Analysis of Internal Inventory Control Systems and Accounting Information Systems For Product Stock Inventory in A National Corporate Wear Manufacturing Company

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Abstract

The purpose of this study is to evaluate the impact of the accounting information system and internal control system on goods inventory. This kind of study employs a descriptive-qualitative methodology. Field research is the method used in this study. The qualitative descriptive analysis method of data analysis was applied in this study. According to the study's findings, the control environment that was put in place proved to be successful because, with a 50% score, three out of the six control environment indicators satisfied the standards for the control environment. The risk assessment implemented has been very effective, with a score of 100% for three of the three indicators that fulfill the risk assessment requirements. The control activities implemented have been effective, with a score of 60% for three of five indicators that fulfill the control activity requirements. The information and communication implemented are very effective, with a score of 100%. The monitoring carried out has been very effective. The accounting information system implemented is very effective, with a score of 100%. Using the COSO Framework to set up an internal control system and an accounting information system has not yet fully met the requirements; the results from the checklist form show that more than 80% of the items are suitable.

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

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1. Introduction

Companies operating in the trading, service, and manufacturing business sectors generally have the same goal, namely making a profit by utilizing all the resources they have as effectively as possible. One of the resources a company needs is inventory [1]. Inventory has an important role in a company because almost all company activities are mostly related to inventory. Sales activities that generate profits are also due to inventory moving within the company. By definition, inventory is an asset that includes goods owned by the company with the intention of being sold or inventory of goods that are still in the process of production. Inventory is a company asset that is most susceptible to the risk of damage or theft [2]. Loss of merchandise and recording errors often become problems when it comes to company inventory [3]. An organization that conducts business by buying products from other businesses and reselling them to customers is known as a trading company. In order to prevent unpleasant issues from arising in the future, trading company management need to establish an internal control system for monitoring item inventories [4]. The internal control system seeks to boost productivity, stop fraud, and guarantee that business operations adhere to legal requirements [5].

The internal control system is a set of policies and procedures designed as appropriate guidelines for management to develop the company according to its goals and objectives [6]. By having control, there will be a balance of inventory items so that there is no excess of goods, which can lead to stockpiling of goods in the warehouse and also avoid inventory shortages, which will risk a decrease in customer demand [7]. An international committee has formally recognized the existence of an internal control system through the COSO organization (committee of sponsoring organizations of the treadway commission). The purpose of the company’s internal control system is to accomplish objectives concerning internal operations, reporting, and compliance. It is a process that is subject to the influence of all internal parties [8]. The control environment, risk assessment, control activities, information and communication, supervision, and monitoring are the several components of internal control that are categorized by the COSO Framework as indicators for assessing the internal control system of the business [9]. The accounting information system, which is the company’s financial reporting system, will have a close relationship with the control system's components. Internal control and the accounting information system are...
inextricably linked [10]. By having complete and good accounting and financial information, companies can classify, analyze, record, and report all transactions involved in company operations, starting from the process of purchasing raw materials to the production and sale of goods [11].

The company is a manufacturing and trading company operating in the garment sector and located in Depok, West Java. It usually provides designs for various kinds of formal clothing, textiles, and accessories for both private and state companies in Indonesia [12]. In fulfilling the inventory of finished goods for sale, the company produces finished goods, which will be stored in certain quantities in the warehouse [13]. The company's many daily activities, including producing finished goods, receiving finished goods, and making sales, of course, really require internal control. Inventory of goods that have an important role will also be at risk of problems if internal control is not managed well. For example, if there is a discrepancy between records on the computer and physical stock in the warehouse, this problem is of little concern to company operational actors, especially company leaders [14]. The aim of purchasing and receiving inventory in a procedural manner, namely material will be strictly controlled so that losses from theft damage to the organization will be eliminated or at least reduced to a minimum. Each material is a receipt that will be checked by the entity in terms of quality assessment and weight as a comparison material, which will be described in a company-level description. Only authorized suppliers will receive a payment voucher upon billing [15]. Only authorized trade inventory will be traded. To achieve the goals mentioned above, there must be a separation of operations, storage, and recording functions [16]. The operations function should be handled by the purchasing and receiving department right when the goods are received into the warehouse. Meanwhile, the storage function is handled by the warehouse department, which is an expert in maintaining inventory, and the recording function is handled by the accounting and finance departments, making it possible to avoid carrying out transactions carried out by many hands [17]. Thus, when receiving goods, there will be an internal check so that the company's assets are guaranteed to be safe and the accounting data is guaranteed to be accurate and reliable [18].

