

## CHAPTER II

### THEORETICAL FRAMEWORK

#### A. Accounting System

##### 1. Definition of System and Procedure

The implementation of accounting system in the company provides a control to help the manager oversee the behavior of the employees in achieving the business objectives. Accounting system reflects the organizational structure and the information needs of individual in the business. In accounting system, system and procedure will be guidance for the every party in conducting the business activities in order to every part in the company has responsibility to do their job based on the authority that should be conducted by them. A system is a group of two or more interrelated components or subsystems that serve a common purpose (Hall, 2008:4). Another definition, O'Brien and Marakas (2010:4) stated that a system is a set of interrelated components, with a clearly defined boundary, working together to achieve a common set of objectives. Besides that, a system is a set of interdependent elements that together accomplish specific objectives and a system must have organization, interrelationships, integration, and central objectives (Gelinas and Dull, 2010:11).

O'Brien and Marakas (2010:570) stated that the definition of procedure is sets of instructions used by people to complete a task. The successful operation of an accounting system requires procedures to ensure that people

are able to perform the duties to which they are assigned (Warren, Fess, and Reeve, 1996:168). In other side, various procedures are designed to safeguard business assets and control expenditures. Mulyadi (2001:5) stated that system consists of procedure network while procedure is a series of clerical operation (chronological). Therefore, procedure as an instruction to operate the system which is system and procedure have important role in business activities as guidance in achieving the business objectives which is necessary to safeguard the assets that company use to provide the profitable result.

## **2. Definition of Accounting System**

Warren, Fess, and Reeve (1996:163) stated that accounting system is the methods and procedures for recording and reporting financial information. Accounting systems reflect the organizational structure and the information needs of individuals within the business, as individuals or lines of authority and responsibility within a business change, the accounting system must also adapt and change. To be effective, the accounting system must support all levels of management. The accounting systems consists of the methods and records established to identify, assemble, analyze, classify, record, and report a facility's transactions and to maintain accountability for the related assets and liabilities.

Accounting system is the methods and procedures for collecting, classifying, summarizing, and reporting a business's financial and operating

information (Reeve et al, 2012:230). Accounting system for large businesses must be able to collect, accumulates, and report many types of transactions.

An accounting system can be defined in several ways (Trenery, 1999:29):

- a. As the systems and procedures used to compile the annual accounting reports.
- b. As the collection of data to be summarized into management and other reports used to control the financial operations of the business.
- c. As the recording and reporting of financial information about the activities of the business for the shareholders.

The accounting system is not only reporting system in a business. The integrated reporting requirements involve all functions and not just accounting departments and accounting requirements. The management of sales, service and purchasing require statistics, usually in units of work hours, items repaired, warranty replacements analyzed into the variety of reasons for the warranty repair, and other relevant trend measures that are required in order to be effective managers. The accounting system is art of this overall system, drawing information from whichever sources are necessary to process the data and prepare the management reports required to confirm the management's objectives are being met. These objectives are met by producing internal reports by certain dates, and meeting other internal deadlines for general or specific purposes.

### 3. Principles of Accounting System

The differences in the nature of businesses, in the volume of transactions to be processed, and in the uses made of accounting data, accounting systems will vary from business to business. However, there are a number of broad principles that apply to all systems as follows (Fess and Niswonger 1980:335-336):

