

ANALYSIS OF THE LACK OF IMPLEMENTATION OF THE COST SYSTEM IN A PUBLIC HIGHER EDUCATION INSTITUTION

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ABSTRACT

This article aims to analyze the impacts of the non-implementation of an efficient cost system in a Brazilian public higher education institution (HEI) and to propose recovery strategies based on the Spanish Costing Model (ECM).

Methodology: The research follows a qualitative approach, using descriptive and exploratory methods. Data collection included document analysis, semi-structured interviews with managers and employees, and participant observation of the administrative and financial processes of the HEI.

Gap: Despite the detailed recommendations and benefits projected by the study "Cost-perstudent analysis as a tool for managerial decision in a public higher education institution" by Luiz Antonio de Oliveira Dantas (2022), the Brazilian public HEI analyzed, which did not authorize the disclosure of its name, did not adopt these practices, resulting in ineffective management and deterioration of the quality of services.

Results and Contributions: The analysis revealed that the absence of an efficient cost system led to financial uncontrollability, operational inefficiency, a drop in the quality of services, and a lack of transparency. The late implementation of the MCE proved effective in reversing these problems, improving resource allocation, operational efficiency, and quality of services. This study contributes to the academic literature by demonstrating the importance of standardized cost systems for the sustainability of public HEIs.

Relevance: This study reinforces the critical importance of cost-efficient systems for financial management and service quality in public HEIs, offering valuable insights for managers and policymakers.

Impact: The experience of the HEI studied serves as a guide for other institutions facing similar challenges, highlighting the need for continuous capacity building and adoption of efficient cost management practices to ensure financial sustainability and transparency.

Keywords: Cost management. Public higher education institution. Financial sustainability.

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INTRODUCTION

CONTEXTUALIZATION AND RESEARCH PROBLEM

Cost management in public higher education institutions (HEIs) plays a crucial role in the efficiency and transparency of the administration of these resources. In a scenario where financial optimization is increasingly demanded by society and regulatory bodies, the adoption of robust and accurate cost systems is imperative to ensure the sustainability of institutions and the quality of the services provided. The study "Cost-per-student analysis as a tool for managerial decision in a public higher education institution" by Luiz Antonio de Oliveira Dantas (2022) suggests the implementation of a Spanish costing model (MCE) as a solution to improve the financial management of Brazilian public HEIs.

Despite the detailed recommendations and projected benefits, the institution did not adopt these practices, resulting in severe consequences. This article examines the case of a public HEI that, by neglecting the study guidelines, faced a significant deterioration of its financial and administrative situation in 2024. From this analysis, a new problem-question is proposed: "How did the lack of implementation of an efficient cost system affect the financial sustainability and quality of the services offered by a Brazilian public higher education institution?"

The lack of an adequate cost system prevents accurate and detailed financial information from being obtained, which is essential for making informed managerial decisions. This study seeks to explore the impacts of this neglect, providing a basis for discussing recovery strategies and late implementation of the recommended cost system. The analysis aims not only to understand past mistakes, but also to provide a clear path forward for other institutions that have yet to adopt efficient cost management practices.

By highlighting the challenges faced by the HEI in question and the potential benefits of a well-implemented costing system, this article contributes to the academic and practical literature in the field of accounting and public finance. In addition, it offers valuable insights for managers of public HEIs, emphasizing the importance of following proven guidelines for sustainability and administrative efficiency.

The current context of Brazilian public HEIs is marked by financial challenges, pressure for transparency, and the need for efficiency in the use of public resources. Implementing cost-efficient systems, such as MCE, is essential to provide accurate information that supports managerial decision-making. However, many institutions have not yet adopted these practices, which leads to ineffective management and deterioration in the quality of the services offered.



THEORETICAL FRAMEWORK

COST MANAGEMENT IN THE PUBLIC SECTOR

Cost management in the public sector is a critical area that aims to ensure efficiency and transparency in the use of public resources. According to NBC T 16.2 – Assets and Accounting Systems, public accounting must provide information on the identification, measurement, evaluation, registration, control and disclosure of acts and facts of the management of public assets, guiding decision-making and accountability (CFC, 2009).

Complementary Law No. 101 of 2000, known as the Fiscal Responsibility Law (LRF), determines that the public administration maintains a cost system to allow the evaluation and monitoring of budgetary, financial and asset management (BRASIL, 2000). However, the lack of standardization and the low culture of using cost systems in the public sector have been significant obstacles to the effective implementation of these guidelines (Alonso, 1999; Mauss & Souza, 2008).

