



Capability Gap Analysis in IT Governance for a Logistics Company Using COBIT 2019

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Abstract

This paper aims to evaluate the IT governance capability levels within a logistics company using the COBIT 2019 framework, focusing on identifying gaps between the current state (as-is) and the desired state (to-be). The methodology involves an assessment of three key Governance and Management Objectives: stakeholder engagement (EDM05), IT asset management (BAI09), and IT compliance (MEA03). The results indicate that all objectives are currently at capability level 1, highlighting the early stages of implementation and the need for substantial improvement. The study concludes that addressing these gaps through the COBIT 2019 framework will significantly enhance the company's IT governance, leading to improved operational efficiency, stronger risk management, and better alignment with strategic business goals. These findings provide actionable insights for advancing IT governance maturity, contributing to the long-term success and competitiveness of the company in the logistics sector.

Keywords: IT governance, COBIT 2019, Capability Level, Gap Analysis, Logistics

1. INTRODUCTION

In the modern age of globalization and digitalization, information technology (IT) has emerged as a critical component in enhancing business operations and improving organizational efficiency. It is no longer merely a tool for processing data; it serves as a strategic foundation that can significantly bolster a company's competitive advantage [1]. The efficient utilization of IT can offer a competitive advantage by enhancing operational effectiveness, lowering expenses, and elevating the quality of services delivered to customers [2]. By integrating IT across various business processes, companies are better equipped to respond swiftly and effectively to market changes, thereby maintaining a competitive edge [3], [4].



Despite the potential advantages, many organizations need help effectively governing their IT resources. Effective IT governance is critical for ensuring that IT resources are utilized most efficiently and effectively while managing the risks associated with IT deployment [5]. Robust IT governance frameworks, such as COBIT 2019, are designed to optimize IT resources, manage risks, and maximize the value derived from IT investments [5], [6]. However, implementing such frameworks poses significant challenges, particularly for small and medium-sized enterprises (SMEs) that may need more resources and infrastructure than larger organizations.

The challenges of IT governance are particularly evident in SMEs within specific industries, such as logistics. These companies often need help optimizing their IT systems, which can result in inefficiencies, increased operational risks, and reduced market competitiveness. Addressing these challenges requires thoroughly evaluating current IT governance practices and developing strategies that align with the organization's strategic objectives. This study focuses on a logistics company, which exemplifies the challenges SMEs face in optimizing IT governance. Despite adopting a desktop-based information system, the company has encountered issues such as the suboptimal utilization of existing IT applications, leading to inefficiencies and a lack of productivity gains. This situation highlights a gap between the current IT governance capabilities and the levels necessary to achieve the company's business objectives. This gap can reduce the company's competitiveness in the market and increase operational risk [7], [8].

This study employs the COBIT 2019 framework to assess the IT governance processes of logistics companies. This framework is widely adopted due to its straightforward and measurable standards for IT governance. Previous research underscores the effectiveness of COBIT 2019 in addressing various IT governance challenges. For instance, studies by [9] and [8] have demonstrated that COBIT 2019 provides a robust framework for aligning IT with business objectives, ensuring regulatory compliance, and managing IT-related risk.

The primary aim is to identify gaps between the current IT governance capabilities and the desired levels and to provide strategic recommendations for bridging these gaps. Through this analysis, the study seeks to enhance the company's operational efficiency, reduce risks, and improve its market competitiveness. Moreover, this research contributes to the broader discourse on IT governance within SMEs, particularly in the logistics sector, an area that has not been extensively explored in existing literature. By applying COBIT 2019 in this context, the study provides valuable insights into the practical implementation of IT governance frameworks in SMEs, addressing their unique challenges and offering actionable recommendations to optimize IT resource utilization.

2. METHODS

Figure 1 presents the methodology employed in this study, beginning with a comprehensive literature review to determine the suitability of the COBIT 2019 framework. Following this, data was collected at a logistics company to gather relevant information. The process then involves goal cascading, evaluating capability levels, and performing a gap analysis. The study culminates with strategic recommendations to enhance IT governance within the logistics company.

