

Consistency of Higher Education Institutions' Strategies: A Study Based on the Stakeholders' Perception using the Balanced Scorecard

Abstract

The strategic orientation of the company was conceived as a management tool known as the Balanced Scorecard (BSC), which aims to measure and monitor the strategy in action. The objective of this study was to verify the strategic consistency in the perception of the stakeholders at Private Higher Education Institutions (HEI), through the perspective of the Balanced Scorecard. The method used was a descriptive research, through a quantitative approach. Data were collected through a questionnaire, applied at four HEIs in the State of Minas Gerais, including directors / coordinators, teachers and students called stakeholders, to identify, based on a Balanced Scorecard model with four indicators in each perspective (financial, clients, learning and growth and internal processes), the consistency of the strategies as perceived by these groups. The main results pointed to a perception difference of the managers regarding the perspectives, with a greater degree of importance given to the perspective "Learning and Growth" and "Internal Processes". The group of teachers attributed less importance to the "Customers" perspective. The main inconsistencies were found in the "Internal Processes" perspective. The "Financial" perspective presented less gaps when compared between the groups, which reveals a strategic inconsistency at the HEIs through the stakeholders' perception. It is concluded that strategic consistency can contribute to organizational competitiveness, identifying the existence of alignment in the actions developed that result in greater efficiency for a competitive scenario according to its stakeholders.

Key Words: Strategic Consistency. Balanced Scorecard. Stakeholders.

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1. Introduction

With the expansion of Brazilian Private Higher Education Institutions (HEI), in addition to several factors such as internationalization, mergers, mergers and split-ups, technological process and changes in consumer behavior, institutions seek efficiency standards for their management. In order for HEIs to conduct their actions in a competitive manner, it is necessary to use strategic management. Strategic management is a competitive advantage that seeks to identify best practices and strategies to guide business and constantly assess the consistency of its actions (Chen, Delmas & Lieberman, 2015).

To consistently evaluate the consistency of their actions, companies adopt strategic consistency, which can be defined as a sequence of internally consistent and conditional resource allocation decisions that are designed to meet the goals of an organization, sharing the resources in accordance with the interests of institutional units, leading to business performance (Venkatraman & Camillus, 1984).

The measuring of performance linked to the strategic orientation of the company was conceived as a management tool known as Balanced Scorecard (BSC), which aims to measure and monitor the strategy in action. This instrument is organized in four distinct perspectives: "Finance", "Customer", "Internal Process" and "Learning and Growth", and is used for one of the core objectives of the BSC, which is to communicate the strategy in all areas of the company, seeking to produce a unified view of the company through performance indicators and the chain of cause and effect. The BSC was developed by Prof. Robert S. Kaplan of the Harvard Business School, and consultant David P. Norton, CEO of the Nolan Norton Institute in 1992 (Hoque, 2014). According to Frezatti, Bido, Cruz and Machado (2015), BSC is one of the relevant elements to formalize the implementation of strategies.

Strategic consistency within a higher institution can be considered as a verification measure of the fulfilment of its mission and strategy and can be related with the students' perceptions, whose values, mission, vision and strategies were well defined (Kettunem, 2003). The strategic use of actions in education and the consistency of these strategies, used efficiently along with the motivational aspects, contribute to a good result and success of the students (Meneghetti, De Beni & Cornoldi, 2007).

In this context, this work presents an investigation of the perceived strategic consistency of private Higher Education Institutions (HEIs), using the perspectives of the BSC, among the directors / coordinators, teachers and students, treated as stakeholders. Thus, the present study aims to answer the following question: Is there a strategic consistency in the perception of stakeholders at Private Higher Education Institutions through the perspective of the Balanced Scorecard?

Thus, the general objective in this study is to verify the strategic consistency according to the stakeholders of private higher education institutions, through the perspectives of the Balanced Scorecard.

Managing an HEI is an increasingly complex task as the market demands for greater profitability in institutions multiply, improving the quality of education, and greater flexibility to ensure competitiveness in the face of the needs imposed by the market and by the Ministry of Education. Education and Culture (MEC). In addition, the global and domestic financial crisis needs to be considered in their strategies, which forces HEIs to compete with each other for more students, which, in turn, highlights the need for more strategic and efficient management (Lira, Gonçalves & Marques, 2015).

In this scenario, this work intends to contribute to management research at HEI, investigating the strategic consistency, which is seen as the sharing of resources and actions per business unit, predicting the level of business performance that may interfere in the results for students, teachers and stakeholders, with a view to contributing to the alignment of strategies and reducing the gaps found. The intent is to deepen the study by Rocha and Oliveira Casartelli (2014), which emphasize the importance of common strategic planning, the stakeholders' need for the dissemination of the BSC methodology and the active participation of top management.

Considering the above, this research seeks to contribute to the findings of Rocha and Oliveira Casartelli (2014) and Ferreira (2013), investigating the strategic consistency at private HEIs, and studying the stakeholders' perception, thus filling the existing gap, in order to verify how to gain a competitive advantage and to deepen the strategic management in the long term (Teixeira & Castro, 2015). The authors emphasize that, despite the widespread use of BSC for higher education, none of the studies mentioned illustrates a clear step for the execution of the strategy phase.

The method proposed is descriptive with a quantitative approach and with data collection through a questionnaire applied at four private higher education institutions - Unipac - located in Governador Valadares, Timóteo, Ipatinga and Betim, all of them in the state of Minas Gerais.

2. Theoretical Framework

2.1 Strategic Consistency

Although the general concept of consistency has been used with very different meanings in a range of contexts, Venkatraman and Camillus (1984) understand its use based on two definitions: (a) descriptive or normative and (b) conceptual or empirical. He describes that strategy research involves the general concept of consistency, contingency, congruence, alignment, etc., invoking and testing various theoretical relationships, but these invocations vary significantly in their theoretical basis and in their accuracy.

A high level of strategic consistency may signal the existence of a strong competitive strategy, or simply structural inertia (Porter, 1992). Strategic consistency means a balance in the allocation of resources in companies. Consistency can also be understood as a balance between strategic business choices and the functional levels of these strategies (Harrison, Hall & Nargundakar, 1993).

