

The Use of BSc With the Regulatory Perspective for A Private Higher Education Institution in Brazil

Ana Célia Galdino Leite (Corresponding author)

Postgraduate Program in Production Engineering, Federal University of Amazonas,
Amazonas, Brazil.

aanacgl@yahoo.com.br

Phone: +55 69 98140-9954

Address: 6200, Rodrigo Octávio Ave., Manaus – Amazonas

Zip Code: 69080-900

Marcelo Albuquerque de Oliveira (Corresponding author)

Postgraduate Program in Production Engineering, Federal University of Amazonas,
Amazonas, Brazil.

marcelooliveira@ufam.edu.br

<https://orcid.org/0000-0003-2496-646X>

Décio Luiz Reis (Corresponding author)

Postgraduate Program in Production Engineering, Federal University of Amazonas,
Amazonas, Brazil.

dercioreis@ufam.edu.br

<https://orcid.org/0000-0001-8175-3212>

Raimundo Kennedy Vieira (Corresponding author)

Postgraduate Program in Production Engineering, Federal University of Amazonas,
Amazonas, Brazil.

kennedy71@gmail.com

<https://orcid.org/0000-0003-3685-0034>

Gabriela de Mattos Veroneze (Corresponding author)

Postgraduate Program in Production Engineering, Federal University of Amazonas,
Amazonas, Brazil.

gveroneze@ufam.edu.br

<https://orcid.org/0000-0002-1978-9190>

Abstract

Higher-Education Institutions need to meet the quality requirements required by the Ministry of Education - MEC, which define the criteria that should be included in the HEI Planning. In this way, using the balanced scorecard - BSC model, using the objectives and goals established in the PDI can help the leaders in the

strategic management of HEI. Given this, the objective established for this work is to propose a BSC model from the perspective of Regulation for a private HEI. The methodology was qualitative, using the bibliographic research procedure and case study of a private IES in Porto Velho - RO. After the literature review, a fifth perspective for the BSC was developed, which was called the Regulatory Perspective, creating a Strategic Management model for the researched institution, thus improving decision-making processes.

Keywords: Strategic Management; Balanced Scorecard; Higher Education Regulations.

1. Introduction

Higher-Education Institutions in Brazil have been facing a very competitive market, and it is necessary that, besides worrying about the quality of education. They also have to worry about acting in the market, because before, these institutions had their business competing only locally, but faced with so many changes that have occurred in this market over the last few years, they have had to adapt and fit into a competitive market.

In addition, this has caused many difficulties for the management of these companies, as the higher-education institutions are extremely complex, and it is necessary to establish strategic planning to survive in the market and at the same time have to comply with the requirements of the Ministry of Education (MEC). According to Ralston *et al.* (2015), strategy is the factor that differentiates a company from its rivals. In contrast, the Higher-Education Legislation in Brazil requires that HEIs have to fulfill several mandatory requirements that often do not fit the creativity of strategic thinking.

The Brazilian Association of Higher-Education Maintainers (ABMES) released the result from a survey where 40% of high-school students intended to enter a college and started working. Of these, 18% consider the financial issue to choose the Faculty, 17% consider academic aspect and quality, and 60% have as a dream a decision factor for choosing the course (ABMES, 2017). For competitiveness in education, it is necessary to think differently about School Management with the construction of strategies and requires a new meaning for competitiveness in education (Maduro *et al.*, 2018; Menezes, 2002). This paper intends to propose a strategic management model for a private educational institution in Brazil, in the Amazon Region.

2. Strategic Management in Higher-Education Institutions

From Mccaffery (2018) perspective, higher-education institutions need to develop appropriate strategies that enable them to address the new and increasingly competitive educational environment.

External pressures consist of scarce resources and a complex and highly competitive environment, with demands for rapid response and new governance and management challenges. Higher-Education Institutions (HEI's) are subject to intensive policies, as they are perceived in a broader socioeconomic context.

Every business is created to achieve goals and strategy is the path they seek to survive. In Pucciarelli (2016) view, education is becoming a global service, an increasingly complex and competitive market. To address these challenges, higher-education institutions need an appropriate strategy. According to Sperling (2017), private higher-education institutions need to be treated as companies, despite the differentiated nature of their products and services, which cannot be evaluated in the short term. The major challenge of private HEI's is their ability to innovate in a competitive market such as education and at the same time bureaucratic with regard to educational legislation.