- a. **Cost-Effectiveness Balance**  
An accounting system must be tailored to meet the specific needs of each business. Since costs must be incurred in so doing, one of the major considerations in developing an accounting system is cost-effectiveness. For example, although the reports produced by an accounting system are a valuable end product of the system, the value of the reports produced should be least equal to the cost of producing them. No matter how elaborate or informational a report may be, it should not be produced if its cost exceeds the benefits derived by those who use it.
- b. **Flexibility to Meet Future Needs**  
A characteristic of the modern business environment is change. Each business must adapt to the constantly changing environment in which it operates. Whether the changes are the result of new government regulations, change in accounting principles, organizational changes necessary to meet practices of competing businesses, change in data processing technology, or other factors, the accounting system must be sufficiently flexible to meet the changing demands made of it.
- c. **Adequate Internal Controls**  
An accounting system must provide the information needed by management in reporting to owners, creditors, and other interested parties and in conducting the affairs of the business. In addition, the system should assist management in controlling operations. The detailed procedures adopted by management to control operations are collectively termed in internal controls.
- d. **Effective Reporting**  
Users of the information provided by the accounting system rely on various reports for relevant information presented in an understandable manner. Whom these reports are prepared, the requirements and knowledge of the user should be recognized.
- e. **Adaptation to Organizational Structure**  
Only by effectively utilizing and adapting to the human resource of a business can the accounting system meet information needs at the lowest cost. Since no two businesses are structured alike, the accounting system must be tailored to the organizational structure of each business. The

lines of authority and responsibility will affect the information requirements of each business. In addition, an effective system needs the approval and support of all levels of management.

#### 4. The Framework of Accounting System

Each entity for which we account is in some ways different from every other entity. Likewise, the needs for accounting information differ for each unique entity being accounted for. Thus each accounting system must be designed to fit the specific needs of the particular entity. Even so, practically all systems share a common framework. According to Dupree and Marder (1984:65), to provide useful information, every accounting system must identify bits of information, collect these bits, and process them to the point that they can be reported to people. In doing this, information is processed through certain phases, or functions, of the system.

a. Documenting

The various transactions experienced by an entity are usually noted on business forms called source documents. These documents, as the first step in the accounting system, can then act as triggers to get the events recorded into the system. Receipts, invoices, checks and earning slips are just a few examples of the forms that help to document transactions. The initial noting of events is not necessarily on paper documents. In some modern systems, it may be done electronically or mechanically. Regardless of how it is done, transactions must somehow be noted for an accounting system to process the information for use in accounting reports.

b. Recording

Information that has been documented must still be recorded in the accounting system for further processing. This is usually done in order to in which transaction occur by date, in chronological order. This second function of accounting, known as recording, is often performed in a book called a journal. A journal is sometimes referred to as a place of original entry because it is the place where transactions are first listed (entered) in a formal.

Recording can be performed in ways other than by writing in a journal. In automated systems, information is recorded into punched cards or

tapes, or on magnetic tapes or disks. Some documents such as checks and deposit slips may be encoded with printing that can be read by a special device, called a scanner, which automatically records the data into the computer "journal". Then, at some later time, the automated system can print out a written record of events as they have been registered in the internal journal. Whatever the method, all accounting systems provide for recording transactions and events into one or more journal of some kind.

c. Summarizing

Accounting information is classified into account categories, which is a way of summarizing the information so that it can be used in reports to people who need the information. The data that are summarized in the third accounting function come from the journal (or journals). In some automated systems, the recording and summarizing functions are performed together. In other words, a computer may record directly into T-accounts. The speed and flexibility of a computer then allows it to print out the recorded information in almost any forms, including a listing of transactions in chronological order.

d. Reporting

The purpose of accounting is to provide useful information to people who need it. Accounting data are frequently presented in formal accounting statements. The fourth function of accounting, reporting, is the end product of the accounting system.

## 5. Components of Accounting System

Fess and Niswonger (1980:335) stated that the basic components of accounting system are the forms, records, procedures, and data processing methods employed to obtain the various reports needed by the enterprise. Forms, such as sales invoices, vouchers, and bank checks are the media initially used in recording transactions. Records include ledgers, journals, registers, and other media used for compilations of data. Various procedures are designed to safeguard business assets and control expenditures. Data may be processed manually or by machines. Reports may be characterized as the end product of the accounting system.

Mulyadi (2001:3) stated that the main components of accounting system are forms, records such as journal, general ledger, subsidiary ledger, and report. Form is document that used in documented every transaction that happens in the company in form of a piece of paper. Form is often called a document.

