literature around the BSC and its adaptation public HEIs. Subsequently the methodological procedures are pointed in sequence are reported the results and discussions. Finally, the concluding remarks of the study are presented.

Implementation strategies of this study departed from a deductive research process, where the conclusion of the investigation is evidenced implicitly in their premises. This method is developed in such way that a certain general analysis is able to generate particular inference on an actually observed occurrence (MARCONI; LAKATOS, 2004). However, in order to allow a more accurate analysis of the phenomenon, also reported to a qualitative approach, as a complement to the central strategy of the research process.

This is an exploratory research, aiming to familiarize the researcher with a subject still little explored, without theoretical or practical implications, which allow the construction of evidence in the empirical reality (AZEVEDO, 1999).

As for the methods for the theoretical development of the study document analysis was used, as this is an important technique not only to complement the information obtained from other sources, but also for its ability to reveal new findings of a problem (AZEVEDO, 1999). This study was used as a source of information the web sites of Brazilian public and private universities to raise research useful documents. This technique differs from longitudinal studies where data are collected over a long period (RODRIGUES, 2012).

Interviews with members of public and private institutions studied were also performed. Using a script semi structured interviews, managers of 10 public



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institutions and 06 private institutions of scope were asked about the results of the documentary analysis undertaken. The interviews were conducted through online form with the actors. It is noteworthy that the small number of involved are the result of the fact that no other universities have taken part in the research.

To meet the objectives originally proposed, this study considered the totality of existing federal public and private universities in Brazil in order to identify and understand their similarities and differences in the use of performance indicators. Data were collected through a search on the web sites of all Brazilian public and private universities; this search has focused on the search for performance indicators.

Thus, were analyzed the indicators related to research and extension education activities, learning, institutional management, financial management and communication services. Furthermore, were still mentioned in the analysis, indexes are not as common in the context of institutions whether public or private.

The results obtained through the confrontation of information pertaining to federal public universities, and private universities were interpreted by techniques specific to the objectives proposed analysis. The results that emerged from the research were placed in a straight sequence of significance to provide explanations that allow making inferences within a reality analyzed (RODRIGUES, 2012).

2.4. Results and Discussion

In this section, the results of the study will be presented and discussed their theoretical and practical implications. It was attempted by means of analytical techniques and particularly compatible with the proposed objectives provide useful information for making clear differences between the use of performance indicators in public and private HEIs.

2.5. Comparative regarding the use of performance indicators

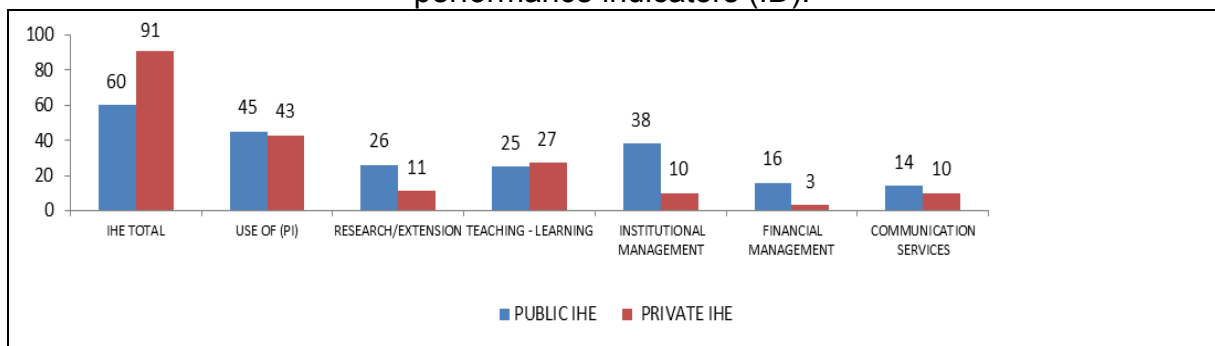
When comparing the BSC approach adopted by the Brazilian public and private HEIs the first notable consideration is that both apply performance indicators to measure and analyze related activities, namely research and extension, teaching - learning, institutional management, business management, and communication services. Importantly, as the business management is a small difference, that while



public HEIs under administer the funds from the government of a private nature deal with financial income derived from third parties who benefit from their services.

