

# *Analysis of Merchandise Inventory Accounting System at Bhuana Utama Department Stores*

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## **ABSTRACT**

The purpose of this study is to analyse the merchandise inventory accounting system at Bhuana Utama department store. Bhuana Utama department store is a trading business unit owned by Village-Owned Enterprises (*Badan Usaha Milik Desa*—BUMDes) Panji. The merchandise inventory accounting system that has been implemented by the management of Bhuana Utama department store is still manual, so it often produces unreliable and untimely information. This research is a case study research. Data collection was carried out through a process of observation, interviews, and documentation study. The results showed that the implementation of the merchandise inventory accounting system at Bhuana Utama department store had several weaknesses. First, there are concurrent duties in the cash and the accounting functions. Second, the Bhuana Utama department store does not yet have an accounting function separated from the BUMDes accounting function. Third, the employees assigned to the Bhuana Utama department store do not yet have adequate knowledge and skills on accounting, both manually and computerized.

**Keywords:** *Accounting system, Merchandise inventory, System analysis*

## **1. INTRODUCTION**

Merchandise inventory is an important aspect for a trading company. Merchandise inventory is the largest component of working capital owned by a trading company. Management of merchandise inventory requires a good accounting system so that it can produce reliable and timely information. This information is used by management as the basis for making decisions related to the management of merchandise inventory policies. A good inventory accounting system can also minimize potential losses caused by embezzlement by employees.

A merchandise inventory accounting system is a system that processes data and transactions to produce useful information regarding merchandise inventory to plan, control and operate a business. With a merchandise inventory accounting information system, it can be seen the activity of the purchase or receipt and sale of goods by the company as a control management for the company, so that the company can find out what types of units are best-selling in the market today. This system is closely related to the sales system, sales return system, purchase system and purchase return system. In

managing merchandise inventory, the company must know whether the unit's inventory is in good condition and suitable for market. In addition, the company must be able to set a list of units to be purchased. This information will help company management in making decisions for future steps to increase sales.

Bhuana Utama department store is a trading business unit owned by Village-Owned Enterprises (BUMDes) Panji. The accounting system for merchandise inventory that has been implemented by the management of the Bhuana Utama department store is still manual and often produces unreliable and untimely information.

This phenomenon indicates that there is a problem in the merchandise inventory accounting system used by the Bhuana Utama department store. A system analysis process is needed to be able to find out the causes of main problems that occur in the Bhuana Utama department store inventory accounting system. And based on the results of the system analysis carried out, it can be developed a new merchandise inventory accounting system, a system that is reliable, effective and efficient.

Based on the background description in the previous section, this research is specifically intended to analyse the merchandise inventory accounting system at Bhuana Utama department store.

## **2. LITERATURE REVIEW**

### **2.1. Inventory**

In general, the term inventory is used to indicate goods that are owned by a company for resale or use in production activities whose results will of course be sold again, after going through the production process. Inventory is the main element of the working capital of a company, both trading company and industry. In trading companies, continuously obtaining inventory by buying goods in a state that is ready to be sold without going through the production process first, while in industrial companies continuously obtaining supplies for further processing to become inventory or products that are ready for sale.

Statement of Financial Accounting Standards explains that inventory is an asset available for sale in normal business activities; assets in the production process and or in transit; or assets in the form of materials or equipment for use in the production process or in the provision of services [1].

Cost of inventory is all sacrifices or expenses made to obtain supplies that are ready for sale or further processing. Reference [2] states that the costs associated with the goods sold are 5 categories: (1) Purchase costs, namely the cost of goods obtained from suppliers, including transportation costs or freight costs; (2) Ordering fee, which includes the cost of obtaining purchase approval fees, as well as other special processing fees; (3) Storage costs, which are costs incurred while holding stock of goods sold; (4) Out of stock costs, namely the costs generated when the company runs out of a certain inventory requested by the customer, and the company must act quickly, or the company gives a loss because it cannot meet the demand; (5) Quality costs, namely costs incurred when the features or characteristics of a product or service do not match customer specifications.

The inventory recording system is very important in determining the amount and value of inventory at the end of the period, where the amount and value of the inventory will be used in the profit and loss calculation and balance sheet. The inventory recording system can be divided into two, namely a perpetual system and a physical system.