The study by Lamberg, Tikkamen, Nokelainen and Suur-Inkeroinen (2009) was based on strategic consistency, according to the pattern of competitiveness of the actions, and describes that the strategic consistency refers to the comparability in the repertoire and the amount of actions an organization undertakes to conduct its competitive position. Thus, a high level of strategic consistency may signal the existence of an explicit or implicit competitive strategy.

By relating the strategic consistency, through the management process of the BSC at HEI, the acknowledgement of the importance of strategic planning for the HEI is highlighted as a strong point. Another point would be the existence of a common strategic focus, as well as the definition of comprehensive institutional priorities, the creation of an implementation team capable of disseminating the BSC method and obtaining an IT tool to support the process and actively engage the top management in this process (Rocha & de Oliveira Casartelli, 2014).

2.2 Stakeholders

In a restricted view, the stakeholders in a social space of the organization can be understood as any group or individual that can affect or be affected by the organizational objectives (Freeman, 2010). Starik (1994), years later, considers them in terms of the extent, type of benefit, importance and, above all, the perception of what organizations are and what their objectives are.

Stakeholders are classified as internal and external stakeholders and should act with corporate social responsibility, agility and performance (Clarkson, 1995). They can be divided into two groups: environmental stakeholders (clients, owners and community) and stakeholders (Employees and suppliers). Stakeholders are considered interested parties who contribute to organizational management and evaluation (Atkinson, Waterhouse & Wells, 1997)

Within this range of considerations and propositions, the literature considers stakeholders as employees, shareholders, suppliers, customers and the community (Moore, 1999). In this research, we worked with the following stakeholders: students, teachers, coordinators and directors.

2.3 Strategies and Management of Higher Education Institutions

To establish an efficient management at Higher Education Institutions, it is necessary to consider some values, which can happen through the creation of value for students, teachers, employees and society, based on the balanced management of intangible assets and on the planning and control of financial resources that will translate into excellence in the delivery of educational services and the financial sustainability of the business (Silva, 2009). To manage these values, one can use the forward-looking BSC for internal improvement, employee investment and long-term performance (Kaplan & Norton, 1997).

Rocha and Oliveira Casartelli (2014) assume that, with the BSC's adaptation to Higher Education Institutions, it is possible to create and communicate the strategy and the directions, through a system of indicators, for all hierarchical levels of the organization, leading to strategic consistency. Therefore, it is possible to adopt the BSC in the performance measuring and assessment system linked to the organizational strategy, offering managers of Higher Education Institutions feasible options to decide on their plans and actions.

The BSC is a tool that was developed in the United States in the year 1992. Its main authors / promoters are Robert Kaplan and David Norton. One of the main objectives of the Balanced Scorecard is to enable managers to monitor and adjust the implementation of organizational strategies (Kaplan & Norton, 1997). The authors' proposition in the development of the Balanced Scorecard is that organizations, in addition to measuring financial indicators, do the same with non-financial indicators, such as clients and knowledge of their employees, always in order to create value in the process, product and / or service. According to Melo Santos, Bronzo, Oliveira and Resende (2014), the BSC model integrates measures for business strategies, according to Kaplan, in at least four dimensions: "Financial," "Customer," Internal Processes, "and" Knowledge and Growth".

BSC complements financial measures of past performance with vector measures that drive future performance (Kaplan & Norton, 1997). In his study, Lima Júnior (2008) states that BSC evolved from a measurement tool to become what Kaplan and Norton (1997) describe as a strategic management system. Although the original intent of the Scorecard system was to balance the financial historical figures with the future value guidelines for the organization, as more companies tested the concept, they found that the Balanced Scorecard with its strategy is an essential tool for alignment in short-term actions.

The main objectives of the BSC, according to Kaplan and Norton (1997), are: to clarify and translate vision and strategy; communicate and link objectives and strategic measures; Plan, set goals and align strategic initiatives; and improve strategic feedback and learning. They also add that BSC cannot be understood only as a set of critical indicators or key factors of success, but rather as the composition of an articulated chain of mutually reinforcing logical measures and objectives that function as a complex set of cause and effect relationships (they should permeate all four perspectives), and that a combination of outcome measures and performance vectors (quantitative indications of time or percentage) is possible because outcome measures without performance vectors do not communicate how outcomes are achieved (Kaplan & Norton, 1997).

Like any other organization, Higher Education Institutions need to have financial sustainability, customer and student satisfaction, learning and growth of their human capital, and internal processes that lead to efficiency-focused management. This management method can be achieved at HEI through the adaptation of the four perspectives of the BSC, through the creation of strategic maps, strategic objectives and, finally, performance indicators inherent to the sector (Silva, 2009).

Rocha and de Oliveira Casartelli (2014) argue that the use of BSC in private HEIs contributes to the definition, classification and communication of their strategy, translating vision and strategy into a set of performance measures. They synthesized the perspectives of the Balanced Scorecard in Higher Education Institutions into: financial responsibility, clients, education, internal processes, learning and growth.

The BSC was studied by Rüdell Bolignon, Pentiado Godoy and Souto Bolzan Medeiros (2014), who proposed to identify the steps necessary for the implementation of the organizational performance assessment tool. The main objective of the authors' work was to translate the vision and mission of an organization into a set of performance indicators, based on the Balanced Scorecard method, for the strategic management of the organization. And it was identified that the main benefits of the BSC are: greater knowledge of organizational strategy and mission, employee motivation, integration of the different areas of action and an improvement in the follow-up of strategic actions and a comprehensive view of organizational performance.

For the application of the questionnaire, performance indicators were evaluated and the three principles of the BSC were adopted: the cause and effect relationship; results and performance vectors; and the relation with the financial factors, as proposed by Silva (2009), within the perspectives adapted from the author by Ferreira (2013), being: Learning and Growth; Qualification of teachers; Qualification of administrative technicians; Motivation and satisfaction in the work of the teaching staff; and improvement in Information Technology - IT. The three principles are:

- a) Internal Processes: pedagogical project / diversity of courses / teaching quality; research and extension program; physical and technological infrastructure (bibliographic collection, laboratories, location, etc.); and social projects and programs;
- b) Clients: reputation for quality of teaching; meeting the expectations of the student; creation of value for the student through support service and tradition of the brand acknowledged by the market;
- c) Financial: sustainability of the institution; cost / benefit ratio of the monthly fee; rational use of available resources; and incentive programs (grants / funding policies / agreements and partnerships).