There are large differences in the use of performance indicators between institutions of two areas that deserve to be highlighted. Figure 1 shows some peculiarities which enable this differentiation between the BSC approaches in these two specific types of the educational institution.

Figure 1: Comparison between Brazilian HEIs regarding the application of performance indicators (ID).



Some differences are evident, starting with the amount of existing private institutions in the country, totaling 91 institutions, much higher number public HEIs totaling only 60 units (Figure 1). Even with this difference, public universities outnumber private in the adoption and use of performance indicators. Forty three private HEIs have this measurement and analysis tool for assessing the results of its activities for 45 public universities. What seems like a minor difference becomes large when considering the context in which it appears, therefore, 47 % of HEIs private origin has performance metrics while in public under the adoption of this tool reaches 75 % of the organizations.

It should be stressed that this preponderance of public HEIs as the adoption of indicators may be related to the higher number of stakeholders associated with these organizations. This term refers to stakeholders, including students, teaching and non-teaching, government and their development agencies, accreditors, auditors and advisors, and even society (BURROWS; HARVEY, 1992). The CFO of a public university analyzed highlights this feature in his speech:

"[...] we have to be accountable not only to the directors, as occurs in most private institutions, our responsibility is much greater, because the number involved in the performance and results of our activities is considerably larger,



government, funding agencies, auditors ... Anyway, there are many conflicting interests to administer" (Public University 08).

Regarding IES using performance indicators – one realizes that there is variation in the degree of measurement activities. The activity of research and extension data are clear in showing the dominance of public HEIs in the metrics within the analysis that affect the aforementioned functions. While 26 public institutions measure and analyze this activity, only 11 has a private interest. Credited with this observation the greatest incentive given to research and extension in Brazilian public universities which consequently implies the existence of mechanisms capable of measuring this action (INEP, 2012).

"Here we have a major concern with the knowledge that we are producing, students are encouraged to develop research and provide all the conditions for this, laboratories, libraries with large collections. [...] The same way, we register everything that is produced, to have indicators that allow us to analyze the development of our research activities". (Public University 01).

As to teaching – learning one realizes that, these seemingly private institutions are preferable. This criterion was the only one where there was a preponderance of that instance on the public sphere. This finding demonstrates that private HEIs are more interested in measuring and evaluating the performance of their teachers in the implementation of their activities and their satisfaction with students to educational services offered, than the public ones.

In turn, institutional management is the activity where there was a major discrepancy between the data obtained. For while 38 public HEIs adopt relevant metrics for this activity only 10 private institutions move actions in order to measure the results of their activities and institutional management. Public universities are more concerned to know, using metrics, effectiveness and coordination of sectors, departments, library and laboratories, as indicated by the data.

"[...] Public institutions demonstrate a greater interest in integrating activities related to institutional management, because they know the benefits from this integration ranging from the improvement of services offered to students up to a substantial cost reduction" (Public University 06) .

Financial management was another activity where the results indicated a prevalence of public institutions as under the use of performance indices. Although not for profit organizations devoted to Brazilian public universities bother to demonstrate to stakeholders how the resources are being used to get through indicators for this purpose. In the information services, related to all the analyzed



context public HEIs have a greater tendency to use metrics in order to measure the effectiveness of such services. It is significant that the rate does not claim to measure the quality of services since the results would be inaccurate, due to the subjective nature of this aspect, which is actually measured, is the effectiveness of services.

It is worth mentioning the presence of specific indexes in some higher education institutions in the country (were not mentioned in Figure 1), as the ratio of aid to students that, in general, refers to benefits such as food assistance, housing assistance, scholarship permanence, emergency aid and worth book (allows students to purchase books for cheaper prices). Although only six public institutions and derisory, three private universities have records and indicators for the evaluation of these services their mention is needed in this analysis, since one must consider the importance and the social impacts of these indicators (approximately 5 million students benefit from these aids, only in public institutions) and also its implications on financial resources of these institutions.

Another index that shows restricted to a few institutions of higher education, whether public or private, refers to artistic activities and sports and leisure. Only two Brazilian universities, these public sphere, have in their records indicators for the analysis of these activities. According to the directors responsible for the department of physical education course, of one such institution that adopts indicators related to these activities:

"Our business is likely to remain restricted to our department, there is no effort to make them something public, an indicator that can be compared with other institutions. This same difficulty is found in other institutions" (Public University 04).