In the physical system, every change that occurs in inventory is not directly recorded in the inventory estimate. If there is a purchase of inventory, this purchase transaction is recorded in the purchase account. Because there is no direct recording, a

calculation, measurement or weighing of goods must be carried out at the end of the accounting period to determine the quantity of goods in the company. This inventory taking is needed to find out how many goods are still there and then the cost of goods is calculated. The cost of goods sold can only be known when the ending inventory has been calculated.

Inventory valuation is intended to determine the cost of goods based on the value of inventories owned by the company in a reasonable manner, in order to determine reasonable income by differentiating the costs concerned from the company's revenues. The Indonesian Accounting Association states that the cost of inventory must be calculated using the formula for first-in-first out costs (FIFO) or weighted average [1].

First in first out (FIFO) method, inventory valuation is based on the assumption that the goods sold are based on the purchase order of the goods, the first purchased goods will be issued (sold) the first time. Thus, the price of the most recently purchased items becomes the ending inventory at the end of the period. In other words, the cost of goods is charged to the previous purchase price, even though its form is not the first item. This method of valuation is mainly applied when prices tend to be stable or decreasing, so that the inventory value on the balance sheet will be closer to replacement value and the cost of goods charged to income is really the cost of goods sold. Another advantage of this method is that it is logical and realistic about the cost flow. The first-in-first-out method provides an opportunity for profit manipulation because the cost of goods is determined according to the incidence of costs.

The weighted average method is based on the assumption that materials on hand at the end of the accounting period are equal to the cost of inventories held at the beginning of the period and the cost of materials purchased during that period. The average method is different when using a perpetual and physical inventory system. When a perpetual system is used to record the quantity and value of inventory, the weighted average method changes to a moving average, where the average inventory price changes every time an inventory change occurs.

### **2.2. Accounting System**

Accounting can be defined from two points of view, namely the definition from the user's point of view and from the point of view of its activities. Accounting from the user point of view is a discipline that provides the information needed to carry out activities efficiently and evaluate the activities of an organization, while accounting from the point of view of activities is the process of recording, classifying, summarizing, reporting and analysing the financial data of an organization/company.

For internal parties, including at every level of management, the information generated will be used in planning, controlling company operations and in the decision-making process. Meanwhile, for external parties, namely the government, investors, creditors and other parties, financial information in the form of financial reports can be used as material for analysis of tax determination for the government, investment decisions by investors and others.

Reference [3] states that the system is a group of two or more components that are interrelated (interrelated) or sub-systems that unite to achieve the same goal (common purpose), whereas ref [4] states that the system is a kind of interconnected parts that carry out one or more processes to achieve specific goals. Reference [5] states that defines a system as a group of elements that are closely related to one another, which function together to achieve certain goals.

The accounting system is an organization of forms, records, and reports that are coordinated in such a way as to provide financial information needed by management to facilitate company management [5]. The elements of an accounting system consist of forms, records consisting of journals, ledgers, and subsidiary books and reports.

Form is a medium used to record transactions. A journal is the first record that is used to record, classify, and summarize financial data and other data. General ledger is a record that is used to summarize financial data that has previously been recorded in a journal. Subsidiaries consist of subsidiary accounts detailing the financial data listed in the ledger accounts. The report is the final result of the accounting process in the form of balance sheet, profit/loss statement, change in retained earnings report, report on cost of goods sold.

### **2.3. Merchandise Inventory Accounting System**

Inventory accounting information systems can be used by trading companies and manufacturing companies, the inventory accounting system aims to record some of the company's assets stored in inventory. Reference [5] states that the inventory accounting system aims to record the mutations of each type of inventory stored in warehouses. The inventory accounting system in a trading company is closely related to the buying and selling systems. A merchandise inventory accounting system is a system that processes data and transactions to produce useful information regarding merchandise inventory to plan, control and operate a business. With a merchandise inventory accounting information system, it can be seen the activities of the purchase or receipt and sale of goods by the company as control management for the company, so that companies can find out which types of units are best-selling in the market today. This system is

closely related to the sales system, sales return system, purchase system and purchase return system. In managing merchandise inventory, the company must know whether the unit's inventory is in good condition and suitable for market. In addition, the company must be able to set a list of units to be purchased. This information will help company management in making decisions for future steps to increase sales.