HEI's seek to improve themselves to offer quality education, with the new educational technologies that are in the market, using new teaching tools, as well as new methodologies that can satisfy the aspirations of new generations of students. The great challenge of HEI's is the speed of information through the Internet and the new technologies that are becoming more accessible to everyone. There needs to be a shift in thinking and acting in education to survive in the education market. From the perspective of Falabela-Cárdenas and García-Treviño (2014), it is evident the close relationship that exists between business schools that have private sector universities.

According to the studies by Menezes (2002), the school could not keep up with the dynamics of a complex and transitory society. The choice of new courses themselves is constantly changing, as there are some professions that are disappearing and others that are emerging, and it is not yet known how to be graduate them. All of this deserves special attention from Managers of Higher-Education Institutions, as they must face a number of challenges to survive in a rapidly evolving world and train professionals to meet the demands of the labor market.

From the perspective of Meyer *et al.* (2012), it is necessary to build a proper management model for private educational institutions, while following the guidelines and priorities established by the plans.

3. Brazilian Higher Education: Policies and Legislation

According to the Federal Constitution, in its articles 205 and 206, educational activity is a public function, but it is not exclusive to the State, requiring the participation of society (ZOCCOLI, 2012). Through the implementation of evaluation policies established by the Ministry of Education, quality indicators have come to be recognized by Brazilian society as a way of assessing the skills and competences of students graduated from HEI's.

In accordance to Drucker (2017), we now have the knowledge society, the information age, the network society, among other expressions, in an attempt to define the transition from an industrial condition to the speed of culture and technological economy. The Ministry of Education has advanced in pursuit of quality education. There are several strategies used by the government to make HEIs fit the indicators. The new models of on-site assessment and also through the National Student Performance Examination (ENADE) have brought society closer to the Higher-Education Institutions, because before it was not chosen a course

by the evaluation that it received from the MEC, but this factor became to be a competitive differential in the market.

In this sense, according to Silva Júnior *et al.* (2014), the regulatory processes to which higher education institutions are submitted evaluate the Institutional Development Planning (PDI) where planning is the act by which the future of the institution is decided and the monitoring of what is under construction.

4. Balanced Scorecard as a Strategic Management Tool

For Kaplan and Norton (1992), the BSC's conception and proposition resulted from the need to modify the performance indicators used by organizations (Figure 1).