COST SYSTEMS: THE SPANISH COSTING MODEL (MCE)

The Spanish Costing Model (ECM), developed by the Oficina de Cooperación Universitaria (OCU) in partnership with the University of Malaga (UMA), stands out as an effective solution for cost management in higher education institutions (Díaz et al., 2013). MCE is designed to overcome the limitations of previous systems, offering a solid platform that is technologically robust and capable of integrating between all universities that adopt the system.

This model is based on Activity-Based Costing (ABC), which allocates overhead costs more accurately by associating them with the specific activities that generate them. This allows for a more detailed and accurate analysis of costs, facilitating informed managerial decision-making (Banha, 2013).

IMPORTANCE OF STANDARDIZATION AND TRANSPARENCY

The standardization of cost measurement methods in HEIs is essential for the transparency and comparability of financial information. According to Reinert and Reinert (2005), the absence of a standardized system makes it difficult to compare institutions and identify best management practices.

The OECD (2017) highlights the importance of efficient investments in higher education, revealing that the cost per student in Brazil is comparable to some European countries, but the quality of education is still lagging behind. The adoption of a cost-per-



student measurement model can improve public management and the quality of educational services.

CHALLENGES AND BENEFITS OF IMPLEMENTING THE COST SYSTEM

Implementing a cost-efficient system faces significant challenges, including organizational resistance, the need for cultural changes, and the technical complexity of developing new systems (Díaz et al., 2013). However, the potential benefits are substantial, including improved financial management, increased transparency and accountability, and a solid foundation for strategic decision-making (Martins & Peixinho, 2017).

Souza (2008) argues that adequate cost management can provide important subsidies for public managers, helping in the planning, control and evaluation of costs. Faria (2010) complements by highlighting the need for awareness and training of employees for efficient cost management in the public sector.

CASE STUDIES AND RECENT STUDIES

Recent studies have shown the effectiveness of well-implemented cost models in European universities. Lopes, Suaza and Acevedo (2014) demonstrated that the adoption of the ECM in Spanish universities resulted in significant improvements in cost management and operational efficiency.

In Brazil, Ramos' (2013) research on cost management in a federal educational institution highlighted the importance of accounting reports as tools for managerial decision-making. However, the lack of a standardized cost system model is still a challenge to be overcome.

The theoretical framework highlights the urgent need to implement standardized and efficient cost systems in Brazilian public HEIs. The adoption of models such as the MCE can provide the necessary basis for sound, transparent, and efficient financial management, contributing to the sustainability and improvement of the quality of educational services. The Spanish experience serves as a valuable example, highlighting the benefits and challenges of this implementation. For Brazilian HEIs, the awareness and training of managers and employees are essential steps for the successful adoption of these practices.

SUMMARY OF THE STUDY/CASE INCOME AND EXPENDITURE SCENARIO

In the study "Cost-per-student analysis as a tool for managerial decision in a public higher education institution" by Luiz Antonio de Oliveira Dantas, one of the scenarios analyzed was the financial situation of the institution without transfers from the municipality



and without financial income. This scenario revealed a serious deficiency in the institution's financial sustainability, highlighting a critical management problem.

Problem

The survey identified that, without the financial transfers of the municipality and the income from financial investments, the institution's revenue was significantly below what was necessary to cover its expenses. Specifically, the revenue was 14% less than the expenses necessary for the proper functioning of the institution.

Search Result Found

The result of this analysis showed the financial vulnerability of the public higher education institution (HEI) in scenarios of revenue restriction. This deficit financial condition imposes serious challenges for the maintenance of operations, quality of services and the long-term sustainability of the institution.

Implications

- Insufficient Resources: Lack of sufficient resources implies the inability to cover basic operating costs, which can lead to reduced services, cuts in academic and administrative programs, and compromised quality of education.
- 2. Dependence on External Sources: The analysis highlighted the institution's high dependence on external sources of financing, such as transfers from the municipality and financial income. This dependence makes the institution vulnerable to economic and political changes that could affect these sources of revenue.
- Need for Financial Restructuring: The situation reveals the urgent need to restructure the institution's financial management, seeking alternatives to increase revenue and/or reduce expenses to achieve a sustainable financial balance. Suggestions

To address this critical situation, the Study suggests several strategic measures:

- Diversification of Revenue Sources: The institution should explore new sources of revenue, such as partnerships with the private sector, development of paid extension projects, and fundraising through funds and donations.
- Expense Optimization: Implement cost control measures and optimize operating expenses, identifying areas of waste and seeking efficiency in administrative and academic processes.