### **2.4. Analysis System**

System analysis can be defined as the breakdown of a complete information system into its component parts in order to identify and evaluate problems, opportunities, obstacles that occur and the expected needs so that improvements can be proposed. The system analysis process consists of three basic steps that must be carried out: (1) Identify: Identifying the problem is the first step in the analysis process. Problem identification is carried out to determine the cause of the problem, decision points, key personnel; (2) Understand: Understanding the work of existing systems is the second step in the analysis process. Poses understands that the work of the existing system is carried out through a systematic and planned research process; (3) Analyse: After understanding the workings of the existing system, a system analysis is carried out which consists of analysing the weaknesses of the existing system and analysing the user's information needs

## **3. METHOD**

This research is a case study research designed to analyse the accounting system for merchandise inventory implemented by Toserba Bhuana Utama. Bhuana Utama Department Store is one of the business units owned by the Panji Village-Owned Enterprise which is engaged in trading business in foodstuffs, staple goods and building materials.

The object of this research is the accounting system for merchandise inventory which has been implemented by the management of Bhuana Utama department store. This study used a qualitative approach so that the data collection techniques used were interviews, observation, and documentation study. Interviews were conducted with the management and employees of Bhuana Utama department store to obtain information about the inventory accounting system that has been practiced so far. Observations were made of the Bhuana Utama department store business activities related to the implementation of the merchandise inventory accounting system. Documentation studies were carried out on various documents related to the accounting system for merchandise inventory at Bhuana Utama department store.

Reference [6] in the study used a qualitative data analysis model. Reference [6] argued that activities in qualitative data analysis were carried out interactively and continued to completion, so that the data was saturated. The measure of data saturation is indicated by no longer obtaining new data or information. Activities in data analysis include data reduction, data presentation and drawing conclusions and verification.

## **4. RESULTS AND DISCUSSION**

System analysis is the process of decomposing a complete information system into its component parts in order to identify and evaluate problems, opportunities, obstacles that occur and the expected needs so that improvements can be proposed. System analysis is the first step that must be done in developing an inventory accounting system. The system analysis stage in this study is divided into three steps, namely identifying problems, understanding the work of existing systems and analysing existing systems.

### ***4.1. Identifying the problem***

Identifying the problem is the first step in the system analysis stage. The problem identification step is carried out through the observation and interview process. Observations were made on the inventory accounting system manual and its implementation by employees who were assigned to the Department Store unit. Interviews were conducted with the chairman of BUMDes Bhuana Utama as the top management of the Bhuana Utama department store and employees assigned to Bhuana Utama department store. The interview was conducted to explore the problems that have been faced by managers and employees of the Bhuana Utama department store related to the implementation of merchandise inventory accounting system.

Based on the results of interviews with the chairman of BUMDes Bhuana Utama, it was revealed that employees assigned to the department store unit were unable to provide reports on merchandise inventory in real time. And based on the results of interviews with department store employees, it was revealed that they experienced difficulties in operating the computerized inventory recording system that was used by BUMDes because of complicated recording procedures. Employees who are in charge of department stores end up manually recording the inventory mutation book.

### ***4.2. Understanding the Work of Existing Systems***

The second step of the systems analysis stage is to understand the work of the existing system. Based on the results of observations and interviews with the chairman and employees of the Bhuana Utama

department store, the researchers gained an understanding of the inventory accounting system that has been implemented so far. There are 3 employees assigned in the department store; one person serves as a cashier and two persons are in charge of sales as part of the warehouse. The accounting system for merchandise inventory at Bhuana Utama department store is related to the accounting system for purchasing merchandise inventory and the accounting system for merchandise sales.

The accounting system for purchasing merchandise inventory consists of purchase request procedures, purchase order procedures, goods receipt procedures and purchase recording procedures. The implementation of the accounting system for the purchase of merchandise inventory involves the warehouse function, purchasing function and accounting and finance functions. In the warehouse function purchase request procedure, an employee who is assigned to the department store submits a merchandise purchase request in the form of a merchandise inventory purchase request list to the purchasing function. The purchasing function is carried out by the chairman of BUMDes Bhuana Utama. In the purchase order procedure, the chairman of the BUMDes based on a purchase request from the warehouse makes an order to the supplier. Suppliers are directly selected by the chairman of the BUMDes based on consideration of offering prices from several suppliers. In the procedure for receiving goods, the warehouse function checks the quantity and type of goods received by the supplier and submits an invoice for the purchase of merchandise to the financial function (BUMDes treasurer). The procedure for recording the purchase of accounting and financial functions is carried out by the BUMDes treasurer. Based on the purchase invoice received from the warehouse section of the BUMDes treasurer, records the purchase of merchandise inventory in the purchase journal and the list of debts (if the purchase is made on credit), records the addition of merchandise inventory to the merchandise inventory list, records payments for purchases of merchandise inventory in the expenditure journal cash if the purchase is made in cash.