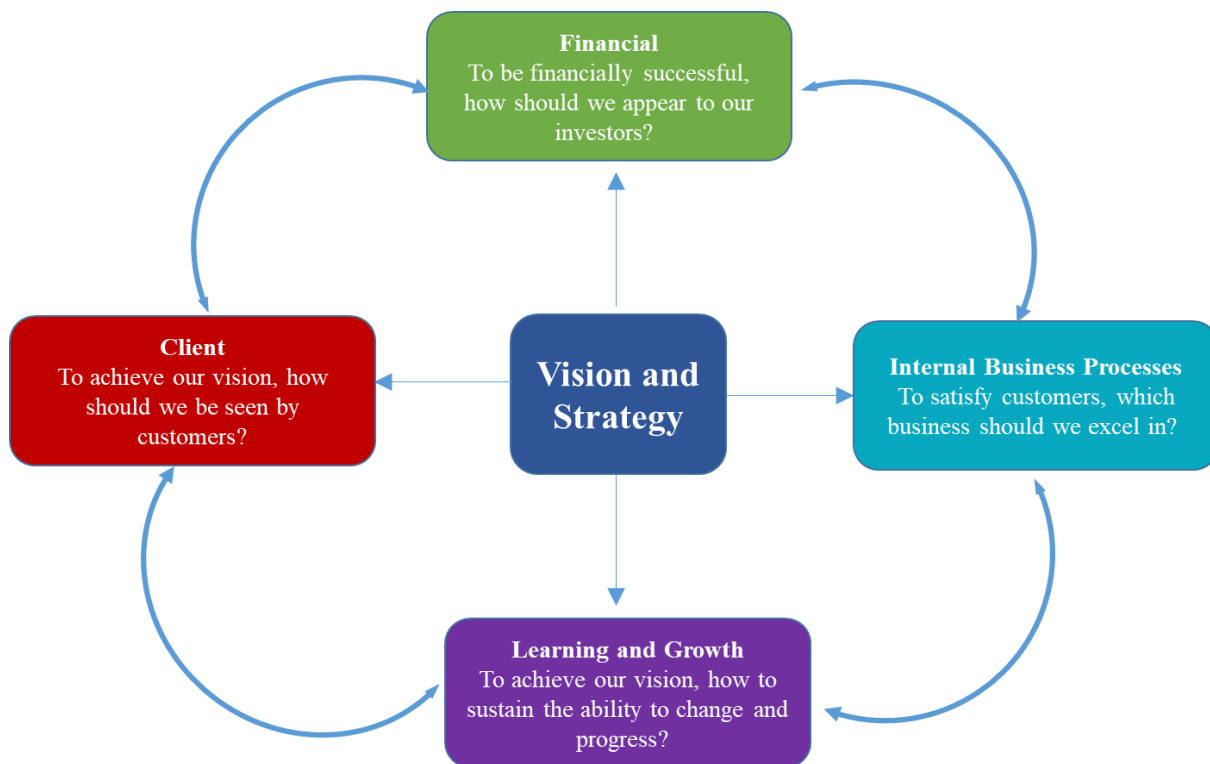


Figure 1. Balanced Scorecard (adapted from Kaplan and Norton (1992)).

In the view of Ribeiro (2005) and Fooland *et al.* (2015), BSC is used to realize the strategies, achieve practical results and successful achievements, and translate the strategy into action. They also add that BSC makes the manager focus his attention on a set of fundamental factors for the business. Its purpose is to direct the company's activities according to the organization's vision and strategy, improving internal and external communication aiming at strategic objectives. The BSC uses four central and important strategic development perspectives that should be properly defined and then measured and tracked.

BSC became a performance appraisal system whose purpose was the implementation of strategies. Kaplan and Norton (2004) say that company assets benefit from this ability to learn and grow. The three groups of inducers of learning abilities are human capital, informational capital, and organizational capital. According to Jensen (2017), BSC should be complemented by a corporate vision that unites the organization's

participants in their struggle for mastery of its competitive arena. Regarding the use of BSC as a strategic management model, these authors state that it is an efficient strategy formulation and management tool.

According to Antunes and Mucharreira (2015), the era of knowledge and new technologies requires any organization to anticipate and strategically react to the constant changes that are emerging in the context in which it operates. Intangible assets, and more precisely intellectual capital, prove to be a very effective strategic factor that enables differentiation and the creation of competitive advantage among its competitors. The authors also state that the importance of BSC is undoubtedly acknowledged and gather's consensus regarding its relevance as a strategic management tool.

In the view of Martello *et al.* (2016), BSC measures are tools for leaders to use to establish financial performance measures and complement those measures with factors that drive the cause and effect relationships of measures derived from the organization's strategy.

4.1 Balanced Scorecard Perspectives

For Kaplan and Norton (1997), companies that want to survive and thrive in the information age cannot motivate and measure performance with financial measures alone, and propose the Balanced Scorecard that incorporates a more generic and integrated set of measures linking performance from the financial, customer, internal process and learning and growth perspective.

In Coe and Letza's (2014) view, the balanced scorecard has now become an effective management tool that drives strategy for many organizations globally. Akkermans (2018) states that BSC has become a popular concept for performance measurement. It focuses management attention on just a few performance measures and interconnects different functional areas as it includes non-financial measures.

4.1.1 Financial Perspective

For Kaplan and Norton (1997), typical financial goals have to do with profitability, growth and shareholder value. Many created the financial measures because of their well-documented inadequacies, their focus in the past, and their inability to reflect contemporary value-creating actions. In Costa's (2008) view, measures such as return on investment and economic value added are excellent indicators for this perspective, as an organization's financial objectives represent long-term results. Akkermans (2018) summarizes this perspective on how the company wants to be viewed by its shareholders.

4.1.2 Customer Perspective

Kaplan and Norton (1997) and Silva (2011) state that a company's performance from the perspective of its customers has become a top management priority. The new economy has shown that customer management may have become the most important dimension of many organizations. Managers must translate their overall customer service mission statement into specific measures that reflect what really matters to them.

In Pascoa's view (2013) the perspectives are interconnected, because it is through customers who have the

good financial performance, it is necessary to have confidence that customers are the ones that contribute most to the positive result of the organization. Hladchenko (2015) states that in an educational institution, clients are not only external stakeholders in society and the professional world, but also students who have the demands corresponding to the results of the learning process.

4.1.3 Internal Processes Perspective

For Kaplan and Norton (1997) internal process perspectives must originate in factors that affect cycle time, quality, employee skills and productivity. Companies should also try to identify and measure the company's core competencies. The critical technologies needed to ensure continued market leadership, must decide which processes and competencies to excel, and specify measures for each.