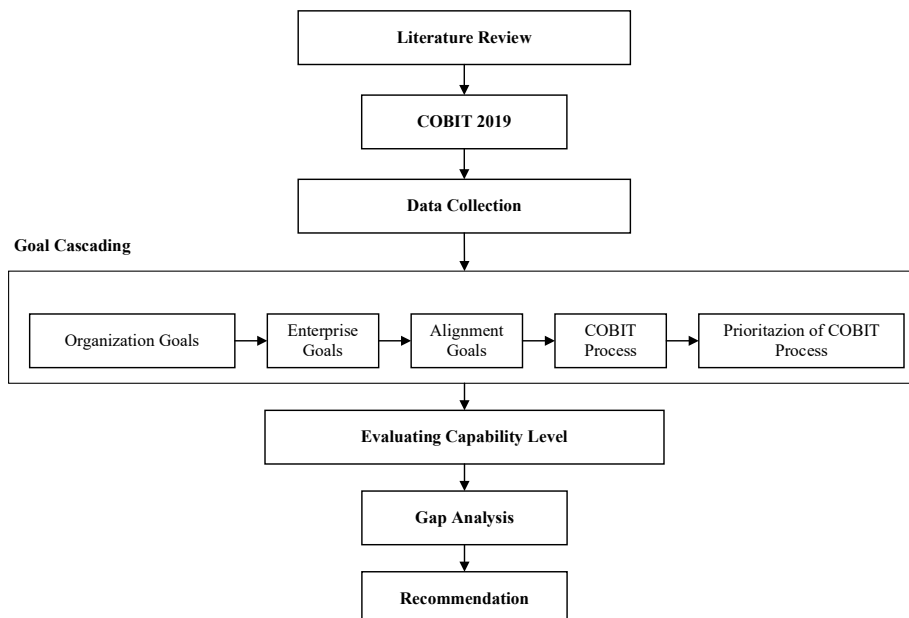


Figure 1. Methodology flowchart for IT Governance capability assessment using COBIT 2019

2.1. Literature Review

This study began with a comprehensive literature review (Table 1) to select the most appropriate framework for evaluating IT governance. Previous research has highlighted several frameworks capable of assessing IT governance, including CMMI, COSO, ISO, TOGAF, and COBIT 2019. According to studies by [10] and [11], COBIT 2019 provides the most comprehensive and measurable guidance for enhancing IT governance among these frameworks. This framework aligns well with the case study of logistics company, which aims to optimize operations and achieve its business objectives.

Table 1. Literature review

Framework	Description	Strengths	Relevant Studies
CMMI	Provides guidance for process development in software engineering and systems engineering.	Focuses on improving and optimizing development processes.	[12], [13]
COSO	Improves organizational oversight by determining integrated control systems.	Strong emphasis on risk management and internal controls.	[14], [15]
ISO 20000	A set of standards for IT service management.	Provides a framework for effective service delivery and process management.	[16], [17]
TOGAF	Provides strategies for achieving business goals through enterprise architecture.	Strong in aligning IT architecture with business strategy.	[18], [19]
COBIT 2019	A comprehensive approach (framework) for IT governance, providing guidelines for business IT alignment, risk management, and value delivery.	Comprehensive and widely adopted; includes measurable standards for IT governance.	[7], [8], [11], [20], [21]

Table 1 above compares various IT governance frameworks, each with distinct strengths. CMMI optimizes development processes, while COSO emphasizes risk management and internal controls. ISO 20000 offers a framework for IT service management, and TOGAF aligns IT architecture with business strategy. However, COBIT 2019 stands out for its comprehensive approach, providing detailed guidelines for aligning IT with business goals, maximizing value from IT investments, and managing risks. Multiple studies have recognized COBIT 2019 as a pragmatic approach to IT governance [9], [10], [11], [20], [22]. Widely recognized and adopted, COBIT 2019 is particularly suited for organizations seeking measurable and effective IT governance. For this reason, COBIT 2019 was chosen as the framework for this study, ensuring a thorough evaluation of IT governance at logistics company tailored to the organization's strategic needs.

2.2. Data Collection

In this study, data collection involved gathering detailed information from CV Hasfi (as a logistics company case study) to assess the current state of IT governance. CV Hasfi, a logistics service provider based in Kalimantan, exemplifies an organization that has embraced IT in its operations. The company offers various services, including the transportation of building materials, vehicles, and agricultural products.

