

**ANALYSIS OF THE EFFECTIVENESS OF THE INTERNAL
CONTROL SYSTEM OVER INVENTORY MANAGEMENT IN
MEDIUM-SIZED COMPANIES
(CASE STUDY : PT TMT)**

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ABSTRACT

This research aims to analyze and provide recommendations for improving the effectiveness of the internal control system in inventory management at PT TMT. PT TMT is a medium-sized manufacturing company specializing in elevators and escalators, where inventory serves as the main source of revenue for the company. Having a good internal control is crucial to influence PT TMT's business operations and mitigate existing risks. However, as a medium-sized company, PT TMT faces limitations in resources, infrastructure, and income, which can hinder the implementation of an effective internal control system. This research adopts a qualitative approach that refers to the COSO framework. Data collection techniques include interviews, direct observations, and analysis of PT TMT's Standard Operating Procedures (SOP) documents. Based on the research findings, it was found that PT TMT still has weaknesses in internal control related to the five components of the COSO internal control framework. This study is expected to provide accurate information regarding the internal control condition at PT TMT and offer recommendations to improve the weaknesses in the company's internal control.

Keywords : internal control system; inventory; inventory management; small medium enterprise

ABSTRAK

Penelitian ini bertujuan untuk menganalisis serta memberikan rekomendasi atas peningkatan efektivitas sistem pengendalian internal pada pengelolaan persediaan di PT TMT. PT TMT adalah perusahaan menengah yang beroperasi di sektor manufaktur khususnya dalam bidang *elevator* dan *escalator*, untuk itu persediaan menjadi sumber pendapatan utama perusahaan. Memiliki pengendalian internal yang baik sangat penting untuk mempengaruhi operasional bisnis PT TMT dan mengurangi risiko yang ada. Namun, sebagai perusahaan menengah, PT TMT memiliki keterbatasan sumber daya, infrastruktur dan pendapatan sehingga hal ini dapat menghambat penerapan sistem pengendalian internal yang efektif. Penelitian ini mengadopsi metode pendekatan kualitatif yang mengacu pada kerangka kerja COSO. Adapun teknik pengumpulan data dilakukan melalui wawancara, observasi langsung, dan melakukan analisis terhadap dokumen Standar Operasional Prosedur (SOP) PT TMT. Berdasarkan hasil penelitian, ditemukan bahwa PT TMT masih memiliki kelemahan pengendalian internal terkait dengan lima komponen kerangka pengendalian internal COSO. Penelitian ini diharapkan mampu memberikan informasi yang akurat mengenai kondisi pengendalian internal di PT TMT dan memberikan rekomendasi untuk memperbaiki kelemahan dalam pengendalian internal perusahaan tersebut.

Kata kunci : sistem pengendalian internal; persediaan; pengelolaan persediaan; perusahaan menengah

INTRODUCTION

Systematic controls and procedures are required to reduce the risk of fraud and ensure that every activity adheres to the Company's rules and policies in order to improve the effectiveness and efficiency of the Company's business development. Internal control is a process designed, implemented, and monitored by responsible parties, including key personnel, the board of directors, and all employees, to provide reasonable assurance of achieving the Company's vision, mission, and objectives of operational efficiency and effectiveness, financial reporting, and compliance with applicable laws and regulations. (ISA 315, 2019).

PT TMT, a 2004-founded manufacturer specializing in construction, installs, maintains and sells lifts, partitions, and escalators. PT TMT filed for a trademark in 2013 to safeguard its intellectual property and expand its market presence by selling additional units. In its more than 15 years of operation in Indonesia, PT TMT has forged partnerships with the private and government. As a medium-sized company, PT TMT faces challenges implementing an effective internal control system. This must affect business operations; in general, companies confront a variety of decision-making actions that align with company objectives since every business decision carries risks (Chairunissa, 2019). This is due to companies' limited resources, employees, and cost and benefit constraints. (Kurniawati, 2011)

Due to the complexity of potential issues, good inventory management is inaccessible (Yusyawiru, 2018). Common inventory management risks include purchasing unnecessary goods, the theft of goods, calculation errors, and transportation mistakes (Romney & Steinbart, 2021). This affects the Company's efficiency and effectiveness in administering its business to generate profits.

This study aimed to analyse the effectiveness of the Company's internal control system, particularly regarding inventory management. The analysis was conducted by examining the design and implementation of the Committee of Sponsoring Organization (COSO) internal control framework, which was a process designed and implemented by the Company, board of directors, or senior management to ensure the achievement of the Company's operational, reporting, and compliance objectives. This research is

anticipated to provide information about internal control in medium-sized companies, particularly in the manufacturing industry, and serve as a reference for future research.