In the perception of Martello et al. (2016), the objective of this perspective is to generate indicators that allow tracking its progress and efficiency, not only in relation to the process itself, but also in relation to the results it causes in the financial and customer perspectives. According to the classic approach, the success of any venture depends on customer satisfaction that is related to the quality of internal processes, motivation and qualification of staff.

4.1.4 Internal Processes Perspective

From the perspective of Kaplan and Norton (1997), a company's ability to innovate, improve and learn is only possible through its ability to launch new products, create more value for customers and continually improve operating efficiencies, and thus increase shareholder value. According to Soares (2013) to promote learning and growth and continuous improvement throughout the organization, the company needs to develop actions to improve long-term processes.

5. BSC Proposal with the Regulatory Perspective

Higher-education institutions seek to establish management systems that can monitor their performance and allow them to adjust to the challenges and requirements of the Ministry of Education. One of the challenges of HEI's is to achieve results in terms of products and services for customers (students) and positive concept regarding MEC regulation. BSC becomes an essential tool for HEI's strategic management.

The researched higher-education institution uses its Institutional Development Plan (PDI) as a strategic framework. To create the BSC, the objectives and targets set in the PDI for the 2017-2021 period were chosen. After the choice of objectives and goals, indicators and initiatives were created for each one, and subsequently grouped according to each BSC perspective.

The main conventional perspectives are financial, customer, internal business process, learning, and growth. The purpose of this paper is that HEI can use a fifth perspective called regulation. This analysis reveals the applicability of BSC in HEI and the perspectives of BSC that are relevant to it (Figure 2).

Higher-education institutions are generally considered nonprofit. Their vision and mission typically focus more on customer (student) satisfaction than profitability concerns. On the other hand, BSC implementation can use existing tools, such as a Strategic Map, to increase clarity. In this way, each one can visualize how their activities contribute to the institutional strategic objectives and the results.



Figure 2. Balanced Scorecard Proposal with the Regulatory Perspective.

The HEI’s strategy map surveyed is comprised of five basic components, usually from the bottom up: *Learning and Growth Perspective*, *Internal Process Perspective*, *Student Perspective*, *Financial Perspective* and *Regulation Perspective*, providing a visual framework that illustrates the standards of cause-and-effect chain, connecting desired outcomes to key factors essential to achieving them (Figure 3). This provides a more practical way to implement the BSC framework for higher education.