The environmental impact of the activities carried out by the institutions was another overlooked factor when analyzing the presence or absence of performance indicators with respect to the garbage collection or effort in reducing the use of paper activities through recycling efforts or yet the adoption of clean energy (renewable). Only three Brazilian universities, with two private, have data controls, performance indices over his actions regarding environmental responsibility. This is worrying, especially within the context we live where concern for the environment is increasingly present.

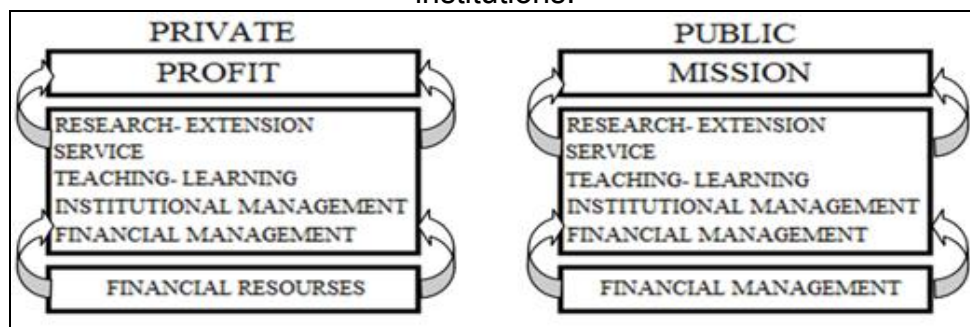


2.6. Different approaches to the financial perspective

Public and private higher education institutions in Brazil have different characteristics when analyzing your financial outlook. The latter, as its very nature, are profit-oriented, ie, improve their activities towards achieving satisfactory financial result, while public HEIs develop its activities to meet the organization's mission (BARMAN, 2002).

Kaplan e Norton (1992) argue that, within the private institutions, the structure of the BSC has the financial perspective as their main goal. Adapting this model proposed private educational institutions are perceived that the business perspective, goes much further, as it represents not only its outcome, but also the starting point of the flow of activities pertaining to these organizations. In turn, the public HEIs has a different structure. The model below sets out the main difference between these two perspectives.

Figure 2: Model of comparative analysis of Brazilian private and public educational institutions.



As for private organizations, this model suggests, (1) that these companies need financial resources to initiate their activities and (2) all activities are gathered toward obtaining financial returns, ie private HEIs run profit towards the profit himself. This finding justifies the idea of flow given the economic outlook adopted by Brazilian private HEIs.

"In reality, provide the knowledge our students is our reason for being, However we cannot close our eyes to the profit for the financial resources, we depend on them. Regardless of all we are a private company, the profit moves us [...]"(University Private 02).

Different with public HEIs (Figure 2) as despite having as a starting point" sufficient financial income" their activities do not make profits; they are oriented to achieve the organizational mission. Like all organizations, or nonprofit, public HEIs



need financial resources for the development of their activities, however, their main goal is to use these resources efficiently, *ie* run maximized shape with minimal of resources possible.

3. EFFECTIVENESS OF THE RESULTS OF THE PERFORMANCE INDICATORS

Performance indicators, or metrics, are used in the context of HEIs to measure and evaluate its activities and results; however, one realizes that the adoption of these indices has an ambiguous behavior as to guarantee a good performance of these institutions. Forty three private HEIs use performance metrics; however, when looking at the result of research undertaken by the Ministry of Education (MEC), which highlighted the 50 best Brazilian higher education institutions in the year 2012, only 3 are private. Given this data it is perceived that there is no clear link between the use of performance indicators and the development of HEIs. Importantly, this data relates only institutions of a private nature (INEP, 2012).

By analyzing the context of public HEIs, the reality is different. It appears that these organizations the performance indices are strong indicators of the quality and effectiveness of the services of these organizations. This factor can be evidenced by the list that shows the best of Brazilian higher education institutions where among these there is a high prevalence of public universities (INEP, 2012).