Data collection was carried out through a combination of document analysis, interviews, and direct observation. Document analysis involved reviewing the company's internal reports, strategic plans, and IT-related documentation to understand the current IT governance framework. Interviews were conducted with key stakeholders, including IT managers, senior management, and operational staff, to gather insights into the perceived strengths and weaknesses of the existing IT governance processes. These interviews were supplemented by direct observation of the company's IT operations, allowing for a comprehensive understanding of how IT resources are utilized in daily operations. This approach ensured a comprehensive understanding of the organization's strategic goals, IT capabilities, and challenges in aligning IT with business objectives. The data collected served as a foundation for the subsequent goal cascading, capability evaluation, and gap analysis, ultimately informing the strategic recommendations provided in the study.

2.3. Goal Cascading

Following the selection of COBIT 2019, the next step involved Goal Cascading. This process began with mapping the strategic goals to enterprise goals, which involved identifying the organization's objectives. These organizational goals were mapped to relevant enterprise goals outlined in the COBIT 2019 framework. This step was followed by aligning the enterprise goals with the appropriate alignment goals and, subsequently, with the relevant COBIT processes. Prioritization of each COBIT process was determined based on its relevance and importance to the organization's objectives.

2.4. Evaluating Capability Level

The evaluation of the current capability levels for each COBIT process was conducted using the Guttman scale. The Guttman scale is a cumulative measurement method used in questionnaires, which is particularly suited for assessing a single dimension of a multidimensional variable. This scale was employed to obtain definitive (yes or no) responses to the evaluated issues. The results of this evaluation serve as the foundation for determining future targets for each IT process, referencing the best practices established in COBIT 2019 and aligning them with the company's strategic goals.

2.5. Gap Analysis and Recommendation

Following the capability evaluation, a gap analysis was conducted to identify the disparities between the existing capability levels and the desired targets. This analysis provided insights into existing gaps and the factors impeding the achievement of the targets. Based on the gap analysis, a set of recommendations

was developed. These recommendations include concrete steps to address the identified gaps.

3. RESULTS AND DISCUSSION

3.1 Mapping Strategic Organizational Goals to Enterprise Goals (EG)

This process began with mapping the organizational strategic goals to enterprise goals based on data collection on a comprehensive review of relevant internal company documents, supplemented by interviews with key stakeholders to understand the company's strategic objectives. The logistics company's strategic goals, as outlined in its Strategic Plan, were then systematically mapped to the enterprise goals delineated in the COBIT 2019 framework. The outcomes of this mapping process were instrumental in identifying the alignment between the organization's goals and the desired outcomes of IT governance.

From the array of enterprise goals presented in COBIT 2019, the goals most pertinent to the logistics company's operational strategy were identified, specifically EG01, EG02, EG05, EG06, EG10, and EG12. This mapping exercise underscores the close alignment between each selected Enterprise Goal in COBIT 2019 and the company's business objectives. By systematically identifying and mapping these goals, the logistics company can ensure that its IT governance strategy is aligned with and supportive of the broader business needs and strategic aspirations. This alignment is crucial for the organization, as it enables operational efficiency, enhances competitive advantage, mitigates risks, improves customer satisfaction, and fosters innovation. This structured alignment of IT governance with strategic business objectives highlights the importance of ensuring that IT investments and governance practices directly contribute to the organization's overall success. It emphasizes a holistic approach to IT governance, where the focus extends beyond mere technical compliance to encompass the creation of tangible business value through strategic IT management.

3.2 Mapping Enterprise Goals (EG) to Alignment Goals (AG)

The second stage in the goal cascade process involves identifying the alignment goals related to the previously mapped enterprise goals. This identification is facilitated by utilizing the mapping table provided in COBIT 2019, which allows for the determination of alignment goals that resonate with the company's strategic objectives. Table 2 showcases the mapping of Enterprise Goals (EG) to the Alignment Goals (AG) as outlined in COBIT 2019.

Table 2. Mapping EG to AG

Item EG	Enterprise Goals	Item AG	Alignment Goals
EG01	Achieve competitive products and services.	AG05	Provide IT services that meet customer needs.
		AG06	Ability to transform business needs into effective operational solutions.
		AG08	Facilitate and propel business operations by seamlessly incorporating technology and applications.
		AG09	Ensure the timely delivery of programs, while adhering to budget constraints and meeting quality standards.
		AG13	Develop knowledge, skills, and initiatives for business innovation.
EG02	Effectively manage business risks.	AG02	Manage risks related to information and technology (I&T).
		AG07	Ensure the security of information, processing infrastructure, applications, and privacy.
EG05	Build a customer-oriented service culture.	AG08	Facilitate and propel business operations by seamlessly incorporating technology and applications.
EG06	Ensure the continuity and availability of business services.	AG07	Ensure the security of information, processing infrastructure, applications, and privacy.
EG10	Enhance staff skills, motivation, and productivity.	AG12	Ensure a skilled and driven team that possesses a profound comprehension of both business and technology.
EG12	Manage the digital transformation program.	AG03	Maximize the benefits of profits and service outcomes to support IT.
		AG08	Support and drive business processes through the integration of technology and applications.
		AG09	Ensure the timely delivery of programs, within budget, and in compliance with quality standards.