Journal is the first accounting record used to record, classify, and summarize the financial data and other data. General ledger consists of accounts used to summarize financial data that have been recorded previously in the journal. Subsidiary ledger consist of subsidiary accounts that elaborate financial data that written in the certain accounts in the general ledger. The content of report is informing the information which is an output of accounting system. The report can be in form of computer printing result and presentation on screen of computer monitor.

## **6. Form**

Mulyadi (2001:75 and p.82) stated that form is a piece of paper that has space to be filled. Form is also called a document. Form holds important role in information accounting system. Form is used to: (1) determine the responsibility on the coming of the business transactions in the company, (2) record the data in business transaction, (3) reduce the possibility of error with explain all of transaction in form of written, and (4) inform the main information from one person to another person in the company or other company.

The basic principle underlying in designing a form, there are some principles that is required to be considered such as:

- a) Use copy form
- b) Avoid the duplication in collecting the data
- c) Make the design of form as simple and short as possible
- d) Put the element of the internal check in designing form
- e) Write name and address of the company in for to be used for communication with outside party
- f) Write the name of form to facilitate identification
- g) Give numbers to identification
- h) Write the number of line on the left and right side of form, if a form wide use, to minimize the possibility of error in filling
- i) Print a line on form, if the form to be filled with handwriting. If the filling in form will be done with typewriter, a line should not be printed, because of a typewriter will able to adjust the spaces own, and also if striped, the form filling with typewriter will take a long time
- j) Write the printed number. This number is used to control the using of form and to identify business transaction. The using of printed number on form such as proof of cash disbursement, check, credit memo, invoice, debit memo are element of internal control on related transaction with form. This printed number will be written in accounting record, in order to facilitate search back the document that support the recorded information in record.

- k) Design the particular form such that the filler just to sign (√) or (x) or by answering yes or no to save time filling
- l) Prepare a double form with carbon disposable, or by using that is used in several times, or print with paper without carbon (carbonless paper)
- m) Dividing the zone such form is divided according blocks area that is logical that contains interrelated data

## 7. Processing Methods

Reeve et al (2012:231) stated that processing methods are the means by which the system collects, summarizes, and reports accounting information.

These methods may be either manual or computerized.

### a. Manual Accounting System

Understand a manual accounting system assists in recognizing the relationships between accounting data and accounting reports. In addition, most computerized systems use principles used in a manual system. Such manual accounting systems are simple to use and easy to understand. Manually kept records may serve a business reasonably well when the amount of data collected, stored, and used is relatively small. As a business becomes more complex, the manual system can be supplemented or replaced by a computerized system.

### b. Computerized Accounting System

Computerized accounting systems have become more widely used as the cost of hardware and software has declined. In addition, computerized accounting systems have three main advantages over manual systems. First, computerized accounting systems simplify the record-keeping process. Transactions are recorded in electronic forms and, at the same time, posted electronically to general and subsidiary ledger accounts. Second, computerized systems are generally more accurate than manual systems. Third, computerized systems provide management current account balance information to support decision making, since account balances are posted as the transactions occur.

## **B. Raw Material Inventory Accounting System**

### **1. Definition of Inventory**

Inventory is a critical resource in many ways. Its presence contributes to value because it reduces the wait time for a customer. It contributes to timeliness, response time, and other customer-service related factor as well. According to Krajewski and Ritzman (1996:519), inventory is a stock of anything held to meet future demand. Inventory is created when the rate of receipts exceeds the rate of disbursements; it is depleted when disbursements exceeds receipts.

Jiao and Li (2012:49) stated that inventory refers to the finished goods or commodities which are for the purpose of selling, enterprises hold in the normal course of business production, or goods are still in producing process for the selling purpose, or the materials consumed in the producing process and etc.