The accounting system for sales of merchandise consists of procedures for receiving orders from buyers, procedures for receiving cash, procedures for goods delivery and procedures for recording sales. The implementation of a merchandise sales accounting system involves a sales function, a warehouse function, a cash function and an accounting and financial function. In the procedure for receiving orders from buyers, the buyer comes directly to the store and selects the goods or products to be purchased. The sales function records the purchase order from the buyer which is then submitted to the cash function (cashier of department store unit). In the cash receipt procedure, the cashier receives payment from the buyer and delivers

the goods to the buyer. In the procedure of sending goods, the sales function will deliver the goods to the buyer. In the sales recording procedure, the cashier every afternoon when the store is closed submits a sales recap to the BUMDes treasurer to be recorded in the sales journal, cash receipts and a list of merchandise inventory.

The accounting system for merchandise inventory consists of procedures for recording the cost of goods purchased, procedures for requesting and releasing goods and procedures for corporate physical counting. The implementation of a merchandise inventory accounting system involves warehouse functions, sales functions and accounting and finance functions. The procedure for recording the cost of inventory purchased is one of the procedures associated with the system for purchasing merchandise inventory. Source documents used in the procedure for recording the cost of goods purchased merchandise inventory are purchase invoices and proof of cash disbursements. Based on invoices and evidence of cash disbursements, the BUMDes treasurer records the cost of merchandise inventory purchased in the merchandise inventory list. Inventories are recorded using the perpetual method and the cost of merchandise inventory is determined using the semi average method.

### **4.3. Analysing existing systems**

Based on the results of interviews with the chairman and employees of Bhuana Utama department store and the results of observations on the existing system, it is concluded that the purchasing accounting system, inventory accounting system and sales accounting system implemented by the Bhuana Utama Department Store unit have several weaknesses. The first weakness, there are concurrent duties in the cash and accounting functions. The cash and accounting functions are carried out by one person, namely the BUMDes treasurer. The BUMDes treasurer is not only responsible for recording purchases and sales of merchandise inventory (accounting function) as well as receiving and storing cash receipts from selling merchandise (storage function) and issuing cash when making payments for purchases of supplies. Based on the principles of the company's internal control system, there must be a separation between the operating and storage functions from the accounting function. Operational function is a function that has the authority to carry out an activity. The storage function is a function that has the authority to store company assets. The accounting function is a function that has the authority to record the company's financial events. The second weakness is that the department store unit should have a special accounting function that is separate from the BUMDes accounting function so that the inflow and outflow of merchandise inventory in the department store can be done in real time and the value of merchandise inventory can also be

presented in real time. The current system assigns the task of the department store accounting function to be carried out by the BUMDes treasurer so that the department store employees do not know the quantity and value of their merchandise inventory because they do not keep records in the form of a supporting account. Based on the results of interviews and observations, it was also revealed that the employees assigned to the Bhuana Utama department store did not yet have adequate knowledge and skills about accounting either manually or computerized.

## **5. CONCLUSION**

Merchandise inventory is an important aspect for a trading company. Merchandise inventory is the largest component of working capital owned by a trading company. Management of merchandise inventory requires a good accounting and management system so that it is able to produce reliable and timely information.

The inventory accounting system implemented by the Bhuana Utama department store has several weaknesses. First, there are concurrent duties in the cash and accounting functions. The cash and accounting functions are carried out by one person, namely the BUMDes treasurer. The BUMDes treasurer is not only responsible for recording purchases and sales of merchandise inventory (accounting function) as well as receiving and storing cash receipts from selling merchandise (storage function) and issuing cash when making payments for purchases of supplies. Second, the department store unit should have a special accounting function that is separate from the BUMDes accounting function so that the inflow and outflow of merchandise inventory in the department store can be done in real time and the value of merchandise inventory can also be presented in real time. The current system assigns the task of the department store accounting function to be carried out by the BUMDes treasurer so that the department store employees do not know the quantity and value of their merchandise inventory because they do not keep records in the form of a supporting account. Based on the results of interviews and observations, it was also revealed that the employees assigned to the department store unit did not yet have adequate knowledge and skills about accounting either manually or computerized.

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