This table showcases the mapping of Enterprise Goals (EG) to the Alignment Goals (AG) as outlined in COBIT 2019. The alignment goals are carefully selected to ensure they support and enhance the organization's strategic objectives, covering areas such as risk management, customer satisfaction, operational efficiency, and staff development. The mapping of alignment goals based on COBIT 2019 encompasses various aspects that support the company's business objectives. The identified alignment goals include AG02 (Financial), which focuses on managing risks related to information and technology (I&T). AG03 (Financial) aims to maximize the benefits derived from profits and service outcomes to support IT. Additionally, AG05 (Customer) emphasizes delivering IT services that meet customer needs, while AG06 (Customer) highlights the capability to transform business requirements into effective operational solutions.

AG07 (Internal) ensures the protection of information, processing infrastructure, applications, and privacy within the internal context. AG08 (Internal) optimizes corporate operations by integrating applications and technology, whereas AG09 (Internal) enables timely delivery of programs within budget and with high quality standards. Lastly, in terms of learning and growth, AG12 highlights the need to have a skilled and motivated team that possesses a deep understanding of both business and technology. AG13 facilitates the progress of information, expertise, and initiatives to stimulate business innovation.

This mapping exercise illustrates the necessity of aligning and optimizing various critical aspects, namely financial management, customer satisfaction, internal security, human resource development, and business innovation, to achieve the company's strategic objectives holistically.

3.3 Mapping to Governance and Management Objectives (GMOs)

The next crucial step in the process involves the process of identifying GMOs that correspond with the previously defined Alignment Goals. This process involves systematically mapping the Alignment Goals to GMOs. Through this systematic mapping, a comprehensive list of GMOs was identified, including objectives based on Figure 2.