Before the goods arrive and are received by the warehouse, a transaction will be preceded by an agreement between the entity and the producer and distributor. These transactions must obtain authorization from authorized officials within the entity, and no material or transactions are entered without their permission [19]. As proof, generally there is a signature on the document, both the source documents and supporting documents. The reason is strong because every transaction that occurs must be recorded in accounting records based on certain procedures [20]. In this way, the accuracy and reliability of the company's assets are guaranteed through concrete evidence based on the authorization of authorized officials and recorded in accounting as appropriate. The division of responsibilities and recording systems and procedures can be implemented as expected if methods are created that can ensure healthy practices [21]. Healthy practices are an inseparable part of the division of responsibilities as well as recording systems and procedures in the internal control system. Without healthy practices, there will be no benefit to dividing responsibilities and recording procedures [22]. The most important thing in internal control is competent and trustworthy employees [23]. This factor is an absolute factor in a good internal control system [24] [25]. However, if it is not balanced with the division of responsibilities and recording systems and procedures, competent and trustworthy employees alone are not enough, because basically humans have natural traits; there are times when you are lazy, have goals that conflict with the company, dissatisfaction with fellow colleagues, and even personal problems that are intentionally or unintentionally presented in your professional activities, which will cause disruption to your work implementation [26] [27].

It is expected that an analysis of the inventory internal control system will help directors and management protect current assets from losses through efficient and effective implementation [28]. This will give them direction on how to keep protecting current assets in inventory from losses in an effective and efficient way, with many interconnected factors that depend on how well human resources work for them [29]. This research will focus on the function of the internal control system components to assess and analyze these components in following up on problems within the company [30][31]. The research is expected to provide a contribution in the form of recommendations to management, which will become material for discussion with the board of directors for improvements that will be given to employees [32]. This scope will focus on activities related to inventory, including procedures for purchasing and receiving goods, procedures for selling and releasing goods, and storing and maintaining goods in the warehouse, which will be linked back to the perspective of the five components of the internal control system.

2. Research Methods

Research methodology is a way to solve research problems carried out systematically. This kind of study employs a descriptive-qualitative methodology, which gathers data via the use of both words and images. Because the research object is an actual object in the field that provides information about the research subject, the research approach is field research. The procedures used to gather data are known as data collecting techniques. The author will employ a variety of data collection techniques during field research, including observation, interviews, and documentation. Because errors cannot be completely eliminated in qualitative research due to the volume of data,
it is imperative to verify that the data acquired is accurate, legitimate, and consistent with field observations and the author's data recording. The qualitative descriptive analysis method of data analysis was applied in this study. In qualitative descriptive analysis, pre-existing theories are compared with collected data in a qualitative manner to produce findings that can be applied as recommendations and conclusions. The author uses the research instrument as a tool to gather information from informants to turn into data. In this research, the research instruments used are components of the internal control system obtained from literature, such as book research journals, which can provide steps on how to carry out research.

