Majalah Bisnis & IPTEK
Vol 17, No. 1, April 2024, 57 – 66
ISSN Online: 2502-1559. DOI: https://doi.org/10.55208/bistek

The Influence of the Merchandise Inventory Accounting Information System on Internal Control of Merchandise Inventory (Study At One of The Companies Operating in The Service Sector in Bandung)

Agmy Dewi Purwanto[1], Bulan Tati Fitria[2], Djajun Juhara[3], Adam Ramdani[4]
Sekolah Tinggi Ilmu Ekonomi Pasundan Bandung, Indonesia[1,2,3,4]
Email: agmydewi@gmail.com[1], bulan@stiepas.ac.id[2], djajun@stiepas.ac.id[3], adam@stiepas.ac.id[4]

ABSTRACT

This study aims to examine the extent to which the Merchandise Inventory Accounting Information System impacts the Internal Control of Merchandise Inventory. The variables examined in this study are the Accounting Information System as the independent variable and Internal Control as the dependent variable. The population for this study consisted of the inventory department of a company operating in the service sector in Bandung. A sample of 40 individuals was selected for the investigation.

The research employed a descriptive-analytic approach and verification analysis, utilizing questionnaires for data collection. The data analysis application employs the Statistical Package for Social Science (SPSS) Version 25 for Windows. The research employed the Correlation Coefficient Test, Simple Linear Regression, Determination Coefficient, and Normality Test for analysis.

The Pearson Product Moment Correlation calculation indicates a "Very Strong" association between the Merchandise Inventory Accounting Information System and Internal Control of Merchandise Inventory. The merchandise inventory accounting information system significantly impacts 74.9% of the internal control of goods inventory. The remaining 25.1% is influenced by external factors that were not included in the variables evaluated by the author. The results of hypothesis testing indicate that the merchandise accounting information system significantly impacts the internal control of goods inventory.

Keywords: Merchandise Inventory, Accounting Information System, Internal Control of Merchandise Inventory

INTRODUCTION

In the present period of global economic integration, the business landscape is characterized by intense competition. Companies must vie for market share not just against domestic rivals but also against international counterparts. A company is established by an individual or a consortium of corporate entities, primarily producing and distributing goods and services to fulfill various demands. There exist three distinct categories of companies, specifically the trading sector, service industry, and manufacturing industry.

The primary function of a firm is the sale of goods and services, which can be conducted by either immediate payment or deferred payment through credit. Every company is established with specific objectives. Generally, the short-term objective is to maximize profits or benefits. In contrast, the long-term objectives encompass various aspects, such as business development and network expansion, to ensure the company's sustainability. (Onodi, Ibiam & Akujor, 2021; Fachruzzaman, Indriani, Mediastuty, Fitranita & Zaman, 2021; Al-Matari, Amiruddin, Aziz & Al-Sharafi, 2022)

Internal control is crucial in enhancing productivity, efficiency, and effectiveness in accomplishing organizational objectives. In order to accomplish this objective, the organization must enhance its SOM performance in terms of supervision. Internal control at a company is necessary to prevent deviations from procedures, such as non-compliance with management standards, inadvertent work errors, fraud, or misappropriation, which can frequently occur. Organizations must not only conduct internal controls, but they must also effectively manage and administer a robust accounting information system in order to remain competitive with other organizations. (Ali & Oudat, 2021; Hashem & Alqatamin, 2021; De Giovanni, 2021)

Inventory holds significant significance since it can impact the production cycle inside a corporation, particularly in trading companies that primarily engage in the direct sale of items to consumers. In order to execute the process of selling merchandise, the corporation must own a stock of merchandise prepared for sale. Effective inventory management necessitates meticulous planning, astute supervision, and diligent oversight to prevent any deficiencies in inventory levels or inaccuracies in documenting inventory quantities. Implementing internal control measures for inventories is crucial as it enables organizations to gain a competitive edge. Internal control in a corporation aims to streamline the process of obtaining pertinent information for company management, enhance operational efficiency, and provide valuable data for planning and monitoring company activities. (Setyowati, Widayanti & Supriyanti, 2021; Talha, Wang, Maia & Marra, 2022; Meraghni, Bekkouche & Demdoum, 2021)

Majalah Bisnis & IPTEK
Vol 17, No. 1, April 2024, 57 – 66
ISSN Online: 2502-1559. DOI: https://doi.org/10.55208/bistek

Implementing internal controls for inventory management will enable the organization to mitigate errors in handling inventory quantities. Accurate recording and evaluation of inventory quantities from the beginning ensures that the final totals in the financial statements are similarly accurate. Nevertheless, numerous companies continue to possess inadequate internal control systems that need improvement in effectiveness and efficiency. This deficiency can result in irregularities, such as the loss and damage of merchandise, which is detrimental to the company. These incidents automatically decrease the company's merchandise inventory and subsequently reduce the profits that the company should have received. In addition, this will result in a decline in consumer confidence and the trust of other stakeholders in the company. (Velayutham, Rahman, Narayan & Wang, 2021; Zdravković, Panetto & Weichhart, 2022)