The hypotheses to be tested in this study were elaborated based on the literature review, especially based on the research results of Kaplan and Norton (1997), Serdar Asan and Tanyas (2007) - Lima Júnior (2008), Silva (2009), Lamberg et. Al. (2009), Rocha (2000), Ferreira (2013) and Rocha and de Oliveira Casartelli (2014).

Thus, the study intends to test the following hypotheses:

H0 - There are no statistically significant differences between the average scores obtained for the variables, considering the three groups management / coordination, teachers and students.

H1 - There are statistically significant differences between the average scores obtained for the variables, considering the three groups management / coordination, teachers and students.

3. Research Method

The proposed method is descriptive, using a quantitative approach and data collection through a questionnaire, at four private Higher Education Institutions - Unipac - located in Governador Valadares, Timóteo, Ipatinga and Betim.

The research was developed through a data collection survey and was conducted through questionnaires, applied to the director / coordination, teachers and students to evaluate the strategic consistency among these subjects, within the perspectives of the BSC.

In the first phase of the research, data were collected in a pilot sample with two hundred students, 21 (twenty-one) directors / coordinators and 31 (thirty-one) professors to validate the research instrument.

In the second phase of the research, new data were collected and the pilot sample was not reused, with 903 (nine hundred and three) students, 37 (thirty seven) directors / coordinators and 90 (ninety) teachers.

In the evaluation of the performance indicators, the three principles of the Balanced Scorecard were adopted: the cause and effect relation; results and performance vectors; and the relationship with financial factors, as proposed by Silva (2009), according to the questionnaire adapted from Ferreira (2013).

3.1 Data Analysis Institutions and Population

The research population consists of coordination/management staff, teachers and students from undergraduate courses in Accounting, totaling 45 people in the coordination / management group, 322 people in the teachers group and 8,520 students, approximately (data for the year 2011).

A questionnaire was elaborated that covers four perspectives of the BSC: "Learning and Growth", "Internal Processes", "Clients and Financial perspectives", in which the respondent assigns a grade from 1 to 5, ranging from of no importance to total importance. With these perspectives, the BSC considers the degree of importance, according to the respondent, of each indicator in the formation of the quality standard of Unipac, totaling 16 approaches.

A survey was conducted with 1,030 respondents, 31 of whom were eliminated because they presented zero variance, totaling 999 valid questionnaires. As proposed by Lima Júnior (2008), the questionnaires of respondents who presented zero variance, that is, attributed to same score to all indicators, were eliminated from the analyses. Hence, it is believed that the respondent did not ponder when responding, because he presented the same answer to 16 items. In the descriptive analysis, the mean represents the degree of importance the respondents attribute according to the questionnaire, which varies from 0 to 5.

The Radar chart was used to show the results presented in the descriptive analysis. This chart, also known as a Spider chart or Star chart because of its appearance, plots the values of each category along a separate axis that starts in the center of the graph and ends in the outer ring. The Radar chart compares the aggregate values of various data sequences.

In order to verify if significant differences were observed through the descriptive analysis of the data, the Analysis of Variance (Anova) was performed. ANOVA permits evaluating if the observed differences between more than two sample means can be randomly distributed, or if there are indeed differences between the means of the corresponding populations (Werkema & Aguiar, 1996). To compare the means of the Balanced Scorecard indicators between the groups, the Levene test was initially performed, identifying the homogeneity of variance between the groups. This test permits verifying the homogeneity of the variances to be compared. And, in this case, if the p-value is greater than 0.05, this indicates that the variances are significantly homogeneous.

Observing differences between means when trying to find out to for which groups the means are different, the Games-Howell test was performed. The Games-Howell comparison test is indicated for situations in which the variances are not the same between the groups and in which the groups have very different sizes (SPSS INC, 2003).

When the hypothesis of equality of variances was not rejected, the Scheffe test was used. The Scheffe test is robust for cases where the samples have very different sizes (SPSS INC, 2003). The Factorial Analysis aims to analyze the interrelationships among a vast number of variables, identifying a group of common latent dimensions, which are called factors (Hair, Babin, Money & Samouel, 2005).

4. Results

The target audience of the research is divided into three analysis groups, being “Director / Coordinator”, “Teachers” and “Students”. Figure 1 shows the sample distribution by groups. In total, 999 interviews were carried out, of which 3.7% (37 respondents) are from the Director / Coordinator group; 9.0% (90 respondents) from the “Teachers” group; and 87.3% (872 respondents) from the “Students” group. All analyses were performed for the three research groups.

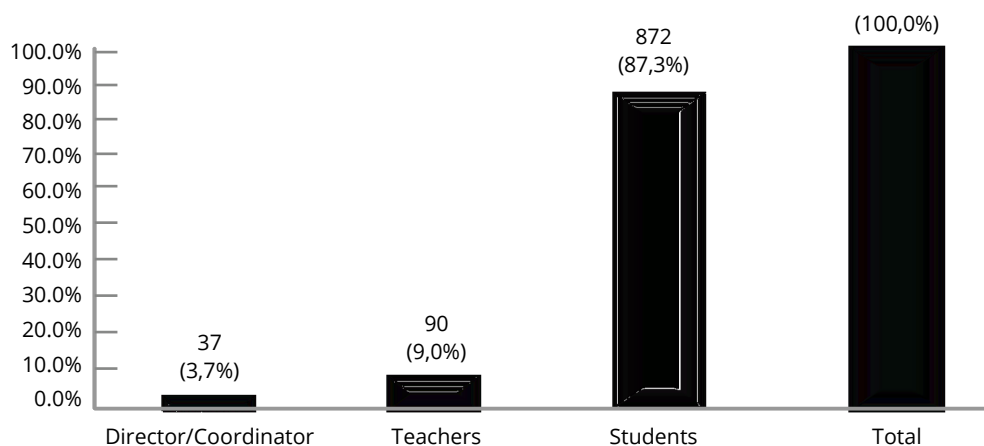


Figure 1. Interviewees per analysis group

Source: research data.