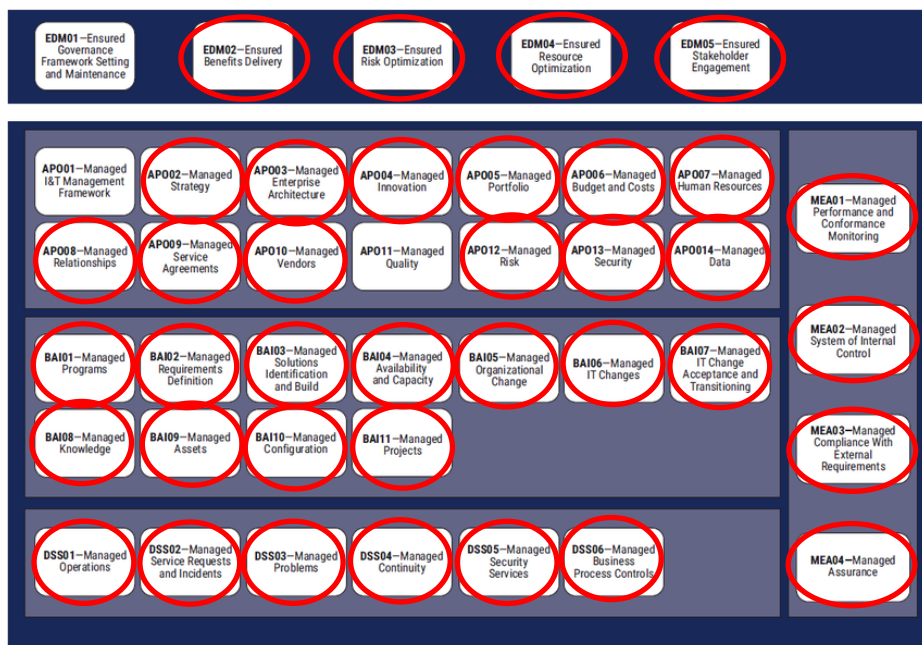


Figure 2. Mapping GMOs based on COBIT 2019 Design Factors

These GMOs will form the basis for the subsequent evaluation, which will be conducted through a structured data collection process using questionnaires with responses measured on the Guttman scale. However, it is essential to note that not all GMOs identified in the initial mapping will be subject to evaluation. This focus is essential because these objectives have been determined to have the highest significance for the company, thus demanding closer scrutiny. The process objectives selected for evaluation and subsequent questionnaire distribution are those with a target value of ≥ 75 , reflecting a high level of importance and a required capability level of up to 4. The selection of these GMOs is informed by the analysis presented in Figure 2, which highlights the objectives with a target value of ≥ 75 , ensuring that the evaluation is concentrated on the most impactful areas of IT governance. The threshold of ≥ 75 is based on organizational best practices and the principle of focusing on high-priority objectives to maximize the impact of IT governance improvements, as supported by [23].



Figure 3. GMOs based on COBIT 2019 Design Factors

Figure 3 illustrates the importance of various GMOs as determined by all design factors within the COBIT 2019 framework. The horizontal bars represent the level of importance assigned to each GMOs, with the scale ranging from -100 to 100. Positive values indicate higher relevance to the organization's strategic goals, while negative values suggest a lesser or even inverse importance. The chart reveals that specific objectives, such as EDM05 (100), BAI09 (100), and MEA03 (80), are of the highest priority, indicating that these areas should be the primary focus of the organization's IT governance efforts. These GMOs are critical for ensuring that the IT governance framework aligns effectively with the company's business objectives, particularly in areas such as risk management, value delivery, and compliance.

Conversely, objectives with negative values, suggest that these areas may either be less relevant or require a different approach based on the organization's unique context and strategic needs. The objectives that have been assigned a value of ≥ 75 (such as EDM05, BAI09, and MEA03) are particularly significant and are therefore prioritized for further evaluation and action. This threshold highlights the focus on objectives that are most critical for the success of the IT governance framework, ensuring that resources are allocated effectively to the areas that will deliver the most value to the organization. This visual representation aids in the decision-making process, helping to clarify where efforts should be concentrated to maximize the effectiveness of IT governance and its alignment with business goals.

The high importance assigned to EDM05, BAI09, and MEA03 suggests that these objectives are integral to achieving the organization's strategic goals, particularly in the areas of risk management, value optimization, and compliance. As such, these objectives will serve as the primary benchmarks for the subsequent evaluation phases. By focusing on these critical GMOs, the organization can ensure that its IT governance efforts are aligned with its most critical business needs, thereby maximizing the impact of its governance initiatives.

3.4 Capability Level Evaluation

Given their importance, EDM05, BAI09, and MEA03 have been selected for further analysis in the core model evaluation stage. This will include a detailed assessment of current capabilities and the development of targeted recommendations to enhance performance. The evaluation is expected to provide actionable insights to refine IT governance, improve operational efficiency, mitigate risks, and align with business objectives. The following table outlines the critical GMOs identified that have been evaluated as part of the IT governance assessment at logistics company. Each objective is categorized within its respective domain and currently resides at Capability Level 1.

Table 3. GMOs and their current Capability Level

Objective	Scope	Capability Level				
		1	2	3	4	5
EDM05	Ensure that stakeholders are identified and involved in IT governance and that IT performance is measured and reported transparently. Engage stakeholder approval of the goals and success measures and take corrective action as needed.	✓				
BAI09	Manage IT assets throughout their lifecycle to guarantee they deliver value at an optimal cost, align with operational goals, and are appropriately accounted for and securely protected. Ensure that critical assets and supporting services are reliable and maintain high availability. Effectively manage software licenses to secure the appropriate quantity, ensure retention, and utilize them according to business requirements while ensuring that software installations comply with licensing agreements.	✓				
MEA03	Assess if the IT systems and the related business procedures adhere to applicable rules, regulations, and contractual commitments. Ensure that the requirements for compliance are clearly understood and carefully adhered to, and that IT compliance is smoothly incorporated into the wider company compliance structure.	✓				

The results of this assessment reveal that all identified objectives within the GMOs of EDM05, BAI09, and MEA03 currently reside at the capability level 1. This level indicates that the associated processes are currently in the preliminary phases of implementation, necessitating further development to attain a more mature and adequate level of capability.