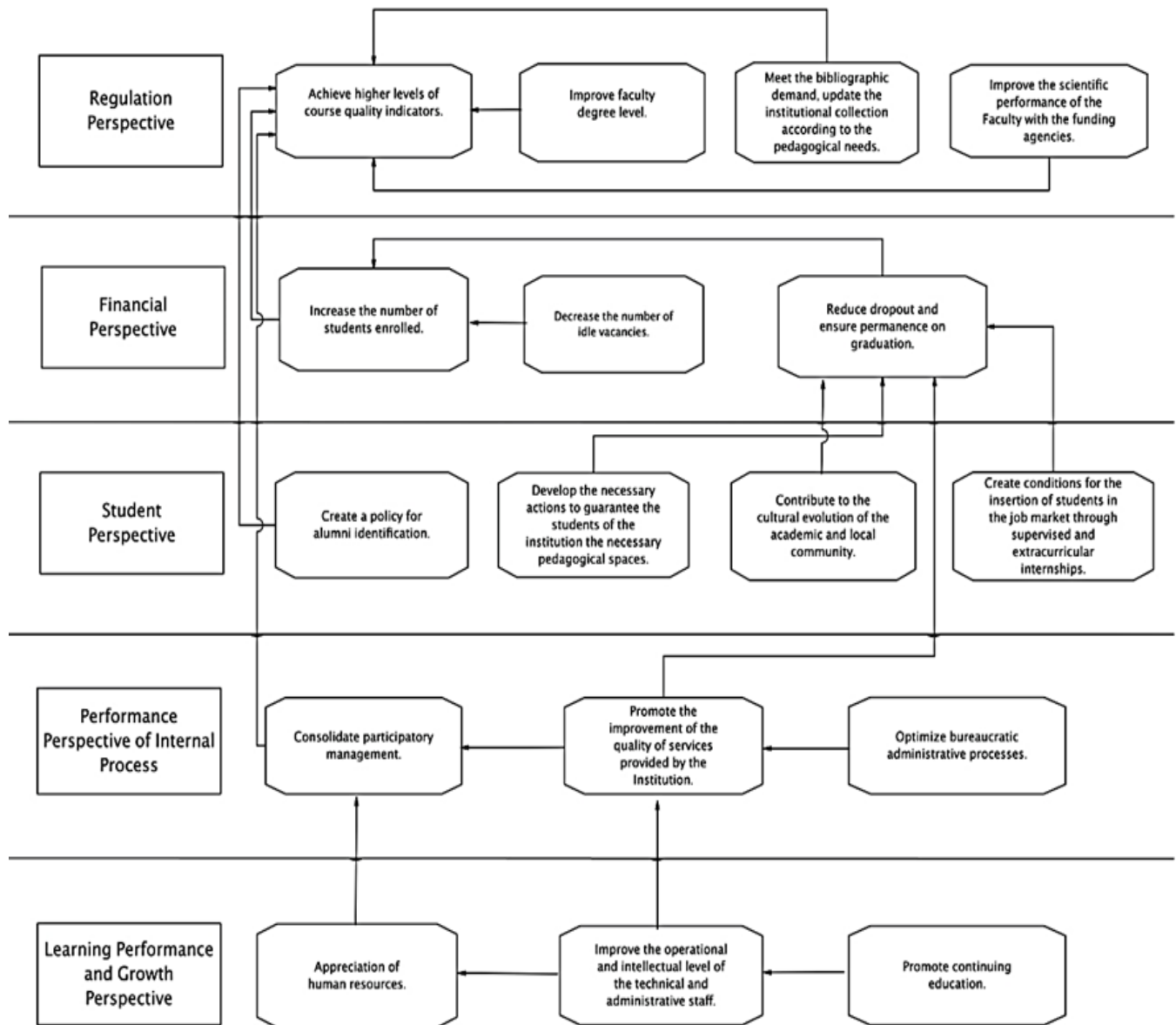


Figure 3. BSC Strategic Map of the Higher Education Institution.

5.1 Higher-Education Institution Financial Perspective

The financial perspective describes how intangible assets will be converted into tangible value. Its goal is to control how a company manages its financial resources and stakeholder involvement in the operation of the company.

In the researched HEI, the following objectives were included: *reduction of idle vacancies, reduction of dropout, guaranteeing student retention and increasing the number of students enrolled*. Table 1 presents the objectives, goals, indicators and initiatives for this perspective.

Table 1 - Financial Performance Perspective: Return on Investment and Economic Value Added; Profitability; Increased revenue mix and Productivity and cost reduction.

OBJECTIVES	GOALS	INDICATORS	INITIATIVE
Decrease the number of idle vacancies.	Decrease by 20% the percentage of current idle vacancies.	Number of vacancies remaining.	Develop marketing and partnership with schools to attract more students who are new.
Reduce dropout and ensure permanence on graduation.	Identify the cause of dropout and create a retention program in 100% of undergraduate courses.	Report of the Faculty system with the amount of dropouts.	Map the causes of student dropout and retention by applying a questionnaire; Improve the communication channel of the educational institution with its academics; Create a permanence management sector.
Increase the number of students enrolled.	Increase by 30% the total amount of students.	Increase in the total number of students enrolled.	Effectively use the existing infrastructure in the institution.

5.2 Higher-Education Institution Customer Performance Perspective

The customer perspective refers to customer relationships and markets, with an emphasis on customer wants and needs. The main measure of a customer's perspective includes stock market share, customer acquisition and customer continuity, customer satisfaction and customer profitability.

According to Ribeiro (2005), the client of a higher education institution are the students, because without them there would be no reason for HEI to exist.

The objectives chosen for this perspective are *to improve the quality of teaching, to guarantee adequate pedagogical spaces, to contribute to the cultural evolution, to promote the insertion of the students in the job market and to create a politics of identification of graduates*. Table 2 presents the objectives, goals, indicators and initiatives for this perspective.

Table 2 - Customer Performance Perspective: Market Share; Customer acquisition; Customer retention; Customer Profitability and Customer Satisfaction.