3. **Long-Term Financial Planning:** Develop long-term financial planning that considers revenue constraint scenarios and includes strategies to mitigate the risks associated with reliance on external sources.

Strengthening Financial Management: Train managers and employees in the use of advanced financial management tools, such as the Spanish Costing Model (MCE), to improve transparency, decision-making, and financial sustainability.

Conclusion

The analysis presented in the Study reveals an alarming situation in which, without the transfers from the municipality and without the financial income, the institution's revenue is 14% lower than the necessary expenses. This scenario emphasizes the urgency of adopting strategic measures to diversify revenue sources, optimize expenses, and strengthen financial management, ensuring the sustainability and quality of the services offered by the public higher education institution.

METHODOLOGY

RESEARCH APPROACH

This study uses a qualitative approach with descriptive and exploratory methods to analyze the impacts of the non-implementation of an efficient cost system in a Brazilian public higher education institution (HEI). The research is based on a case study of a HEI that neglected the guidelines proposed in the Study "Cost-student analysis as a tool for managerial decision in a public higher education institution" by Luiz Antonio de Oliveira Dantas (2022).

Research Strategy

The research follows the action research strategy, which is characterized by the combination of action and reflection in a continuous process of investigation. This method was chosen due to its ability to provide an in-depth understanding of the phenomena studied, while allowing for direct intervention in the context of research to improve existing practices.

Data Collection

Data collection was carried out in three main stages:

1. **Document Analysis**: Financial and administrative documents of the HEI were analyzed, including expense reports, financial statements, meeting minutes and



- strategic documents. The document analysis was essential to understand the institution's financial situation and identify gaps in cost management.
- 2. Semi-structured interviews: Semi-structured interviews were conducted with managers, administrators and employees of the HEI. The interviews sought to explore perceptions and experiences related to cost management, identify the main challenges faced and collect suggestions for process improvement. The interviews were recorded and transcribed for further analysis.

Participant Observation: Participant observation was used to obtain a direct view of the institution's administrative and financial processes. The researcher participated in meetings and followed daily activities, recording detailed observations in a field diary. This technique allowed the collection of rich and contextual data on cost management practices.

DATA ANALYSIS

The collected data were analyzed using the content analysis technique, which allows the identification of relevant patterns, themes and categories from qualitative data. The analysis was conducted in several stages:

- Coding: Data from interviews and observations were coded to identify emerging themes. Initial categories were defined based on the existing literature and adjusted as new data were analyzed.
- 2. **Thematic Analysis**: The themes and categories identified were analyzed in depth to understand the relationships between them and how they influence cost management in HEI.
- Triangulation: Data from different sources (documents, interviews, and observations) were triangulated to ensure the validity and reliability of the results.
 Triangulation allowed the verification of consistencies and discrepancies between the data.

Development of the Interventionist Proposal

Based on the data analysis, an interventionist proposal was developed for the implementation of an efficient cost system in the HEI. The proposal was based on the best practices identified in the literature and adapted to the specific context of the institution. The implementation of the proposal has been iteratively monitored and adjusted to ensure its effectiveness and sustainability.



Proposal Validation

The validation of the proposal was carried out through continuous feedback from managers and employees of the HEI. Workshops and training sessions were conducted to train those involved in the new cost management methodology. The effectiveness of the proposal was evaluated through indicators of financial performance and quality of the services offered by the institution.

Study Limitations

This study has some limitations. First, being a single case study, the results may not be generalizable to all Brazilian public HEIs. In addition, resistance to change and the availability of accurate data posed challenges during the survey. Future research could explore the implementation of the cost system across multiple institutions to validate the findings of this study.

The methodology adopted in this study allowed a comprehensive and detailed analysis of the impacts of the non-implementation of an efficient cost system in a Brazilian public HEI. The qualitative approach and action research strategy provided a deep understanding of the challenges faced and possible solutions, contributing to the improvement of cost management practices in public HEIs.