LITERATURE STUDY

Internal Control

According to Karim (2018), the internal control system comprises company-wide policies and procedures implemented by all personnel, regardless of position or level, to mitigate business risks and provide reasonable assurance. As defined by Puspasari (2019), internal control is an action to plan company policies to safeguard company assets and monitor and evaluate the results of planning and actions. Implementing a system of policies and procedures encompassing various aspects of operations, reporting, and compliance within the Company supports the conclusion that internal control plays an essential role. The objective is to reduce risk and provide sufficient assurance.

Internal Control Framework

Each COSO internal control framework component possesses five components which aim to accomplish effective internal control. These components include the control environment, the risk assessment, the control activities, information and communication, and the monitoring activities. (Figure 1)

Previous Research

Researchers analysed several previous studies to indicate expanding comprehension and support analysis of the discussed issues. The reference was used as a comparison and reference to ensure that the research contained no significant similarities.

Kurniawati (2011) researched small and medium-sized companies' internal control systems. The research employed a case study approach in private and family-owned small and medium-sized companies. This study discovered that small and medium-sized companies have room for development in five components of internal control, ranging from the control environment to revenue cycle-related monitoring activities.

Cheng, Beng, and Jae (2017) concluded in their research on internal control evaluation and operational efficiency that successful internal control not only influences the quality of the information received by investors for decision-making but also has the potential to increase the Company's overall operational efficiency. Therefore, effective internal control can provide the Company with multiple benefits.

Karim (2018) analysed internal control vulnerabilities in manufacturing companies, particularly in administering lubricating fluids. Observation and document analysis were used in the study to

compare and validate the accuracy of documents obtained from management. Among the identified flaws were the absence of a routine schedule for stocktaking and a lack of separation of duties and responsibilities in receiving raw materials and accessing information in the system, as demonstrated by the findings.

Jaunanda (2020) analysed the PT STI inventory cycle internal control system, concentrating on the appropriate subsector. This research employs in-depth interviews and document analysis to achieve a thorough comprehension. According to the findings, PT STI had accounting procedures that complied with the COSO framework, conducted periodic reviews on raw and finished goods inventory, and segregated responsibilities for receiving and recording goods.

Based on previous research, an effectively-designed internal control system positively affected the Company's operational performance. The object of this research was engaged in a different industry than previous research.

RESEARCH METHOD

This study was qualitative. A qualitative approach is a strategy of research that emphasises an in-depth comprehension of the words and descriptions employed rather than the quantification of data. This approach is predominant in examining the relationship between theory and research subjects, thereby fostering a deeper comprehension of the study phenomenon. This research employed techniques of purposive data collection, which is a form of non-probability sampling. Random sampling was not attempted in this study, which seeks to select problems strategically; thus, the sample was relevant to research questions and theories (Bell & Harley, 2019). According to Sugiyono (2015), the categories of research data can be categorised based on their source, nature, method of collection, and duration. There are two categories of data based on how they are obtained: primary and secondary data, and researchers utilise both kinds of information. Primary data consists of company financial reports, inventory management standard operating procedures, firsthand observations, and management interviews. Secondary data, meanwhile, consists of literature reviews from literature studies and prior research pertinent to this research topic.

The procedure for collecting data in this study commenced with a review of the relevant literature and previous research. In addition, interviews were conducted with management and analysed documents about the Company's inventory management internal control system.

This research commenced with interviews with PT TMT's management and employees to collect general information regarding the Company's business overview. This study analysed the Company's internal control system in the inventory cycle based on the results of interviews, observations, and primary data obtained from the Company. Subsequently, it provided recommendations for weaknesses in the Company's internal control system in the inventory cycle.

RESEARCH RESULTS AND DISCUSSION

This study described the analysis of the internal control of the inventory cycle at PT TMT. This analysis aimed to assess the conformance of the internal control framework implemented by PT TMT with the COSO (2013) standards for inventory planning and recording. Consequently, this endeavour could assist in identifying weaknesses and provide recommendations for enhancing internal control, which was anticipated to increase the effectiveness and efficiency of internal control at PT TMT by reducing the risk of inventory-related errors and fraud.