OBJECTIVES	GOALS	INDICATORS	INITIATIVE
Develop the necessary actions to guarantee to the students of the HEI the adequate pedagogical spaces.	Ensure the necessary spaces for the development of courses and Professional Practice; Take at least one-half-yearly action on entrepreneurship.	Report with practical activities developed; Academics with knowledge and desire to undertake.	Expansion of laboratories for professional practice; Creation of Junior Company of Administration and Accounting Sciences courses; Develop actions for awareness, sensitization and training on entrepreneurship.
Contribute to the cultural evolution of the academic and local community.	Develop cultural and extension programs; Encourage the participation of students and teachers in scientific initiation programs.	Cultural activities and extension courses being developed by all courses; Have students and teachers with projects developed and approved by CNPQ;	Expand the offer of extension, undergraduate and lato sensu specialization courses in the area covered by the Faculty of Rondônia - FARO; Expand Research and Extension; Improve the means of communication for the dissemination of extension actions; Expand cultural actions; Improve the site with updated information; Create an FARO newsletter; Create cultural project on the campus of FARO; Establish partnerships with SESI, SENAI, SENAC in holding events.
Create conditions for students to enter the job market through supervised and extracurricular internships.	Increase the amount of internships offered to academics.	Internship sector report on the number of students with internship relationship with companies and related agencies.	Strengthening of the Legal Practice Center; Accompaniment of the Junior Company of Civil Engineering - ECONCI; Creation of Junior Companies for the Administration and Accounting Sciences courses; Promote partnership with local businesses from various segments.
Create a policy for alumni identification.	Identify the alumni's of the College and	Have alumni students to	Develop a project to accompany alumni's;

	their insertion in the job market.	participate in College activities.	Develop one action a year, aimed at monitoring alumni's.
--	------------------------------------	------------------------------------	--

5.3 Higher-Education Institution Performance Perspective of Internal Process

This perspective is important because the company can analyze its current internal capacity and react according to market needs. In the context of HEI, the objectives of the internal process performance perspective refer to the realization of an effective learning process and excellent curriculum matrix.

The objectives of the internal process performance perspective are *to promote quality improvement, consolidate participatory management and optimize processes*. Table 3 presents the objectives, goals, indicators and initiatives for this perspective.

Table 3 - Performance Perspective of Internal Process: Failure indices; Product or service acceptance rate; Unplanned Downtime and Activity Costs x Competition.

OBJECTIVES	GOALS	INDICATORS	INITIATIVE
Promote the improvement of the quality of services provided by the Institution.	Implement the Institutional Evaluation Project and consolidate the CPA.	Satisfied Customer Index.	Promote the feasibility of the applicability of online assessments for all segments; Training for employees to improve service quality; Develop a service quality improvement project for the support of CPA.
Consolidate participatory management.	Implementation of an effective system for capturing and disseminating information; Implement calendar of periodic meetings of the board with representatives of the organs, at all levels, to monitor the management of the Faculty of Rondônia - FARO; Encourage the revitalization of student, teacher and	Capture system for dissemination of information implemented; Regular meetings with all those involved in college management; Participation of student representatives in periodic meetings of the Academic Board.	Adopt more flexible attitudes regarding the concepts of power and influence, which implies the adoption of strategies compatible with the involvement and engagement of employees, enabling the appreciation of human potential.

	technical-administrative representation bodies.		
Optimize bureaucratic administrative processes.	Rationalize and standardize processes; Implement process quality control.	Standardized and quality control processes.	Creation of a project for process optimization.

5.4 Learning Performance and Growth Perspective

This perspective includes three key evaluation criteria, which include employee satisfaction, employee continuity, and employee productivity. In the context of higher-education institutions, it is necessary to highlight staff motivation, development and curriculum innovation.

The objectives chosen for this perspective were *to improve the operational and intellectual level of the technical and administrative staff, valuing human resources and promoting continuing education*. Table 4 presents the objectives, goals, indicators and initiatives for this perspective.

Table 4 - Learning Performance and Growth Perspective: Employee Satisfaction; Retention of employees; Profitability per employee.

OBJECTIVES	GOALS	INDICATORS	INITIATIVE
Improve the operational and intellectual level of the technical and administrative staff.	Conducting training courses.	Have qualified administrative staff.	Offer short courses for employee training; Encourage employees by offering undergraduate and graduate scholarships.
Valorization of Human Resources;	Achieve 80% employee satisfaction goal.	Employee satisfaction.	Implement an assessment and recognition system.
Promote continuing education.	Promotion of actions to provide continuing education.	Relationship with the number of teachers and administrative technical staff and their qualifications.	Create a training and human resources development program that aims to keep staff in a constant educational process, with the purpose of improving individuals and consequently improving the assistance provided to users.

5.5 Regulation Perspective

The regulatory perspective for higher-education institutions focuses on the Ministry of Education's assessment that it is essential for HEI's to remain in the educational market, as the institution must achieve

grades ranging from 1 to 5, with grades 1 and 2 considered insufficient by the MEC.