In particular, the objective EDM05 is designed to ensure the involvement of stakeholders in IT governance, with a focus on measuring and transparently reporting IT performance. Although foundational mechanisms for this process are in place, the evaluation indicates that the level of stakeholder engagement and transparency in reporting remains rudimentary, highlighting the need for significant enhancements to achieve optimal outcomes. Similarly, the objective BAI09 addresses the management of IT assets throughout their lifecycle, aiming to ensure that these assets provide optimal value, align with operational goals, and are subject to adequate accountability and physical protection. At capability level 1, however, this management process requires substantial improvements, especially in terms of efficiency and compliance with software licensing agreements. Lastly, MEA03 focuses on ensuring that IT and business processes comply with applicable laws, regulations, and contractual obligations. While the necessary compliance requirements have been identified and preliminary steps toward implementation have been taken, there remains a need for more comprehensive integration of IT compliance within the broader corporate compliance framework to advance to higher capability levels.

These findings underscore the imperative for targeted interventions and continuous development in these critical areas to enhance the overall effectiveness of IT governance at logistics company. Advancing beyond the foundational stages in these domains will be critical to achieving improved operational efficiency, more robust risk management, and more substantial alignment with the organization's strategic objectives.

3.5 Gap Analysis and Recommendations

Figure 4 illustrates a gap analysis of the existing capability levels (as-is) and the desired capability levels (to-be) for three key objectives in IT governance at the logistics company: EDM05, BAI09, and MEA03.

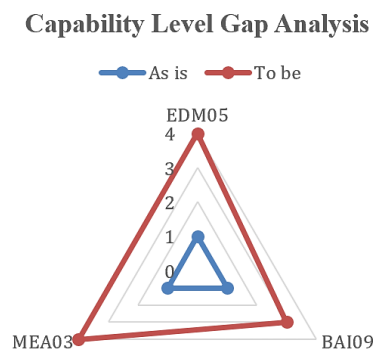


Figure 4. Gap analysis

The analysis reveals that all objectives are presently at capability level 1, indicating that the related processes are still in the early stages of implementation and operation. In contrast, the desired capability levels range between 3 and 4, reflecting the need for more mature and structured capabilities. The significant disparity between the "as-is" and "to-be" states underscores a considerable gap that must be addressed. For EDM05, this gap suggests that stakeholder engagement and IT performance reporting are not yet optimal. Enhancements in transparency processes and more proactive stakeholder involvement are required to ensure that IT governance effectively supports the company's strategic goals.

In the case of BAI09, the capability gap emphasizes the need for more effective management of IT assets throughout their lifecycle, including the maintenance and management of software licenses. Improved management is necessary to ensure that critical assets not only function optimally but also support the continuous availability of services. For MEA03, the gap highlights that while basic compliance processes are in place, stronger integration between IT compliance and overall corporate compliance is still urgently needed. This is crucial to ensure that the

company not only adheres to external regulations but also maintains robust internal controls to support sound governance.

To address the identified capability gaps between existing capability levels (as-is) and the desired capability levels (to-be), several targeted recommendations have been formulated and are summarized in the table below. These recommendations are intended to provide concrete guidance for enhancing IT governance within the organization, focusing on critical areas that require particular attention. The table outlines the identified gaps, the proposed recommendations, and the specific actions suggested for each objective:

Table 4. Identified gaps, the proposed recommendations, and the specific actions suggested

Objective	Identified Gaps	Recommendations	Proposed Actions
EDM05	Stakeholder engagement and IT performance reporting are currently at a basic level (level 1), with limited transparency and feedback mechanisms.	Enhance stakeholder engagement	<ul style="list-style-type: none"> • Strengthen communication with stakeholders. • Improve transparency in IT performance reporting. • Establish regular feedback mechanisms to ensure alignment with strategic objectives.
BAI09	IT asset management and software licensing are in the early stages of maturity (level 1), with suboptimal maintenance and protection of assets.	Improve IT asset management	<ul style="list-style-type: none"> • Strengthen policies and procedures for managing IT assets throughout their lifecycle. • Enhance software license management to ensure compliance and optimize usage. • Improve physical and operational protection for critical assets.
MEA03	Integration between IT compliance and corporate compliance policies is weak (level 1), with uncoordinated internal controls.	Strengthen compliance integration	<ul style="list-style-type: none"> • Integrate IT compliance processes with corporate compliance policies. • Ensure that IT internal controls are aligned with external regulations and corporate policies.

Objective	Identified Gaps	Recommendations	Proposed Actions
			<ul style="list-style-type: none"> Improve coordination between IT compliance and corporate compliance teams.