4.1 Descriptive Analyses of Degrees of Importance of the Indicators

For each of the indicators, some descriptive statistics were calculated, such as: the mean, standard deviation and importance, which is the sum of the percentages of grades 4 (four) and 5 (five) of the grade scale used in the questionnaire. The general average of the indicators was calculated, first, obtaining the average grades of each interviewee for the indicators. Then, the average was made between the interviewees and the standard deviation of the overall mean was calculated from each perspective. The significance of the differences between the averages obtained were evaluated by means of statistical tests of Analysis of Variances (Anova), to compare the mean grades.

4.1.1 Learning and growth perspective

The first BSC perspective assessed was related to Learning and Growth. It was observed that the “Students” group tends to strongly influence the significance of the differences between the groups with regard to the indicators of the perspectives. Some descriptive statistics are displayed in Table 1.

Table 1:

Descriptive Statistics of Learning and Growth Perspective

Groups	Indicators	Mean	Standard Deviation	VC(%)	Level of importance
Director/ Coordinator	1-Teachers' qualification	4.84	0.44	9.09%	97.30%
	2-Administrative technicians' qualification	4.57	0.60	13.13%	94.59%
	3-Teaching staff's motivation and satisfaction at work	4.84	0.44	9.09%	97.30%
	4-Qualification in Information Technology (IT)	4.27	0.84	19.67%	83.78%
	GENERAL AVERAGE	4.62	0.36	7.79%	93.24%
Teachers	1-Teachers' qualification	4.66	0.72	15.45%	93.33%
	2-Administrative technicians' qualification	4.32	0.83	19.21%	86.67%
	3-Teaching staff's motivation and satisfaction at work	4.67	0.67	14.35%	94.44%
	4-Qualification in Information Technology (IT)	4.14	0.80	19.32%	80.00%
	GENERAL AVERAGE	4.45	0.55	12.36%	88.61%
Students	1-Teachers' qualification	4.56	0.72	15.79%	90.25%
	2-Administrative technicians' qualification	4.09	0.92	22.49%	74.66%
	3-Teaching staff's motivation and satisfaction at work	4.34	0.87	20.05%	83.72%
	4-Qualification in Information Technology (IT)	4.02	1.04	25.87%	72.59%
	GENERAL AVERAGE	4.25	0.72	16.94%	80.30%

Source: research data.

The “Director / Coordinator” group tends to grade the “Learning and Growth” indicators higher, which can be observed for the mean values and the degrees of importance assigned and presented in Table 1. The students group tends to assign less importance to this perspective in relation to the other groups when the average grades are observed. Another relevant factor is in terms of the homogeneity of the groups, since the Variation Coefficient (VC) is lower for the Director / Coordinator group (7.79%), which indicates that the perceptions tend to be more similar among the interviewees. Some discrepancies in the results can be seen in Figure 2.

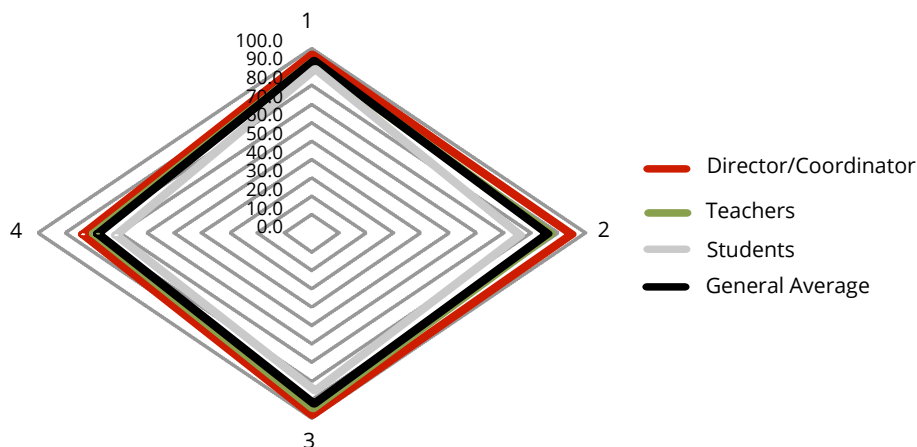


Figure 2. Degree of importance for the indicators of the Learning and Growth perspective

Source: research data.

Legend:	
1	Teacher qualification
2	Qualification of administrative technicians
3	Motivation and satisfaction in the work of the teaching staff
4	Qualification in Information Technology (IT)

From Graph 2, it can be noted that the degree of importance the students attribute to this perspective tends to be lower compared to the group of teachers and the group “Director / Coordinator”, respectively, for all indicators. The more to the end of the Radar chart, the higher the percentage of the degree of importance assigned to the indicators. The lines of the students’ percentage grades are more internal to the Radar chart and lower than the general average, which indicates lower grades of importance.

4.1.2 Internal processes perspective

The second perspective of the Balanced Scorecard evaluated was related to “Internal Processes”. The differences between the groups were significant in relation to the indicators in this perspective. These differences are mainly related to the evaluation of the directors / coordinators. Table 2 presents the descriptive statistics.

The “Director / Coordinator” group tends to assign higher grades to the indicators related to the Internal Processes Perspective, which can be observed for the mean values and for the importance grades assigned in Table 2. Students tend to assign less importance to this perspective when compared to the other groups when the average grades are observed, although the differences appear to be smaller for this perspective. Another relevant factor is in terms of group homogeneity. The Variation Coefficient (VC) is lower for the “Director / Coordinator” group (8.30%) and for the “Teachers” group (9.74%), which indicates that perceptions tend to be more similar between interviewees in these two groups. Some discrepancies in the results can be seen in Figure 3.

Table 2:
Descriptive Statistics of the Internal Processes Perspective

Groups	Indicators	Mean	Standard Deviation	VC(%)	Degree of Importance
Director/ Coordinator	1-Pedagogical project/range of courses/ teaching quality	4.76	0.50	10.50%	97.30%
	2-Research and community service program	4.24	0.55	12.97%	94.59%
	3-Physical and technological infrastructure	4.73	0.45	9.51%	100.00%
	4-Social projects and programs	4.11	0.70	17.03%	81.08%
	GENERAL AVERAGE	4.46	0.37	8.30%	93.24%
Teachers	1-Pedagogical project/range of courses/ teaching quality	4.66	0.56	12.02%	95.56%
	2-Research and community service program	4.31	0.71	16.47%	87.78%
	3-Physical and technological infrastructure	4.50	0.66	14.67%	91.11%
	4-Social projects and programs	3.84	0.91	23.70%	58.89%
	GENERAL AVERAGE	4.33	0.41	9.47%	83.33%
Students	1-Pedagogical project/range of courses/ teaching quality	4.34	0.89	20.51%	83.94%
	2-Research and community service program	3.97	1.08	27.20%	72.71%
	3-Physical and technological infrastructure	4.01	1.17	29.18%	70.64%
	4-Social projects and programs	3.96	1.04	26.26%	70.64%
	GENERAL AVERAGE	4.07	0.87	21.38%	74.48%

Source: research data.