The following was an analysis of the conformity between PT TMT's inventory cycle internal control and the COSO internal control framework:

1. Components of the Control Environment

- a. Despite its Principle of Commitment to Integrity and Ethical Values, the Company lacks a system for reporting unethical or unethical behaviour by employees. The Company can receive reports on integrity violations and ethical values through electronic communications facilities, and the whistleblower may also utilise anonymous electronic correspondence to conceal his or her identity.
- b. The weakness of the Principle of Management Independence in Supervision Activities was that the personnel of the Board of Commissioners continued to have familial ties with Directors.
- c. Principle of Organisational Structure of Management and Supervisory Board, Based on the results of interviews with the Director of PT TMT, there were still some weaknesses in the business unit, such as the lack of personnel to carry out their duties in the logistics and operational business units of the Company and the absence of an audit committee in the Company to assist the board of commissioners in carrying out their supervisory responsibilities.

- d. The Principle of the Company's Commitment to Develop and Retain Competent Individuals, PT TMT has an SOP for recruiting employees based on the Company's requirements and required competencies. Each employee has responsibilities and duties within their respective business entity. Additionally, once or twice a year, the Company conducts internal and external training activities to enhance the competence of its employees. On the other hand, annual employee performance evaluations for promotions were conducted, and the findings were used to determine how many salary increases employees receive.
- e. Under the Principle of All Individual Accountability for Internal Control and Achievement of Company Goals, the Company would conduct a monthly meeting to establish annual performance goals. The performance objectives include the Company's overarching goals for each department or business unit and its employees. The target would be evaluated monthly by the Board of Directors; thus, the Company could identify field-based obstacles; thus, they could be mitigated and coordinated with each business entity in the organisation.

2. Components of Risk Assessment

- a. Principles of Company Objectives for Risk Analysis, the management-determined vision and mission would serve as the foundation for formulating the Company's objectives. The Company's primary goals were formulated before becoming specific objectives for each business entity. Risk analysis was performed concurrently with establishing the Company's goals; however, the Company was required to establish a risk tolerance standard that it can tolerate. The Company's annual target setting was predicated on its annual objectives.
- b. Under the Principle of Identifying Risks in All Divisions, the organisation only identified risks in daily operational activities that present internal or external obstacles or disruptions.
- c. Based on document analysis and interviews with directors, the Company did not yet have a procedure for assessing potential fraud. In addition, the Company's operational activities were only audited by an internal audit (third party) once yearly. However, the Company's contract agreement specifies that if an employee commits fraud, he or she will receive a warning or punishment under the applicable rules.

d. Based on the results of interviews with directors and the Principle of Significant Changes Affecting the Internal Control System, the Company still requires a specific procedure for identifying significant changes that affect its internal control system.

3. Components of Control Activities

a. There was no employment rotation to prevent extortion in the planning and procurement process, and receiving gifts from suppliers was not restricted or prohibited.

b. There was room for improvement in the receiving, management, and storage processes because there was no separation of duties between receiving and recording products, the Company's inventory was not insured, and there were no emergency procedures in case of a disaster.

c. There was no procedure for doing monthly physical inventory counts, no use of barcode technology for inventory recording, and no system configuration to prevent double shipments throughout the shipping process.

d. There was no backup and recovery procedure in the case of a disaster, nor an audit of the financial statements

4. Component Information and Communication needs to be improved in delivering accurate financial statement information to internal and external parties through meetings and reports since the Company's financial statements were not audited by a public accounting firm (KAP).

5. Activity Monitoring Component needs to be improved since the Company did not have an internal audit function, KAP did not audit the financial statements prepared by the Company, and the Company does not conduct a monthly procedure to compare actual and projected financial statements. In daily operational activities, the supervisory responsibilities of each department's managers were also impracticable because verbal communication must be documented in an activity report.

CONCLUSION

Medium-sized companies were restricted regarding human resources, financial constraints, and technological infrastructure. This may increase inventory management risks, such as larceny of goods and errors in calculating and shipping goods, affecting the Company's internal control activities.

This research demonstrated weaknesses in PT TMT's internal control system, particularly in the inventory cycle, based on COSO's components and principles of internal control. The control environment component lacked a specialised internal audit division, and the Company lacked a whistleblowing system. In the risk assessment component, the Company did not have a specific procedure for identifying changes that significantly affected the organisation. The Company was required to enhance internal control in the control activities component, commencing with planning and procurement and concluding with inventory recording. The Company's annual financial statements must be audited by the Public Accounting Firm (KAP), which was a weakness of the information and communication element. In the final component, monitoring activities, additional procedures are required to compare the Company's actual financial reports with its projected financial reports.

In order to enhance the effectiveness of PT TMT's internal control system, this study recommends several COSO components, including the existence of a whistleblowing system, the addition of an internal audit department, the auditing of financial reports by KAP, and the comparison of actual financial reports with projected financial reports by the Company.

It is recommended for future research should concentrate on the inventory cycle and the Company's entire business cycle.

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FIGURE



Figure 1. Internal Control Components
Source: COSO