3. Results and Discussion

In the internal activity of inventorying merchandise, the company cannot be separated from the coordination of several departments, such as logistics and retail, MD (merchandise designer), MP (merchandise planner), and finance. Then the internal team will also coordinate with several garments as places of production of supplies and expeditions as goods movement services that have collaborated according to the type of inventory needed. As for marketing, the companies have collaborated to market online, offline, and through direct sales. Online marketing uses the marketplace (e-commerce) as a marketing venue. Meanwhile, offline marketing is available in more than 200 shops and department stores throughout Indonesia. In the meantime, agencies that have collaborated carry out direct-sales marketing. Even though it sells directly, the company does not accept wholesale or individual sales. In establishing communication between departments, the company uses a software unit called Dynamics AX for the management of goods procurement, sales and retail, warehouses, and transportation. So that the logistics department will not lose records of the status of the movement of merchandise. In terms of location, warehouse, and logistics department offices, there are three floors, where the first floor is a supply of merchandise for offline sales with a combination of the Jack Nicklaus and JOBB brands. Meanwhile, the second and third floors are inventory storage for online sales, where the second floor is designated for the Jack Nicklaus brand and the third floor for the JOBB brand.

The company's guiding principle always places a high priority on the performance of workers who have a strong desire to learn, can think critically, display good behavior, adhere to SOP and KPI, are devoted to the business (have ownership), and are able to foster communication (teamwork), with fellow employees both inside and outside the department. Every employee recognizes that employees who are ready and implement the values of the philosophy above will improve their quality and skills so that they can survive and be able to follow the current work environment. Every manager in a department of the company already knows what employees should do. According to the author's interviews and observations, the operating style of the company is largely based on SOPs and KPIs, which every department must adhere to. Because SOPs must be implemented, each department has a variety of approach techniques from the managers and supervisors of each department, such as holding morning briefings and company outings to create intensive communication between employees so that they can realize one of the company's missions, namely "Empowering Human Resources through Development Competence and Openness to Information and Technology Developments in the Digitalization Era." Based on the theory and interview results, this shows that the company has implemented a management philosophy and style of managing operations in accordance with the COSO Framework.

The company's ethical and integrity values are in accordance with previous research, which requires that management take firm action for employees to eliminate or reduce dishonest, illegal, and unethical behavior not only by using software but also by having certain policies. Then, it is believed that the rules that HRD has established for each department's employees are useful in enforcing discipline among employees. The company has implemented ethical and integrity values. Companies must determine certain criteria, such as the skills, education, and experience of prospective employees, which are divided into general and specific assessments. In its application, this assessment was quite effective. This means that the company has made good efforts to create competent and committed employees. Based on the results of documentation and interviews, the logistics and retail departments are fully occupied, and each employee has their own duties, which have been separated into certain task sections. Apart from that, there is a task from the online sales division that is still not listed in the chart, namely the marketplace admin who answers questions from customers. Structurally, in the organization, it is in accordance with theory because each employee has their own responsibilities. However, it is better to always keep the organizational structure chart updated whenever there are changes. Apart from that, it would be better if each employee's name actually had details of their responsibilities. It turns out that after reviewing it from several employee perspectives, the coordinator of the logistics and retail department made a regulation that the department enforces rolling between teams every three months. This regulation is considered useful so that employees in the department understand and know how each team works. So if there is a situation where one of the teams is unable to attend, the other team can fill the gap and already understand how it works.

The company mapping the organizational structure in each department in the office means that the organizational structure is separated according to the responsibilities outlined in the form of an organizational chart describing the relationship between authority and reporting. However, it is different with the logistics and retail departments,
which still use a rolling policy between teams so that the organizational structure will not be permanently held by people. So, companies have not been as effective in implementing organizational structures as experts believe. As a result, employee turnover will easily occur due to high work pressure. The author argues that the most important aspect of the internal control environment is the welfare of human resources. If employees are competent, trustworthy, and happy because they are treated fairly, then they will produce good performance. Companies are required to provide training, evaluation, and compensation programs that can discipline and motivate employee performance. However, the logistics and retail departments do not have specific skills training to develop freelance and contract employees. Given that each person’s level of computer literacy was different, several employees stated that they required training, particularly training in computer systems. The FICO and data analyst departments have received specific training in the form of software training that brand managers or Trisula central management will use. So, there is still a gap in skill development among employees.