Effective internal inventory control is crucial for a firm operating in the service sector in Bandung. It plays a vital role in managing all inventory, particularly postal items, to monitor and regulate the stock of commodities such as stamps, stamps, and covers. Utilizing a first in, out (FIFO) method facilitates efficient management of incoming and exiting commodities stock. The current internal control system is suboptimal due to inefficiencies in managing inventory demand. This condition is attributed to the need for multiple departments to handle the flow, leading to excessive stock and disorganized data.

The monthly inventory stock taking at the Bandung Post Office is recorded in their report. However, there is a significant variation in the recorded stock, which poses a problem for the accounting information system and internal control of inventory. In January, there was a 0.04% discrepancy in the distribution of stamp duty, which was caused by inadequate control over stock storage. This issue directly impacts the overall stock quantity. In February, the percentage rose to 0.06% due to suboptimal control in reporting the distribution of stamp duty in the BPM section, leading to calculation errors. In March, it further increased to 0.07% because of a lack of inspection or monitoring of stamp stock, resulting in a delivery error from Konsfila. However, in April, the percentage decreased to 0.02% as the monitoring function, particularly in the distribution of stamp duty supplies, became more optimal, reducing the occurrence of errors, damaged goods, or lost items. In May, the percentage rose to 0.06% because there was a failure to inspect stamp sales activities regularly. It increased to 0.08% in June due to changes in the person responsible for stamp supplies. In July, it decreased to 0.05% because the inventory department did not take responsibility for damaged and missing stamp stocks. In August, it rose to 0.07% because there was a lack of proper recording of stamp purchase activities from KCP to the Bandung branch. In September, it rose to 0.13% because there was a failure to check stock quantities, resulting in errors in entering the purchase or request amounts from KCP. It decreased to 0.08% in October due to a lack of supervision or regular checks on demand. From October to November, it further decreased to 0.06%. In December, it remained at 0.06% for the last two months due to a need for more information and communication regarding renewing the stamp duty amount from 6,000 to 10,000.

Based on the given description, the internal control of merchandise inventory, particularly stamp duty at PT, is evident. Pos Indonesia is not functioning optimally. In terms of control activities, numerous areas require improvement. For instance, manually recording requested data in a book leads to scattered and disorganized information. Consequently, when this data is inputted into the system, errors frequently occur, ultimately impacting inventory data. Also, stock calculations could be more effective, and stock reconciliation between the system and physical inventory needs improvement. In addition to control efforts, issues with internal control are believed to be affected by the suboptimal accounting information system.

Effective internal inventory control is essential for ensuring the proper functioning of the inventory accounting information system and minimizing the possibility of divergence from the intended objectives.

Developing an inventory accounting information system is essential in every firm to facilitate the management and processing of stock data for items or products in a highly effective and efficient manner. A corporation's inventory accounting information system can be operated manually or by computerization. The purpose of the inventory accounting information system is to document changes for each category of stored inventory. This system is intricately linked to the sales, sales returns, purchasing, and purchase returns systems. All activities must comply with established protocols by implementing a proficient accounting information system. (Chan, Chen & Liu, 2021; Gao, 2022)

The accounting information system is implemented at PT. Efficient management of item inventory is crucial for Pos Indonesia as it enables effective internal inventory control and ensures optimal stock management. By implementing an accounting information system, all internal control activities are expected to adhere to the relevant procedures. The accounting information system is believed to be suboptimal due to the suboptimal hardware and procedures in the inventory section. Additionally, inventory data management involves multiple departments, resulting in less structured and tidy data. The Accounting Information System of one of the companies working in the service sector in Bandung is experiencing issues due to the following factors:

1. Due to hardware constraints, some computers may not fulfill the minimal requirements for the software required to record inventory and distribute stamp stock.
2. only a few inventory software only partially supports performance, resulting in a significant amount of manual recording.
3. The system's data entry process necessitates manual execution, occasionally leading to data input problems.

Internal control over inventory involves establishing effective control operations to determine the appropriate inventory level while preventing potential infractions and fraud that may harm the organization. Thus, it is imperative to establish a robust policy, procedure, and system for inventory management. An accounting information system for inventory streamlines data processing and offers comprehensive financial information for a company. Additionally, the system aids in forecasting possible earnings and provides financial data on assets and liabilities.