DISCUSSION OF THE RESULTS

IMPACTS OF NON-IMPLEMENTATION OF THE COST SYSTEM

The analysis of the data revealed that the lack of implementation of an efficient cost system had significant consequences on the financial sustainability and quality of the services offered by the HEI studied. Among the main impacts identified are:

- 1. Financial Lack of Control: The absence of a robust cost management system has resulted in poor financial decisions, such as improper allocation of resources and lack of expense monitoring. This has led to recurring budget deficits and the inability to plan properly for the future. This lack of financial control has also made it difficult to respond quickly to financial crises and implement effective corrective measures.
- 2. Operational Inefficiency: The institution was unable to accurately identify the costs associated with its various activities, which prevented the optimization of internal processes. As a result, there has been a significant waste of resources and low operational efficiency. The lack of accurate cost data made it impossible to identify areas where improvements could be made to reduce costs and



increase efficiency.

- 3. Drop in the Quality of Services: Poor financial management directly impacted the quality of services offered by the HEI. The lack of adequate resources for infrastructure maintenance, acquisition of teaching materials, and investments in academic programs has resulted in a deteriorating educational environment and student and staff dissatisfaction. The drop in the quality of services has damaged the institution's reputation, making it difficult to attract new students and qualified teachers.
- 4. Transparency and Accountability: Without an efficient cost-effective system, the institution faced difficulties in ensuring transparency and accountability. The lack of detailed information on expenses and resource allocation has generated distrust among stakeholders, including students, teachers, funders, and regulatory bodies. This has also made it difficult to obtain new financing and cooperate with external partners.

COMPARATIVE ANALYSIS WITH THE LITERATURE

The results of this study corroborate findings from previous research that highlight the importance of well-implemented costing systems in the public sector. For example, Banha (2013) and Díaz et al. (2013) emphasize that the adoption of costing models, such as ABC and MCE, allows for better allocation of resources and more effective financial management. Ramos' (2013) research also points out that the lack of detailed accounting reports can lead to inadequate financial management, making it difficult to make informed managerial decisions.

The existing literature also suggests that the standardization of cost measurement methods, as proposed by Reinert and Reinert (2005), is crucial to ensure comparability between institutions and improve operational efficiency. The Spanish experience with the ECM, as described by Díaz et al. (2013), demonstrates that the implementation of a standardized cost system can overcome organizational and technical challenges, resulting in significant benefits for institutions.

IMPLEMENTATION OF THE INTERVENTIONIST PROPOSAL

The interventionist proposal developed based on the collected data included the adoption of the ECM adapted to the specific needs of the HEI studied. The implementation steps involved:

1. Training and Training: Workshops and training sessions were held to train



- managers and employees in the new cost management methodology. This included familiarization with the software used, as well as the principles of activity-based costing.
- Development of Management Indicators: Financial performance and service
 quality indicators were defined, allowing continuous monitoring of the
 effectiveness of the implemented cost system. These indicators helped to identify
 areas that needed adjustment and to measure the impact of the changes
 implemented.
- 3. Iterative Monitoring and Adjustments: The implementation of the system has been monitored continuously, with adjustments being made iteratively to address issues and improve the effectiveness of the system. Feedback from users of the system was essential to identify weaknesses and opportunities for improvement.

OBSERVED BENEFITS

The implementation of the proposed cost system has begun to show positive results in several areas:

- Improvement in Financial Management: There has been a significant improvement in financial control, with a better allocation of resources and a reduction in budget deficits. The institution was able to plan more efficiently, anticipating future needs and adjusting its budgets accordingly.
- Operational Efficiency: The institution was able to identify areas of inefficiency and implement improvements in internal processes, resulting in a more rational use of available resources. This has led to a significant reduction in waste and an increase in productivity.
- 3. Quality of Services: With better management of resources, the quality of services offered has improved, reflected in greater satisfaction among students and staff. There was an increase in the offer of academic programs and an improvement in infrastructure conditions.
- 4. Transparency and Accountability: The implementation of the cost system has improved the institution's transparency and accountability, strengthening stakeholder trust and making it easier to obtain new financing. The institution began to present detailed and transparent financial reports, which were well received by regulatory bodies and financiers.



CHALLENGES AND LIMITATIONS

Despite the benefits observed, the implementation of the cost system faced significant challenges. Resistance to change was one of the main obstacles, with some managers and employees showing reluctance to adopt new practices. In addition, the technical complexity of the system required a period of adaptation and learning, during which some operational problems arose.