The company has used several tools to anticipate disasters that could endanger the physical inventory of merchandise. The tools used are four CCTVs located in each corner of the warehouse building. Then fire extinguisher warehouses are placed at each corner in the middle of the stairs. In the system of maintaining the quality of goods inventory, the company minimizes the risk of goods not being sold and being left behind by assessing the useful life limits of goods. From the start, the MD and MP departments have determined the maximum use value of goods to be 700 days. Merchandise must be immediately moved to be sold at bazaars or discounters with the aim of using up stock after 700 days have passed. This MP and MD policy applies to all sales, both offline and online, except direct sales. All business operations related to retail merchandise are generally integrated into Microsoft Dynamics AX software. Additionally, the logistics coordinator has directed the retail and logistics departments to implement a data backup process for data and the flow of goods in and out that each team leader must complete using Microsoft Excel. So that if an item is scanned twice or not scanned, it can be easily traced. This technique can also be used to verify discrepancies in the quantity of goods brought from the garment to the warehouse, or vice versa, due to input errors from the SPG and expedition. Then, when there are returns between department stores, the merchandise planner team changes the reverse and correct TO. In terms of shipping goods, the company has its own standards for studying expeditions that come to offer their services. Apart from assessing the expedition's integrity in terms of timeliness in sending goods, it also checks the quality conditions of the expedition's warehouse. If the expedition warehouse is located in an unhygienic place, such as the side of a toll road or under a bridge, it will be rejected by the company because the condition of the warehouse will affect the quality of goods, which will have an impact on customer satisfaction.

Based on observations and interviews with several departments, the company has employees whose job it is to consider threats from competitors, market demand, and the political and economic situation. So by having specific tasks for anticipating the problems above, the company has succeeded in dealing with the COVID-19 phenomenon by creating sales variations such as Chat and Shop and strengthening the online sales system. In each department, all positions are sought to be filled quickly and urgently to avoid duplicate positions. In the logistics and retail departments, the division of employee duties has been separated and written in the SOP in accordance with the structure and needs of the department. However, within the FICO Department, the party who processes, records, pays, and receives funds is carried out by finance, which is divided into accounts receivable and payable, as well as the account reporter. So, almost an overall separation of duties has been implemented, but there still needs to be a separation between account reporting and accounts payable. Transactions regarding merchandise inventory have SOPs that are systematically arranged and computerized. In terms of reporting documents, PO (purchase order), waybill/TO (transfer order), and other documentation are reported in Microsoft Dynamics AX software and also physically to every other department related to the movement of goods.

Basically, the party in charge of receiving hardcopy documents has arranged them correctly using neatly arranged cupboards and safes. Every department uses Friday as a day to clean the work environment. Almost all coordinators and employees emphasize that the review must start with human resources. After both have been repaired correctly, regulations will be created that regulate procedures and guidelines for each employee. In operating activities, the author concludes that each department coordinator coordinates a lot with internal audit, who is very focused on improving SOPs so that the targets to be achieved can be easily created. The company must carry out reviews of its financial and non-financial performance as a performance benchmark in the form of company targets and accomplishments. The company's retail merchandise inventory accounting information system is related to the management activities of several parties involved, namely accounting, accounts receivable, accounts payable, and accounting (account reporting). The retail inventory accounting information system is computerized, namely using the Microsoft Dynamic AX system. The method for recording retail merchandise inventory uses the perpetual method and the FIFO (First In, First Out) system. Every purchase and expenditure transaction for merchandise and inventory balances is recorded in an account in the accounting system called the RCM and Microsoft Dynamic AX systems, so that all documents such as invoices, POs, and TOs have been integrated into the system. On the other hand, IC (inventory control) uses a Microsoft Dynamics AX incoming and outgoing goods movement system.
to record incoming and outgoing goods. The FICO Department previously carried out this task, so the existence of IC makes the FICO Department's task more effective.