For the proposal of the perspective of regulation, the following objectives were chosen: *to reach higher levels of the indicators of the quality of the courses, to improve the faculty degree level, to meet the bibliographic demand, to update the collection according to the pedagogical needs and to improve the performance of the Faculty with the funding agencies.* Table 5 presents the objectives, goals, indicators and initiatives for this perspective.

Table 5 - Regulation Perspective: Meet the requirements of Educational Legislation.

OBJECTIVES	GOALS	INDICATORS	INITIATIVE
Achieve higher levels of course quality indicators.	Achieve concept five (05) in all courses.	ENADE Evaluation and On-site Evaluation.	Create an ENADE evaluation follow-up project for each course; Create a teaching methodology that better qualifies academics; Meet the requirements of the MEC evaluation form for on-site evaluations.
Improve the Faculty titling level.	80% of teachers with a stricto sensu degree.	Stricto sensu qualification of teachers.	Promote partnerships with federal and private institutions for the qualification of teachers; Institutional support for teacher qualification; Authorize the removal of teachers for qualification.
Meet the bibliographic demand; Update the collection according to the pedagogical needs.	Expand the library's collection.	Update of the collection of all courses with works of at least three (03) years of publication.	Virtual Library Subscription; Update of the bibliographic collection; Subscription of journals.
Improve the scientific performance of the Faculty with the funding agencies.	Facilitate the publication of the scientific production of teachers and students; Create follow-up mechanism and systematic support to research groups;	Teachers with at least three (03) publications per annum; Research groups in operation; Scientific events happening systematically	Encourage teachers to publish in qualitative journals by adding to the Teaching Career Plan the promotion of the number of publications; Create research groups in all areas to develop research with the academic community; Create scientific events by publishing research developed by the academic

	Encourage the realization of scientific events; Achieve the Qualis concept in the Faculty's Scientific Journal.	during the school year; Publication of quality articles of scientific relevance in the Faculty Journal.	community; Encourage the publication of articles in the Journal of the Faculty that has scientific relevance.
--	--	--	--

6. Conclusion

The failures in higher-education organizations are attributed to the lack of strategic planning, but it is observed that higher-education institutions have some difficulty in implementing a management model, as they need to comply to the requirements of the Ministry of Education.

In this work, we used the Balanced Scorecard (BSC) model as a strategic management tool to identify the most appropriate perspectives to consider and to evaluate the performance of the researched higher-education institution. This analysis allowed verifying the applicability of BSC in the researched higher-education institution.

Given the problems of this study, the institution's PDI (Institutional Development Plan) was analyzed, and objectives and goals were found that were transformed into indicators and initiatives. The strategic map used the four perspectives of the Kaplan and Norton model, and the customer perspective was transformed into students. In addition, the perspective of regulation was added, with its objectives and goals, which were also extracted from the institution's PDI.

Therefore, this study meets the proposed general objective of *“proposing a Balanced Scorecard (BSC) model from the perspective of Regulation for a private HEI”*. The limitation of this work is the lack of further study of the new perspective of regulation.

The proposal as a BSC model with the fifth regulatory perspective is a step towards organizational performance measurement systems that match their specific goals and characteristics. One of the advantages over the model is that the system can be adjusted to changes in legislation. As future work, it is recommended to apply the new BSC model in the researched educational institution and evaluate the achievement of the goals for each category.

7. Acknowledgement

The authors thank the Postgraduate Program in Production Engineering (PPGEP) of the Federal University of Amazonas (UFAM) for their support and structure. This work was carried out with the financial support of the Amazonas State Research Support Foundation (FAPEAM).

8. References

[1] AKKERMANS, Henk A.; VAN OORSCHOT, Kim E. Relevance assumed: a case study of balanced scorecard development using system dynamics. In: System Dynamics. Palgrave Macmillan, London, 2018.

p. 107-132.

[2] ANTUNES, Marina; Ribeiro Mucharreira, Pedro. Os Intangíveis no Balanced Scorecard: A sua relevância na gestão empresarial e na estratégia do negócio. *Portuguese Journal of Finance Management and Accounting*, Vol 1, Nº 1, March 2015.

[3] BRASIL. Constituição (1988). Constituição da República Federativa do Brasil. Brasília, DF: Senado Federal: Centro Gráfico, 1988.

[4] COE, Nicholas; LETZA, Steve. Two decades of the balanced scorecard: A review of developments. *The Poznan University of Economics Review*, v. 14, n. 1, p. 63, 2014.

[5] COSTA, E. A. DA. *Gestão Estratégica: Da Empresa que temos para empresa que queremos*. 2ª ed. São Paulo: 2008.