Table 4 presents the proposed recommendations to address the capability gaps identified in the IT governance evaluation for the three key objectives: EDM05, BAI09, and MEA03. The evaluation results indicate that these objectives currently operate at a capability level of 1, suggesting that the associated processes are in the early stages of implementation and require significant enhancement. For EDM05, there is a critical need to improve stakeholder engagement and the transparency of IT performance reporting. Prior research, such as the work of [21], has demonstrated a strong correlation between active stakeholder involvement in IT governance and increased operational efficiency and effectiveness. Accordingly, it is essential to enhance communication, ensure more transparent reporting, and implement regular feedback mechanisms to align IT governance with stakeholder expectations.

Regarding BAI09, the analysis highlights deficiencies in IT asset management, particularly in maintenance, physical protection, and software license management. This finding is consistent with [24] emphasis on the importance of effective IT asset management for supporting business continuity and reducing the risk of asset failure. Strengthening the management of IT assets throughout their lifecycle and improving compliance with software licensing agreements are crucial steps to ensure that critical assets support the organization's operational objectives more effectively.

In the case of MEA03, the identified gap indicates that the integration between IT compliance and corporate compliance policies is insufficiently coordinated. Study by [25] stresses the importance of strong integration between IT compliance and broader corporate compliance to ensure that IT processes align with both regulatory requirements and internal policies. To enhance the effectiveness of IT governance, the organization must integrate IT compliance processes with broader corporate policies, ensuring that all compliance aspects are thoroughly managed and that internal controls are in alignment with external regulations.

3.6 Discussion

The findings from this evaluation will be instrumental in guiding the logistics company toward developing a more mature and effective IT governance structure tailored to its unique operational needs and strategic objectives. Concentrating on the most critical Governance and Management Objectives (GMOs) identified

through the assessment ensures the evaluation's efficiency. It guarantees its alignment with the company's overarching strategic priorities. The application of COBIT 2019 as the evaluation framework further underscores its reliability and comprehensiveness in addressing the distinct IT governance challenges faced by small and medium-sized enterprises (SMEs) within the logistics industry.

The study's application of COBIT 2019 in this context highlights its effectiveness in bridging the gap between theoretical frameworks and practical implementation, particularly within a sector that has received limited attention in existing research. The logistics industry, characterized by its dynamic operational environment and complex supply chain demands, presents unique challenges that necessitate a robust and adaptable IT governance framework. COBIT 2019 structured approach to governance, risk management, and value delivery has proven to be a versatile tool across various industries, and its deployment in this study reaffirms its capability to align IT processes with business objectives in SMEs.

By focusing on the logistics sector, the study provides actionable insights that can directly enhance the company's IT governance framework, significantly improving operational efficiency and a more proactive approach to risk management. These enhancements are crucial for maintaining the reliability and continuity of services, which are vital in the logistics industry. Moreover, aligning IT governance with the company's strategic business goals will facilitate long-term success and enable the company to adapt more swiftly to industry-specific challenges, thus sustaining its competitive advantage in an increasingly competitive market. In conclusion, this comprehensive evaluation and its strategic recommendations serve as a critical step in the continuous development of a robust IT governance model. This model is designed to support the evolving needs of the logistics company, ensuring that it remains agile, resilient, and capable of leveraging technology to drive business growth and achieve sustained success in the market.

4. CONCLUSION

This study aimed to assess the IT governance capability levels within a logistics company using the COBIT 2019 framework, focusing on how well the current IT governance aligns with the organization's strategic objectives. The analysis revealed that the capability levels across key Governance and Management Objectives (GMOs) particularly in areas such as stakeholder engagement (EDM05), IT asset management (BAI09), and IT compliance (MEA03) are currently at level 1, indicating the early stages of implementation. These findings underscore significant gaps that must be addressed to develop a more mature and effective IT governance structure. The application of COBIT 2019 proved to be a reliable framework for identifying these gaps and provided structured recommendations for improvement. By concentrating on these critical areas, the

company has the potential to enhance operational efficiency, strengthen risk management, and ensure a better alignment between IT governance and strategic business goals. Addressing these gaps is crucial for advancing the maturity of IT governance, thereby supporting the company's long-term success, adaptability, and competitive advantage. This study contributes to a deeper understanding of IT governance in the logistics industry by demonstrating the practical effectiveness of the COBIT 2019 framework.

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