4. Conclusion

Based on the research results, it can be concluded that score of 50% indicates that the control environment in place is effective. As many as three of the six control environment indicators can meet the control environment requirements according to COSO theory. All employees must adhere to the company's SOPs (standard operational procedures) and work culture because the company has implemented a control environment. The risk assessment implemented has been very effective, with a score of 100% for three of the three indicators that fulfill the risk assessment requirements. In the risk assessment, the company has seen various risks and complaints that have occurred to the company. The company has noticed the inefficiency of its employees' work. In addition, the company has a separate department for assessing external threats. The control activities implemented have been effective, with a score of 60% for three of five indicators that fulfill the control activity requirements. Separation of duties in departments has been implemented, and each has its own duties, but there still needs to be a separation between accounts reporting and accounts payable in the FICO Department. The company does not carelessly give every employee the freedom to sign each document. Each department has a safe place to store important documents, and this place must be cleaned regularly. KPIs (key performance indicators), which every employee must implement, regulate all of these regulations. The information and communication implemented are very effective, with a score of 100%. The company uses the MyTrisula application to inform employees of their attendance. The company has an IT (information technology) department as a software developer and provides IT-related information to each department. In anticipating its activities, the company has a generator to anticipate future disruption problems. The logistics and retail departments use racking and console techniques with the help of the Microsoft Excel system as a data backup to make work easier.

The monitoring carried out has been very effective, with a score of 100%. Throughout the year company will still monitor SOPs and KPIs, which are still fluid in nature. Therefore, the internal audit department often requests regular sampling twice a year in each department. Therefore, audits are carried out on an ongoing basis to ensure that each of the five internal control components is still functioning and must be carried out properly. The accounting information system implemented is very effective, with a score of 100%. Inventory recording uses a computerized system called the Microsoft Dynamics AX system, which makes it easier to manage and monitor retail merchandise automatically and up-to-date. In its implementation, the inventory recording procedure has been carried out effectively because, between the recording on the computer and the physical stock of goods inventory, data is automatically entered into the system and carried out by different people. So those human errors such as double data input, incorrect data input, forgetting to record the time when raw materials were released, missing goods release records, picking up the wrong goods, and incorrectly counting goods can be avoided. This can support the company's use of the FIFO recording method so that it does not impede the collection of goods due to incorrect quantities. In terms of receiving incoming and outgoing transactions, several positions have been held with certain duties and have carried out duties according to current SOPs so that multiple positions are not too significant, even though the duties of account reporting and accounts payable are still carried out by one person. Using the COSO Framework to set up an internal control system and an accounting information system has not yet fully met the requirements; the results from the checklist form show that only 85% of the items are suitable. Based on the conclusions above, the author provides suggestions for consideration, namely: Immediately ensure SOPs and KPIs in each department in the near future before entering ISO 9001:2015, which focuses on quality management. It is necessary to remind all employees about the implementation of the company's core culture so that, in the future, the control environment can be even better. It is necessary to remind all employees, when carrying out their duties and obligations, not to deviate from the regulations set by the company. Training should also be provided to freelance and contract employees so that employees do not feel pressured to learn tasks they still don't understand. The administration of the logistics and retail department must be ready to update the fluctuating organizational structure within it if the rolling system is considered a more effective activity for the department to use with the aim that all employees can know all the tasks in the entire warehouse. Provide the same training for employees in the logistics and retail departments related to computer literacy. There still needs to be a separation of duties between account reporting and accounts payable. So that there is no burnout for employees who have the dual duties of account reporting and accounts payable, it will also be more effective if done by different people because they correct each other's reports. So that certain department coordinators cannot easily manipulate the Microsoft Dynamics AX system, internal audit must immediately check and master it. It is necessary to improve the system currently used so that future company programs can be even better.

References


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