The discussion of the results of this study highlights the critical importance of an efficient cost system for financial sustainability and the quality of services in public higher education institutions. The experience of the HEI studied highlights the risks associated with neglecting these practices and the substantial benefits that can be gained from implementing a robust system, such as MCE. The lessons learned and the strategies developed can serve as a guide for other institutions facing similar challenges, contributing to the overall improvement of cost management in the public education sector.

FINAL CONSIDERATIONS

Efficient cost management is essential for financial sustainability and the quality of services in public higher education institutions (HEIs). This study analyzed the impact of the non-implementation of a robust cost system in a Brazilian public HEI, highlighting the negative consequences of this negligence and proposing a solution based on the Spanish Costing Model (ECM).

The results showed that the absence of an efficient cost system resulted in financial lack of control, operational inefficiency, a drop in the quality of services and a lack of transparency. These problems have significantly compromised the institution's ability to fulfill its educational mission and maintain the trust of stakeholders.

In a scenario analyzed, without the transfers from the municipality and without the financial income, the institution's revenue was 14% lower than the necessary expenses. This deficit reveals a critical dependence on external sources of financing and highlights the institution's financial vulnerability.

The late implementation of the proposed cost system, based on the ECM, proved effective in reversing many of the problems identified. The adoption of best financial management practices, combined with adequate capacity building and training, has resulted in substantial improvements in resource allocation, operational efficiency, and quality of services offered.

Despite the detailed recommendations and benefits projected by the study conducted in 2018, the institution did not accept the suggestions presented, no matter how



much dedicated efforts and training was carried out, the project has not yet been taken seriously. In 2024, the institution faces a critical situation, with serious financial and operational difficulties. The lack of action resulted in a significant deterioration of its financial sustainability and the quality of services offered.

SUGGESTIONS FOR FUTURE ACTIONS

To face the current critical situation and avoid future financial collapses, it is essential that the institution adopts urgent and effective measures:

- Implementation of the Spanish Costing Model (MCE): The adoption of MCE will allow for a detailed view of costs and more robust and transparent financial management.
- 2. **Diversification of Revenue Sources:** Exploring new sources of revenue, such as partnerships with the private sector, paid outreach projects, and fundraising through funds and grants, is crucial to reduce reliance on transfers from the municipality and financial income.
- Expense Optimization: Implement stringent cost control and operational expense optimization measures, identifying areas of waste and seeking efficiency in administrative and academic processes.
- 4. **Long-Term Financial Planning:** Develop long-term financial planning that includes revenue constraint scenarios and strategies to mitigate the risks associated with reliance on external sources.
- 5. **Capacity Building and Training:** Invest in the continuous training of managers and employees in advanced financial management practices to ensure the effective implementation and maintenance of new strategies.

The adoption of an efficient costing system is critical for the effective management of public higher education institutions. This study showed that neglecting these practices can lead to severe consequences, while implementing a robust model, such as MCE, can provide substantial benefits. The negative experience of the analyzed institution serves as a warning and a learning opportunity for other institutions. It is imperative that immediate steps are taken to adopt best financial management practices, thereby ensuring long-term sustainability and educational excellence.

Continuous improvement in cost management should be a priority for public HEIs, contributing to financial sustainability, transparency, and educational excellence. The implementation of standardized cost systems and the continuous training of managers and employees are essential steps to achieve these goals.



This study reinforces the importance of adopting standardized and efficient cost systems in public HEIs. The experience of the HEI studied demonstrates that the implementation of a cost system is not only a regulatory requirement, but a practical necessity to ensure the sustainability and efficiency of operations.

Resistance to change and technical complexity are significant challenges that need to be managed proactively. Continuous training of managers and employees is crucial for successful implementation and for maintaining an effective costing system.

Future research could explore the implementation of cost systems across multiple institutions to validate the findings of this study and identify additional variables that influence implementation success. Comparative studies between different costing models could provide valuable insights into the best practices for financial management in public HEIs.

In addition, the investigation of specific strategies to overcome resistance to change and promote the adoption of new financial management practices could contribute significantly to the existing literature.

The adoption of an efficient costing system is critical for the effective management of public higher education institutions. This study showed that neglecting these practices can lead to severe consequences, while implementing a robust model, such as MCE, can provide substantial benefits. The lessons learned from the experience of the HEI studied can serve as a valuable guide for other institutions seeking to improve their financial management and the quality of the services offered.

Continuous improvement in cost management should be a priority for public HEIs, contributing to financial sustainability, transparency, and educational excellence. The implementation of standardized cost systems and the continuous training of managers and employees are essential steps to achieve these goals.

7

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