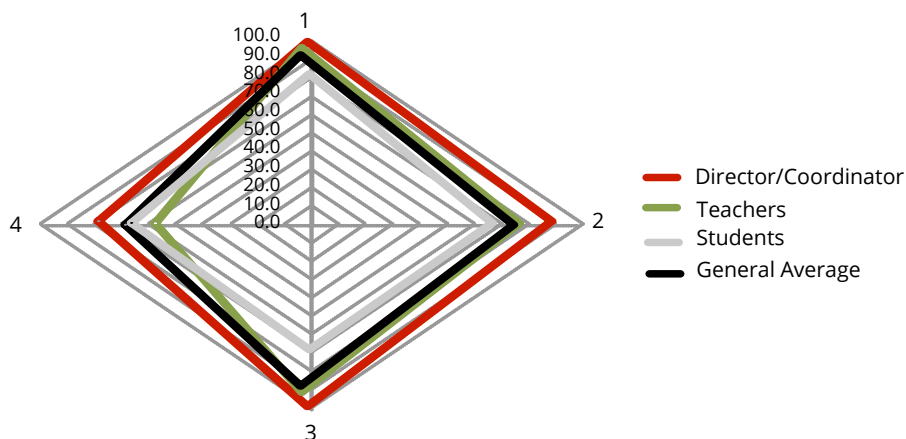


Figure 3. Degree of importance for the indicators of the Internal Processes perspective

Source: research data.

Legend:
1-Pedagogical project/range of courses/teaching quality
2-Research and community service project
3-Physical and technological infrastructure
4-Social projects and programs

Figure 3 reveals that the students tend to consider this perspective less important than the teachers and the director/coordinators, respectively, except for the attribute “Social Projects and Programs”. The lines of the students’ percentage grades are located more to the interior of the Radar graph and are lower than the general average, indicating lower grades of importance.

4.1.3 Clients perspective

Third, the “Clients’ perspective was assessed. Significant intergroup differences were observed with regard to the indicators in this perspective. These differences are mainly related to the teachers’ assessment. The descriptive statistics are displayed in Table 5.

Table 3:
Descriptive Statistics of Clients Perspective

Groups	Indicators	Mean	Standard Deviation	VC(%)	Degree of Importance
Director/ Coordinator	1-Reputation for quality of teaching	4.95	0.33	6.67%	100.00%
	2-Responding to students’ expectations	4.08	0.86	21.08%	81.08%
	3-Attribute value to the student through support services	3.86	0.92	23.83%	78.38%
	4-Brand tradition acknowledged in the market	4.30	1.13	26.28%	78.38%
	GENERAL AVERAGE	4.30	0.55	12.79%	84.46%
Teachers	1-Reputation for quality of teaching	4.62	0.59	12.77%	94.44%
	2-Responding to students’ expectations	4.04	0.83	20.54%	72.22%
	3-Attribute value to the student through support services	4.01	0.89	22.19%	65.56%
	4-Brand tradition acknowledged in the market	3.64	1.15	31.59%	56.67%
	GENERAL AVERAGE	4.08	0.63	15.44%	72.22%
Students	1-Reputation for quality of teaching	4.31	0.92	21.35%	81.88%
	2-Responding to students’ expectations	4.23	1.02	24.11%	80.96%
	3-Attribute value to the student through support services	4.10	1.04	25.37%	75.23%
	4-Brand tradition acknowledged in the market	4.10	0.99	24.15%	75.80%
	GENERAL AVERAGE	4.19	0.82	19.57%	78.47%

Source: research data.

For the “Clients” perspective, the “Teachers” group shows a slightly lower importance in relation to the other groups. Table 3 presents apparently significant mean differences between the “Teachers” group and the other groups. The Variation Coefficient (VC) is lower for the “Director / Coordinator” group (12.79%), which indicates that the perceptions tend to be more similar among the interviewees. Some discrepancies in the results can be seen in Figure 4.

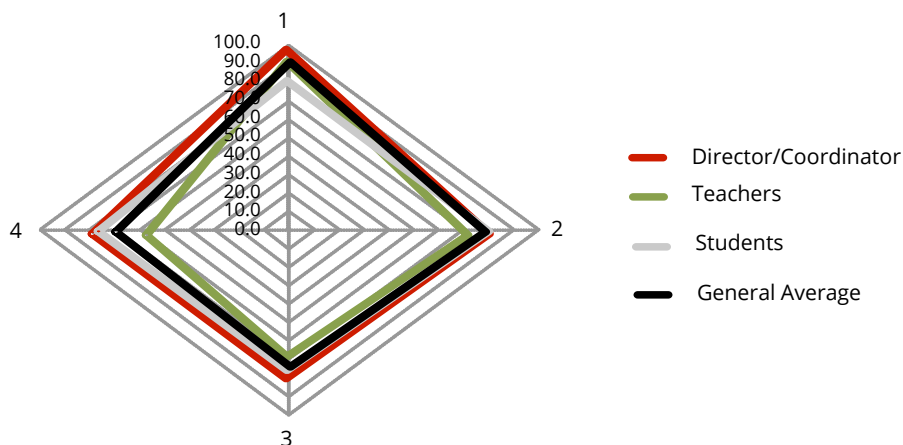


Figure 4. Degree of importance for indicators of the Clients perspective

Source: research data.

Legend:

- 1-Reputation for quality of teaching
- 2-Responding to student's expectations
- 3-Attribute value to the student through support services.
- 4-Brand tradition acknowledged in the market.

Figure 4 illustrates the teachers' low degree of perceived importance for the "Clients" perspective. For three out of four indicators, the lines for the percentage degree of importance are lower than for the other groups, indicating a very negative assessment.

4.1.4 Financial perspective

The final Balanced Scorecard perspective assessed was the "Financial". The intergroup differences were significant for the indicators in this perspective. Table 4 presents the descriptive statistics.