To mitigate the issues above, it is imperative to establish robust internal control measures for inventory management. By implementing robust internal control measures and utilizing a comprehensive accounting information system to handle product data, the company will generate valuable reports for enhancing organizational efficiency. Additionally, these reports will aid executives in formulating policies, making informed decisions, and assigning tasks to run the company effectively.

The merchandise inventory accounting information system and internal control of merchandise inventory have a mutually reinforcing relationship. These two tools must collaborate in a company. It is not feasible for a corporation to have successfully implemented a robust information system, as the primary objective of the accounting system is to enhance the internal control system.

Hence, the accounting information system and internal control of goods inventory have a symbiotic relationship. The internal control framework for inventory cannot function without the necessary means or instruments, which the accounting information system provides. Conversely, an accounting information system is considered satisfactory if it has sufficient internal control over inventories.

The author intends to research the influence of merchandise inventory accounting information systems on the internal control of merchandise inventory. The study will focus on a company operating in the service sector in Bandung.

METHOD

Majalah Bisnis & IPTEK
Vol 17, No. 1, April 2024, 57 – 66
ISSN Online: 2502-1559. DOI: https://doi.org/10.55208/bistek

The research employed a quantitative methodology, utilizing descriptive analysis and verification as the primary data analysis methods. Research methods are systematic approaches used to gather data for specific purposes and applications in a scientific manner. The efficacy of a research endeavor can be gauged by the methodologies or approaches employed throughout the study process. This study employs a quantitative approach to conduct descriptive analysis as a research methodology.

The purpose of this research is to evaluate hypotheses using statistical computations. This research examines the impact of variable x on the study of y. Verification refers to evaluating a theory by determining if a hypothesis is confirmed or refuted. By applying research methods, we can uncover meaningful connections between the variables under investigation, leading to conclusions that will enhance our understanding of the object of study.

To ensure the smooth and successful execution of this research, thorough research planning and design must be undertaken prior to commencing the study. Research design serves as a framework to guide the research process methodically.

This study is a population-based investigation aimed at elucidating the correlation between factors. Based on the organizational unit, this research was carried out inside a single work unit, specifically among employees at a company operating in the service sector in Bandung. Moreover, the research population consists of 40 employees, specifically from the inventory area at the Bandung Post Office. These individuals are used as the sample for the study.

The sample represents a population subset and includes its many attributes and features. When the population is extensive, and the researcher cannot study every aspect of it, often owing to limited resources, energy, and time constraints, the researcher will select a sample from that community. The knowledge from studying the sample will be extrapolated to make inferences about the entire population. Therefore, the samples collected from the population must be genuinely representative. The essential criteria for a questionnaire are its validity, ensuring it is legally acceptable, and its reliability, ensuring consistent and dependable results. Data testing must be conducted, namely through validity and reliability tests.

RESULTS and DISCUSSION

The research findings indicate a strong correlation between the utilization of accounting information systems and the efficacy of internal control over goods inventory. The research yielded a coefficient of determination (R^2) of 0.749, indicating that about 74.9% of the variability in internal control of product inventory can be accounted for by installing the merchandise inventory accounting information system. The remaining 25.1% of the variation is attributed to additional factors not accounted for in this study.

It is crucial to comprehend that internal control over inventory serves multiple purposes in a sizable organization, like a company in the service sector in Bandung. It helps prevent fraud or recording errors and enhances operational efficiency by optimizing inventory turnover and reducing storage costs. An excellent accounting information system enables firms to continuously track inventory, optimize resource utilization, and enhance the precision of data used for managerial decision-making.

Additional examination of other variables that could impact internal inventory control, such as procurement and sales processes, can offer a more comprehensive understanding of the internal mechanisms that affect inventory management. An efficient procurement system may guarantee that the acquisition of goods is conducted with consideration for the organization's specific requirements, hence minimizing the likelihood of excessive or insufficient inventory. The sales system, however, impacts the efficiency of goods allocation and distribution to clients, thus affecting the rate at which inventory is turned over.

This study demonstrates that accounting information systems play a significant role in influencing internal control. However, effective integration and synergy between accounting information systems and other systems in the supply chain are crucial to achieving optimal internal control. This implies that a company in the service industry in Bandung should evaluate and perhaps enhance the integration of its systems to enhance efficiency.

Additional statistical analysis reveals a significantly high correlation coefficient of 0.866, falling within the upper range of 0.810 to 1.000. This condition suggests a significant correlation between the utilization of a merchandise inventory accounting information system and the internal control of merchandise inventory in a company operating in the service sector in Bandung. The coefficient indicates the significance of information technology in enhancing internal control policies, particularly in merchandise inventory, which is frequently a crucial aspect of firm operations.