4. FINAL REMARKS

In Brazil, there is a greater number of private HEIs compared the educational institutions of the public sphere. While these first totaling 91 institutions, public universities represent only 60 units. However, there is a greater tendency to use performance indicators by public HEIs. This finding may be associated with the complexity of the interests of stakeholders requiring these companies effective measurement mechanisms that can accurately demonstrate the expected results.

When analyzing the HEIs using performance indicators, it was noticed that in respect of research and extension, communication, institutional management and financial management services activities there was a preponderance of public organizations in adopting them. Regarding the activity of teaching - learning, private HEIs were more favorable, this, in turn, was the only one of all activities where private institutions predominated up on public.



Another clear finding in this investigation is the different financial perspectives associated with public and private institutions. While the public nature of HEIs has the financial resources your starting point because they need these resources to develop their activities, private institutions go much further, taking the financial resources not only as the kick, but as the outcome. HEIs just run profit towards the profit.

Through the analysis of the results of research conducted by the Ministry of Education (MEC), which highlighted the top 50 higher education institutions in Brazil in 2012, it was shown that the adoption of performance indicators in private HEIs has no direct relationship with the quality of the activities and the consequent results of these organizations. In contrast, public institutions adopting performance indices are strong indicators of the quality and effectiveness of services provided. This evidence demonstrates the ambiguous behavior regarding the use of performance indicators in HEIs of the two instances.

Finally, it is expected that the results that emerged from this research can be used as a reference for building studies within the theme to be here. The field of study that deals with the application of performance indicators HEIs lies eager investigations that enable greater contributions with respect to comparative analysis between public and private HEIs.

REFERENCES

AZEVEDO, I. B. (1999) **O Prazer da Produção Científica**. São Paulo: Unimep.

BARMAN, E. A. (2002) Asserting difference: the strategic response of nonprofit organizations to competition. **Social Forces**, v. 80, p. 1191-1222.

BOURNE, M. (2002) The Emperor's new scorecard. **Financial World**, p. 48-50.

BURROWS, A.; HARVEY, L. (1992) Defining quality in higher education: the stakeholder approach, paper to the AETT. In: CONFERENCE ON QUALITY IN EDUCATION,1, New York, **Proceedings ...** New York: University of York.

CHETKOVICH, C.; FRUMKIN, P. (2003) Balancing margin and mission nonprofit competition in charitable versus fee-based programs. **Administration and Society**, v. 35, p. 564-596.



INEP (2012) Instituto Nacionais de Estudos e Pesquisas, Available: <http://www.publicacoes.inep.gov.br/resultados.asp?cat=6&subcat=5>. Accessed in: february 23. 2014.

KAPLAN, R. S.; NORTON, D. P. (1992) The balanced scorecard: measures that drive performance. **Harvard Business Review**. v.70, p. 71-79.

KAPLAN, R. S.; NORTON, D. P. (1997) **The balanced scorecard: translating strategy into action**. Boston: Harvard Business school press.

KAPLAN, R. S. (1994) Devising a balanced scorecard matched to business strategy". **Strategy & Leadership**, v. 22, p. 15-25.

KONG, E. (2009) Facilitating learning through intellectual capital in social service nonprofit organizations. **International Journal of Learning**, v. 16, p. 531-550.

KONG, E. (2007) The strategic importance of intellectual capital in the nonprofit sector. **Journal of Intellectual Capital**, v. 8, p. 721-731.

MARCONI, N. A.; LAKATOS, E. M. (2004) **Metodologia Científica**. São Paulo: Atlas.

NEELY, A. (2003) Gazing into the crystal ball: the future of performance measurement. **Perspectives on Performance**, v. 2, p. 12-13.

OLIVEIRA, J. (2001) The BSC: an integrative approach to performance evaluation. **Healthcare Financial Management**, v. 55, p. 42-46.

RODRIGUES, T. K. A. (2012) **Caracterização de MPEs brasileiras quanto ao conhecimento de ferramentas de gestão**. Dissertação (Mestrado em Administração). Lavras: Available in: december/ Universidade Federal de Lavras. Available: <http://repositorio.ufla.br/handle/1/440>. Accessed in: january 11, 2014.

STEELE, J. (2001) Transforming the balanced scorecard into your strategy execution system. **Manage**, v. 1, p. 22-23.