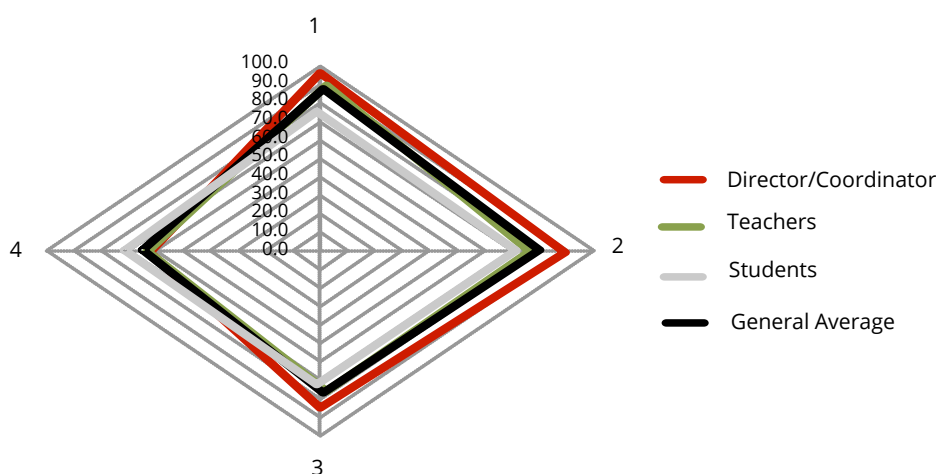
Table 4:

Descriptive Statistics of Financial Perspective

Groups	Indicators	Mean	Standard Deviation	VC(%)	Degree of Importance
Director/ Coordinator	1- Financial sustainability of the institution	4.84	0.44	9.09%	97.30%
	2- Cost/benefit replacement of monthly fee	4.35	0.68	15.63%	89.19%
	3- Rational use of available resources	4.27	0.73	17.10%	83.78%
	4- Incentive programs	3.65	0.86	23.56%	62.16%
	GENERAL AVERAGE	4.28	0.49	11.45%	83.11%
Teachers	1 Financial sustainability of the institution	4.58	0.70	15.28%	90.00%
	2- Cost/benefit replacement of monthly fee	4.06	0.83	20.44%	74.44%
	3- Rational use of available resources	4.09	0.76	18.58%	75.56%
	4- Incentive programs	3.91	1.02	26.09%	65.56%
	GENERAL AVERAGE	4.16	0.55	13.22%	76.39%
Students	1- Financial sustainability of the institution	4.10	1.01	24.63%	75.46%
	2- Cost/benefit replacement of monthly fee	4.11	2.04	49.64%	72.94%
	3- Rational use of available resources	4.02	1.03	25.62%	72.25%
	4- Incentive programs	3.99	1.26	31.58%	69.84%
	GENERAL AVERAGE	4.06	1.03	25.37%	72.62%

Source: research data.

Table 4 presents apparently significant mean differences between students and teachers on the one hand and the “Director/Coordinator” group on the other. The latter attributes greater importance to the financial sustainability indicator with a slightly higher average, apparently. The “Students” group seems to consider incentive programs less important than the other indicators. Some discrepancies in the results are shown in Figure 5.


Figure 5. Degree of importance for indicators of the Financial perspective

Source: research data.

Legend:

- 1-Financial sustainability of the institution

- 2-Cost/benefit replacement of monthly fee

- 3-Rational use of available resources

- 4-Incentive programs

Figure 5 indicates that the “Director/Coordinator” group considers the “Financial” perspective more important, which seems to have been affected by the financial sustainability indicator of the institution. Overall, the Director/Coordinator group considers most indicators more important.

4.2 Factor analysis for determination of factors for the Balanced Scorecard perspectives

What we intend to show through the Factor Analysis is whether the four indicators within each perspective can be represented by the respective factors, which in turn represent the perspectives of the BSC. Thus, a comparative analysis can be developed for the perspective as a whole, instead of indicator by indicator. The Principal Components method was used. Table 5 presents the results of the Factor Analysis of the BSC perspectives.

Table 5:

Factor Analysis of BSC Perspectives (Logarithmic Scale)

Perspective	KMO	Bartlett's	Extracted Factors	Explained Variance
Learning and growth	0.786	< 0.001	1	65.26%
Internal processes	0.809	< 0.001	1	68.03%
Clients	0.775	< 0.001	1	66.90%
Financial	0.813	< 0.001	1	68.70%

Source: research data.

Based on the results of Table 5, it was concluded that indicators can be reduced by a single factor for all perspectives. The Kaiser Meyer Olkin statistical results are all well above 0.600, which indicates a good fit of the data to the factorial analysis model. The explained variance can also be considered very reasonable, that is, the factors extracted for each perspective can explain the variability of the data through the established Balanced Scorecard indicators. Bartlett's Sphericity Test proves that the correlation matrix between the indicators for each of the factors is not an identity matrix. Thus, there are significant correlations between the indicators that make up each factor determined. According to the statistical criteria presented in Table 5, the Factorial Analyses performed were appropriate. The eigenvalues relative to the factor inputs generated by the factorial analysis were able to explain more than 65% of the variability of the data for all perspectives.

4.2.1 Result of mean comparison between factor analysis scores for BSC perspectives

According to Table 6, for scores inferior to 0.05, the equality of variance hypothesis between the groups is rejected. Therefore, Scheffé's test was applied to verify for which groups differences exist.

Table 6:

Levene Test for Equality of Variance (Logarithmic Scale)

Factors	Levene Statistic	P value	Homogeneity of variance
Factor Learning and Growth Perspective	13.799	0.000	Not assumed
Factor Internal Processes Perspective	27.592	0.000	Not assumed
Factor Clients Perspective	3.930	0.020	Not assumed
Factor Financial Perspective	18.161	0.000	Not assumed

Source: research data.

The analysis that compared the mean factor scores between the analysis groups proved to be important for a more general analysis of the Balanced Scorecard. A perception of less importance was confirmed for the interviewees from the Students group and greater importance attributed to the interviewees from the director/coordinator group, in some cases comparable to the group of teachers.