The investigation of simple linear regression revealed that the mathematical relationship can be accurately described by the equation $Y = 3.840 + 0.895X$. According to this model, a constant of 3.840 represents the fundamental value of internal control for merchandise inventory in the absence of a merchandise inventory accounting information system. The regression coefficient of 0.895 demonstrates the extent to which a one-unit increase in the accounting information system impacts the rise in the value of internal control of goods inventory. A positive coefficient value validates the beneficial and robust impact of utilizing accounting information systems on internal control.

This research provides theoretical support for the idea that well-designed and efficient information systems can significantly enhance internal control inside an organization. A successful accounting information system not only ensures precise financial recording and reporting but also enhances internal control by offering timely and pertinent information for decision-making and risk management.

The findings of this study have significant ramifications for managing an information technology strategy in one of Bandung's service sector organizations. Companies in Bandung's service sector should prioritize investing in accounting information system technology that facilitates financial functions and integrates with other internal control systems to enhance visibility over merchandise inventory.

Furthermore, management must prioritize employee training and development explicitly about utilizing accounting information systems. By enhancing employee proficiency in system operation, it is anticipated that operational efficiency will improve, along with the establishment of more robust internal controls. Additionally, it involves harnessing the data produced by the system to conduct more insightful analysis and facilitate informed decision-making.

Furthermore, this study proposes that periodic audits and assessments of the efficiency of accounting information systems should be conducted to guarantee the system's continued relevance and efficacy in light of alterations in company circumstances or rules.

CONCLUSION

This study successfully identified and analyzed the substantial impact of the merchandise inventory accounting information system on internal control in a company operating in the service sector in Bandung. Nevertheless, several constraints exist, such as the lack of elucidation regarding additional aspects that could impact the internal control of item inventory. To further investigate, it is advisable to examine additional aspects, such as organizational policies, human resource capabilities, and external conditions, that could impact internal control.

This research contributes to the academic literature on the impact of information technology on internal control. It offers practical guidance for management in similar firms on enhancing internal control by efficiently utilizing information technology.

REFERENCES

Ali, B. J., & Oudat, M. S. (2021). Accounting information system and financial sustainability of commercial and islamic banks: A review of the literature. Journal of Management Information and Decision Sciences, 24(5), 1-17.

Al-Matari, A. S., Amiruddin, R., Aziz, K. A., & Al-Sharafi, M. A. (2022). The impact of dynamic accounting information system on organizational resilience: the mediating role of business processes capabilities. Sustainability, 14(9), 4967.

Chan, K. C., Chen, Y., & Liu, B. (2021). The linear and non-linear effects of internal control and its five components on corporate innovation: Evidence from Chinese firms using the COSO framework. European Accounting Review, 30(4), 733-765.

De Giovanni, P. (2021). Smart Supply Chains with vendor managed inventory, coordination, and environmental performance. European Journal of Operational Research, 292(2), 515-531.

Fachruzzaman, F., Indriani, R., Mediastuty, P. P., Fitranita, V., & Zaman, A. A. P. (2021). The accounting information system impact on micro, small, medium-sized enterprises performances in Bengkulu. JEMA: Jurnal Ilmiah Bidang Akuntansi dan Manajemen, 18(2), 236-246.

Gao, J. (2022). Analysis of enterprise financial accounting information management from the perspective of big data. International Journal of Science and Research (IJSR), 11(5), 1272-1276.

Hashem, F., & Alqatamin, R. (2021). Role of artificial intelligence in enhancing efficiency of accounting information system and non-financial performance of the manufacturing companies. International Business Research, 14(12), 1-65.

Meraghni, O., Bekkouche, L., & Demdoum, Z. (2021). Impact of digital transformation on accounting information systems–evidence from Algerian firms. Economics and Business, 35(1), 249-264.

Onodi, B. E., Ibiam, O., & Akujor, J. C. (2021). Management accounting information system and the financial performance of consumer goods firms in Nigeria. European Journal of Business and Management Research, 6(1), 112-120.

Setyowati, W., Widayanti, R., & Supriyanti, D. (2021). Implementation of e-business information system in indonesia: Prospects and challenges. International Journal of Cyber and IT Service Management, 1(2), 180-188.

Talha, M., Wang, F., Maia, D., & Marra, G. (2022). Impact of information technology on accounting and finance in the digital health sector. Journal of Commercial Biotechnology, 27(2), 184-195.

Velayutham, A., Rahman, A. R., Narayan, A., & Wang, M. (2021). Pandemic turned into pandemonium: the effect on supply chains

Majalah Bisnis & IPTEK
Vol 17, No. 1, April 2024, 57 – 66
ISSN Online: 2502-1559. DOI: https://doi.org/10.55208/bistek

and the role of accounting information. Accounting, Auditing & Accountability Journal, 34(6), 1404-1415.

Zdravković, M., Panetto, H., & Weichhart, G. (2022). AI-enabled enterprise information systems for manufacturing. Enterprise Information Systems, 16(4), 668-720.