[6] DRUCKER, Peter. *The age of discontinuity: Guidelines to our changing society*. Routledge, 2017.

[7] FABELA-CÁRDENAS, M. A.; GARCÍA-TREVIÑO, A. H. Gestión de la calidad educativa en educación superior del sector privado. *Magis. Revista Internacional de Investigación en Educación*, v. 6, n. 13, p. 65–82, 2014.

[8] HLADCHENKO, Myroslava. Balanced Scorecard—a strategic management system of the higher education institution. *International Journal of Educational Management*, v. 29, n. 2, p. 167-176, 2015.

[9] JENSEN, Michael C. Value maximisation, stakeholder theory and the corporate objective function. In: *Unfolding stakeholder thinking*. Routledge, 2017. p. 65-84.

[10] KAPLAN, R. S.; NORTON, D. P. How strategy maps frame an organization's objectives. *Financial Executive*, 2004.

[11] KAPLAN, R. S.; NORTON, D. P. The balanced scorecard - measures that drive performance. *Harvard Business Review*, 1992.

[12] KAPLAN, Robert S.; NORTON, David P. *A estratégia em ação: balanced scorecard*. Gulf Professional Publishing, 1997.

[13] MADURO, Soraia; FERNANDES, Paula O.; ALVES, Albano. Management design as a strategic lever to add value to corporate reputation competitiveness in higher education institutions. *Competitiveness Review: An International Business Journal*, v. 28, n. 1, p. 75-97, 2018.

- [14] MARTELLO, Michael; WATSON, John G.; FISCHER, Michael J. Implementing a balanced scorecard in a not-for-profit organization. *Journal of Business & Economics Research (Online)*, v. 14, n. 3, p. 61, 2016.
- [15] MCCAFFERY, Peter. *The higher education manager's handbook: effective leadership and management in universities and colleges*. Routledge, 2018.
- [16] MENEZES, J. M. *Administração estratégica como ferramenta de gestão escolar*. Dissertação (Mestrado em Engenharia da Produção) - Universidade federal de Santa Catarina, Santa Catarina, 2002.
- [17] MEYER JR, V.; PASCUCCI, L.; MANGOLIN, L. *Gestão estratégica: um exame de práticas em universidades privadas*. *Revista de Administração Pública*, v. 46, n. 1, p. 49–70, fev. 2012.
- [18] PÁSCOA, Dionísio João Manuel. *Concepção do Balanced Scorecard na Fisipe S. A*. Dissertação (Mestrado em Ciências Empresariais Ramo de Gestão de PME). Instituto Politécnico de Setúbal. Setúbal, 2013.
- [19] PUCCIARELLI, Francesca; KAPLAN, Andreas. *Competition and strategy in higher education: Managing complexity and uncertainty*. *Business Horizons*, v. 59, n. 3, p. 311-320, 2016.
- [20] RALSTON, Peter M. et al. *A structure–conduct–performance perspective of how strategic supply chain integration affects firm performance*. *Journal of Supply Chain Management*, v. 51, n. 2, p. 47-64, 2015.
- [21] RIBEIRO, Nuno Adriano Baptista. *O Balanced Scorecard e a sua aplicação às instituições de ensino superior público*. Dissertação (Mestrado em Contabilidade e Auditoria). Universidade do Minho, Braga, 2005.
- [22] SILVA Junior, Annor da *et.al*. *Políticas públicas para a educação superior: a avaliação, a regulação e a supervisão de IES privadas em debate*. *Ensaio: Avaliação e Políticas Públicas em Educação*, vol. 22, núm. 82, pp. 215-239, enero-marzo, 2014. *Red de Revistas Científicas de América Latina, el Caribe, España y Portugal Sistema de Información Científica*.
- [23] SILVA, Jorge Francisco Vaz da. *Aplicação da metodologia Balanced Scorecard numa Escola Básica do ensino Público*. Dissertação (Mestrado em Gestão de Sistemas de Informação). Instituto Universitário de Lisboa. Lisboa, 2011.
- [24] SOARES, Leonardo Humberto. *Gestão de Instituições de Ensino: o ensino superior privado e os novos parâmetros de perenidade*. *Universitas Gestão e TI*, v. 3, n. 2, p. 79-87, jul./dez. 2013
- [25] SPERLING, John. *For-profit higher education: Developing a world class workforce*. Routledge, 2017.
- [26] ZOCCOLI, M. M. DE S. *Educação Superior Brasileira: Política e Legislação*. 1ª ed. Curitiba: Intersaberes, 2012.