However, for a more careful analysis, a view of the indicators themselves seems to be more relevant, since it allows one to punctually assess which gaps or differences are most relevant. The factor analysis tends not to permit significant differences between the groups to be observed, since the index produced is more influenced by some variables than others. The same can occur with the analysis of the general mean grade of the perspective. In some cases, no difference is observed in the overall mean, but there are some gaps when the indicators are analyzed in isolation.

The comparative result of the mean Factor Analysis score was similar to the simple average score of the indicators for the “Learning and Growth”, “Internal Processes” and “Clients” perspectives. For the first two, the students’ assessment was lower in terms of importance. In the “Customers” perspective, both analyses did not indicate differences between the groups. However, it is more strategic to check the indicators individually with a view to a more detailed and timely conclusion.

5. Discussion

When analyzing the research results obtained through the application of questionnaires to the director/coordination, teachers and students, to evaluate the strategic consistency between these subjects within the perspectives of the BSC, it is observed that the perceptions among the stakerolders are different and do not always converge to the same opinion.

In analyzing the perception of “Learning and Growth” and “Internal Processes”, it can be inferred that the directors / coordinators tend to score these indicators higher, while students tend to attribute less importance to these perspectives in relation to the other groups. Therefore, considering that the objective of the research is to verify the strategic consistency in the perception of stakeholders in private higher education institutions, through the perspective of the Balanced Scorecard, this analysis reveals that the perceptions diverge in some attributes. Therefore, the analysis is in line with Rocha and Oliveira Casartelli (2014), which assumes that, as the BSC is suitable for Higher Education Institutions, it is possible to create and communicate the strategy and directions, offering HEI managers feasible options to decide on their plans and actions, as shown in the perception of the “Director / Coordinator” group.

When analyzing the degree of importance assessed with regard to the client, the group of teachers indicates slightly less importance in relation to the other groups. The variation coefficient (VC) for three of the four indicators referring to the degrees of importance, is lower than the other groups, which indicates a very negative evaluation. When evaluating the “Financial” perception, there are apparently significant mean differences between the groups of students and teachers in relation to the “directors / coordinators” group. Since the “Director / Coordinator” group attributed greater importance to the indicator of financial sustainability, with a somewhat higher average, it seems that students seem to assign less importance to incentive programs than to other indicators.

Regarding the factorial analyses, it was observed that they were adequate. The eigenvalues relative to the factor inputs generated by the factorial analysis were able to explain more than 65% of the data variation for all perspectives.

Overall, a perception of minor importance was confirmed for the interviewees from the “Students” group and greater importance attributed to the interviewees from the “Coordinator / Director” group, in some cases comparable to the “Teachers” group. The same can occur for the analysis of the general mean score of the perspective. In some cases, no difference is observed in the overall mean, but there are some gaps when the indicators are analyzed in isolation. Therefore, it is more strategic to check the indicators individually with a view to a more detailed and timely conclusion. Thus, the results converge to the literature because they verify the importance of the stakeholders through the adaptation of the four perspectives of the BSC, leading them to management focused on efficiency and strategic consistency (Silva, 2009).

6. Conclusion

The general objective in this study was to verify the strategic consistency in the perception of the stakeholders in Private Higher Education Institutions through the perspectives of the Balanced Scorecard.

In this sense, it can be inferred that stakeholders' perceptions are generally different, but important for the strategic consistency of HEIs and their future strategic planning. It is inferred, then, that the “Coordinator / Director” group evaluates with a higher perception than the other groups analyzed. But each group is able to present its perception through the results and, based on these, the companies can check their strategic consistency to be developed within the HEI, which makes the perceptions through the BSC efficient for HEIs, as they help to align the interests of individuals, or the individual himself with the strategies of the institution.

When verifying the management in HEI regarding the strategic consistency, which is seen as the sharing of resources and actions per business unit, predicting the level of business performance that can interfere in the results of students, teachers and stakeholders, with a view to contributing to the alignment of the strategies and reduction of the gaps found, it is perceived that the interests are different. Therefore, this has implications for the strategic environment, as it requires greater dissemination of the BSC method, active participation of top management and recognition of the importance of strategic planning common to stakeholders.

The BSC is a tool to help managers to manage efficiently and effectively, which should support HEIs at times of increased competition, changes in the industry and government requirements, as HEIs should apply appropriate performance measures to the system, which reflect and grant them the opportunity to improve their teaching and research and the quality of their facilities and employees. Such performance measures should also incorporate the perspectives of stakeholders in the HEI, which have to be communicated to all and constantly evaluated through an appropriate management method, such as the BSC, thus improving the competitiveness of HEIs, both local and nationally; it is also due to the limitation of the few institutions used, which can be extended to more institutions and locations. Although many management techniques used by HEIs are based on MEC requests, it is worth investigating the benefits that the Balanced Scorecard as a management tool can achieve.

Therefore, considering the presented results, the H1 hypothesis was confirmed, responding to the research problem that there is no internal strategic consistency from the perspective of the Balanced Scorecard. These results are intended to contribute information to the management process and to the consistency of strategies in the view of the main stakeholders of the HEI.

The work was limited by the non-segregation of results per institution, presenting instead a generalization of the results for all the HEIs surveyed, making it impossible to understand the data more closely per HEI. As a suggestion for future research, the involvement of the administrative part of HEIs is suggested, since employees are part of the process that involves institutional management, in addition to dealing directly with existing demands. As new research, one can also compare the strategies of public and private educational institutions, evaluating best practices per region, presenting the results per institution, thus avoiding their generalization, which may make it easier to verify the alignment of the perceived perspectives and indicators, considering the reality of each institution involved.

