

IT Governance Model for Public Institutions with a focus on Higher Education.

1st Nicolas Romero Diaz

Abstract—The research proposes an IT Governance model for Public Institutions with a specific focus on Higher Education. It utilizes best practices such as COBIT 5 and the ISO 38500 standard to generate value, including benefits, risk optimization, and efficient resource management within the institution. The primary goal is to position the IT department strategically, contributing to institutional objectives. Motivated by the need to support current and future strategic decisions in Higher Education, the study validates the model in SENESCYT. This validation aims to enhance the institution's capacity in Information Technology processes for effective IT Governance. The research recommends continuous measurement and improvement to maintain perceived value, suggesting ongoing assessment of results and catalysts to identify initiatives for enhancing the IT Corporate Governance Framework.

Index Terms—IT Governance, Higher Education, COBIT 5, ISO 38500, Strategic Positioning, Value Generation, Risk Optimization, Resource Management, Institutional Objectives, Strategic Decisions, SENESCYT, Validation Process, Information, Technology Processes, Continuous Measurement, Iterative, Improvement

I. INTRODUCTION

In the rapidly evolving landscape of Information Technology (IT), effective governance models are imperative for the successful operation and strategic positioning of public institutions, particularly in the realm of Higher Education. This research endeavors to contribute to the field by proposing a robust IT Governance model tailored specifically for public institutions, with a keen focus on Higher Education contexts. By drawing on established best practices such as COBIT 5 and the ISO 38500 standard, the model aims to not only optimize risks and resources but also to generate tangible value for the institution. The strategic positioning of the IT department within the institution is emphasized, aiming to align IT initiatives with overarching institutional objectives. Motivated by the necessity to provide support for both current and future strategic decisions in Higher Education, the study not only proposes a model but also undertakes a validation process within the framework of SENESCYT. This validation seeks to progressively enhance the institution's capacity in Information Technology processes, paving the way for effective IT Governance. To ensure the sustained success of the IT Governance Framework, the research recommends a continuous measurement approach and an iterative improvement plan, emphasizing the need for ongoing assessment and enhancement of key catalysts. This research, therefore, not only

addresses the immediate needs of IT governance in Higher Education but also lays the foundation for adaptable and value-driven governance frameworks in the dynamic landscape of technological evolution.

II. PLANTEAMIENTO DEL PROBLEMA

"How can the absence of a dedicated IT Governance framework tailored for public Higher Education institutions impact their ability to effectively manage resources, mitigate risks, and align IT initiatives with overarching institutional objectives in the rapidly evolving technological landscape? Moreover, how might the proposed IT Governance model, drawing on best practices such as COBIT 5 and the ISO 38500 standard, address these challenges and strategically position the IT department to contribute significantly to institutional excellence?"

III. DESCRIPCION DEL PROBLEMA

In the dynamic landscape of Higher Education, the integration and effective governance of Information Technology (IT) are crucial for institutions aiming to adapt to technological advancements and fulfill their strategic objectives. However, despite the recognized importance of IT Governance, there exists a notable gap in the formulation of a comprehensive model tailored specifically for public institutions in the Higher Education sector. The absence of a dedicated IT Governance framework leaves these institutions vulnerable to suboptimal resource utilization, inadequate risk management, and a lack of strategic alignment between IT initiatives and overarching institutional goals. Additionally, the evolving nature of technology further complicates this scenario, necessitating an agile and adaptable governance model. Consequently, there is a pressing need for research that not only addresses the deficiencies in existing IT Governance structures but also proposes a model grounded in best practices such as COBIT 5 and the ISO 38500 standard. This study seeks to bridge this gap by formulating and validating an IT Governance model that not only optimizes risk and resource management but also strategically positions the IT department as a driving force in achieving institutional excellence. Through this endeavor, the research aims to contribute valuable insights to the field of IT Governance, particularly within the context of Higher Education institutions.

IV. CONCLUSION

In conclusion, this research has endeavored to address the critical need for a dedicated IT Governance model tailored

for public institutions within the Higher Education sector. The exploration of best practices, including COBIT 5 and the ISO 38500 standard, has provided a solid foundation for the formulation of a comprehensive governance framework. Through the identification of gaps in existing structures and the recognition of the challenges posed by the dynamic technological landscape, this study has emphasized the importance of strategic alignment, risk optimization, and efficient resource management within the IT domain of Higher Education.

The proposed IT Governance model not only seeks to fill these gaps but also aims to position the IT department as a strategic driver for institutional success. The validation process within the SENESCYT framework adds a layer of credibility and applicability to the model, ensuring its relevance and effectiveness within the specific context of Higher Education institutions.

As Higher Education continues to navigate the complexities of technological evolution, the adaptability and continuous improvement inherent in the proposed model offer a promising approach to meeting the ongoing challenges in IT Governance.

V. ANALISIS

The research presents an IT Governance model for Public Institutions, with a focus on Higher Education. The model incorporates best practices such as COBIT 5 and the ISO 38500 standard, aiming to generate value by obtaining benefits, optimizing risks, and efficiently managing resources. The primary goal is to strategically position the IT department as a key contributor to institutional objectives, supporting both current and future strategic decisions in Higher Education.

VI. REFERENCIAS

- Espinoza-aguirre, C., Pillo-guanoluisa, D. (2018). IT Governance Model for Public Institutions with a focus on Higher Education. 2018 13th Iberian Conference on Information Systems and Technologies (CISTI), 1–14.