References

- Atkinson, A. A.; Waterhouse, J. H. & Wells, R. B. (1997). A stakeholder approach to strategic performance measurement. *MIT Sloan Management Review*, 38(3), pp. 25-37
- Chen, C. M.; Delmas, M. A. & Lieberman, M. B. (2015). Production frontier methodologies and efficiency as a performance measure in strategic management research. *Strategic Management Journal*, 36(1), pp. 19-36. doi: 10.1002/smj.2199.
- Clarkson, M. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *Academy of management review*, 20(1), pp. 92-117. doi: 10.5465/AMR.1995.9503271994.
- De Melo Santos, N.; Bronzo, M.; de Oliveira, M. P. V. & de Resende, P. T. V. (2014). Cultura organizacional, estrutura organizacional e gestão de pessoas como bases para uma gestão orientada por processos e seus impactos no desempenho organizacional. *BBR-Brazilian Business Review*, 11(3), pp. 106-129. doi: <http://dx.doi.org/10.15728/bbr.2014.11.3.5>.
- Ferreira, J. M. (2013). *Perspectivas do Balanced Scorecard na avaliação da consistência estratégica: um estudo baseado na percepção da direção/coordenação e dos alunos em uma Instituição de Ensino Superior*. Dissertação de Mestrado, Fundação Instituto Capixaba de Pesquisas em Contabilidade, Economia e Finanças, Vitória, ES, Brasil.
- Freeman, R. E. (2010). *Strategic management: A stakeholder approach*. Cambridge University Press.
- Frezatti, F.; Bido, D. S.; Cruz, A. P. C. & Machado, M. J. C. (2015). A estrutura de artefatos de controle gerencial no processo de inovação: existe associação com o perfil estratégico?. *BBR-Brazilian Business Review*, 12(1), pp. 129-156. doi: <http://dx.doi.org/10.15728/bbr.2015.12.6>.
- Hair Jr, J. F., Babin, B., Money, A. H., & Samouel, P. (2005). *Fundamentos de métodos de pesquisa em administração*. São Paulo: Bookman.
- Harrison, J. S.; Hall, E. H. & Nargundkar, R. (1993). Resource allocation as an outcropping of strategic consistency: Performance implications. *Academy of Management Journal*, 36(5), pp. 1026-1051. doi: 10.2307/256644.
- Hoque, Z. (2014). 20 years of studies on the balanced scorecard: Trends, accomplishments, gaps and opportunities for future research. *The British accounting review*, 46(1), pp. 33-59. doi: <http://dx.doi.org/10.1016/j.bar.2013.10.003>.
- Kaplan, R. S.; & Norton, D. P. (1997). *A estratégia em ação: Balanced Scorecard*. Rio de Janeiro: Campus.
- Kettunem, Juha. (2003). Strategic evaluation of institutions by students in higher education. *Perspectives*, 7(1), 14-18. DOI: 10.1080/1360310022000056687.

- Kettunen, J. (2003). Strategic evaluation of institutions by students in higher education. *Perspectives*, 7(1), pp. 14-18. doi: 10.1080/1360310022000056687.
- Lamberg, J. A.; Tikkanen, H.; Nokelainen, T. & Suur-Inkeroinen, H. (2009). Competitive dynamics, strategic consistency, and organizational survival. *Strategic Management Journal*, 30(1), pp. 45-60. doi: 10.1002/smj.726.
- Lima Júnior, G. F. de. (2008). *Balanced Scorecard como ferramenta de avaliação da consistência estratégica: um estudo em instituição de ensino superior privada*. Dissertação de Mestrado, Universidade Federal do Rio Grande do Norte, Natal, RN, Brasil.
- Lira, M.; Gonçalves, M. & Marques, M. D. C. D. C. (2015). Instituições de ensino superior públicas em Portugal: sua administração sob as premissas da new public management e da crise econômica global. *Revista Brasileira de Educação*, 20(60), pp. 99-119. doi: <http://dx.doi.org/10.1590/S1413-24782015206006>.
- Meneghetti, C.; De Beni, R. & Cornoldi, C. (2007). Strategic knowledge and consistency in students with good and poor study skills. *European Journal of Cognitive Psychology*, 19(4-5), pp. 628-649. doi: <http://dx.doi.org/10.1080/09541440701325990>.
- Moore, G. (1999). Tinged Shareholders theory: or what 's so special about stakeholders? *Business Ethics: A European Review*, 8(2). doi: 10.1111/1467-8608.00136.
- Porter, M. E. (1992). *Vantagem competitiva* (3ª ed.). Rio de Janeiro: Campus.
- Rocha, D. J. A. (2000). *Desenvolvimento do Balanced Scorecard para instituição de ensino superior privada: estudo de caso da unidade 4 da Universidade Gama*. Dissertação de Mestrado, Universidade Federal de Santa Catarina, Florianópolis, SC, Brasil.
- Rocha, J. M. & de Oliveira Casartelli, A. (2014). Análise do processo de implantação do Balanced Scorecard (BSC) em uma instituição de ensino superior. *Revista Gestão Universitária na América Latina-GUAL*, 7(3), pp. 268-290. doi <http://dx.doi.org/10.5007/1983-4535.2014v7n3p268>.
- Rüdel Boligon, J. A., Pentiado Godoy, L., & Souto Bolzan Medeiros, F. (2014). Balanced Scorecard: Estratégia de Gestão Vinculada à Melhoria da Qualidade Organizacional. *GEINTEC-Gestão, Inovação e Tecnologias*, 4(3), pp. 1228-1243. doi: 10.7198/S2237-0722201400030017.
- Serdar Asan, Ş. & Tanyaş, M. (2007). Integrating Hoshin Kanri and the balanced scorecard for strategic management: The case of higher education. *Total Quality Management*, 18(9), pp. 999-1014. doi: 10.1080/14783360701592604.
- SPSS Inc. (2003). *Advanced Statistical Analysis Using SPSS*.
- Silva, R. (2009). *Balanced Scorecard–BSC–Gestão do Ensino Superior–Gestão profissionalizada e qualidade de ensino para instituições de ensino superior privado*. Curitiba: Juruá.
- Starik, M. (1994). The Toronto conference: reflections on stakeholders theory. *Business and Society*, California, 33(1), pp. 82-131. doi: 10.1177/000765039403300105.
- Teixeira, J. F. & de Castro, L. M. (2015). Questões de governança e os papéis dos stakeholders no ambiente do ensino superior brasileiro. *Revista Gestão Universitária na América Latina-GUAL*, 8(2), pp. 237-257. doi: <http://dx.doi.org/10.5007/1983-4535.2015v8n2p237>
- Venkatraman, N. & Camillus, J. C. (1984). Exploring the concepts of 'fit' in strategic management. *Academy of Management Review*, 9(3), pp. 513-525.
- Werkema, M. C. C., Aguiar, S. (1996). *Planejamento e Análise de Experimentos: como identificar e avaliar os principais indicadores influentes em um processo*. Belo Horizonte, MG: Fundação Christiano Ottoni, Escola de Engenharia da UFMG.