Carmichael, Whittington, and Graham (2007:20.2) stated that inventory as an asset. Inventory generally is acquired or produced for the subsequent exchange. This utility or service potential justifies the classification of inventory as an asset of the enterprise that controls it. Normally, inventory is converted into cash or other assets during the operation cycle of the business. In fact, this process is what establishes the operating cycle. As a result, inventory typically is classified as a current asset for purposes of preparing a classified balance sheet.

## 2. Types of Inventory

Nahmias (2009:201) stated that when consider inventories in the context of manufacturing and distribution, there is a natural classification scheme suggested by the value added from manufacturing or processing.

- a. Raw Material. These are the resources required in the production or processing activity of the firm.
- b. Components. Components correspond to items that have not yet reached completion in the production process. Components are sometimes referred to as subassemblies.
- c. Work-in-process. Work-in-process (WIP) is an inventory either waiting in the system for processing or being processed. Work-in-process inventories include components inventories and may include some raw materials inventories as well. The level of work-in-process inventory is often used as a measure of the efficiency of a production scheduling system.
- d. Finished goods. These are final products of the production process. During production, value is added to the inventory at each level of the manufacturing operation, culminating with finished goods.

There are some types of inventory as follows (Carmichael, Whittington, and Graham, 2007:20.3):

- a. Retail - wholesale  
Wholesalers and retailers typically acquire merchandise that is ready for resale to customers. Acquisition cost becomes the basis for carrying the inventory until it is sold
- b. Manufacturing  
In a manufacturing operation, a production process creates goods for sale to customers or for use in other operations. Manufacturing inventories often are categorized by stage of completion
  - 1) Raw materials.  
Goods to be incorporated into a product or used in the production process that have not yet entered the process are referred to as raw materials inventory. The output from one process can become the raw material for another process (e.g., subassemblies).
  - 2) Work in process  
Goods typically are classified as work in process inventory as soon as they are drawn from raw materials stock and enter the manufacturing process.

3) Finished goods

Products that are complete and ready for sale are considered finished goods inventory.

4) Supplies.

Materials necessary for the manufacturing operation but not a significant component of the final product are known as supplies inventory. For example, small incidental screws may be considered supplies inventory, or oil used to lubricate a grinding machine may be considered supplies inventory.

c. Consignment

Arrangements for marketing, storage, distribution, and finishing of a company's products can result in goods being held by a party other than the owner. The consignee (party holding the goods) generally is precluded from recording the inventory because legal title is retained by the consignor and no exchange has taken place. The consignment inventory balance frequently is combined with the work in process or finished goods inventory shown on the consignor's financial statements. Examples include inventories held for sale in a retail store that have been consigned by the manufacturer, and components held by an outside machine shop to be used in a larger product by the consignor.

d. Trade-in

Some companies obtain goods accepted from customers in connection with sales of other products. These goods may or may not be similar to the items sold or other products of the seller. An example is a cell phone accepted in trade by a wireless company when upgrading customer equipment. Trade-in inventory should be valued at net realizable value, defined as estimated selling price less costs of disposal. The discount or allowance deducted from the list price of the goods sold is not an appropriate value to assign to the trade-in inventory, because the discount often pertains to marketing strategy and other factors not related to the trade-in items.

e. Repossessed

In connection with its collection efforts, a company may repossess its product from customer. Companies that provide consumer financing often deal with repossessed inventory. The physical condition of the property may vary widely and will affect the company's decision regarding disposition (e.g., rework, offer for sale at a discount, scrap). Repossessed inventory should be recorded at the lower of outstanding balance of the note receivable (i.e., cost) or the asset's replacement cost (i.e., cost to purchase or reproduce). Solely considering the outstanding balance of the receivable from the customer is not appropriate, because this approach does not consider the condition and utility of the repossessed item. If replacement cost cannot realistically be determined, net realizable value should be used.

f. Contract production

A company may enter into a contract under which the customer provides specifications for purchasing goods, constructing facilities, or providing services.

g. Products maturing in more than one year

Certain products such as tobacco, spirits, livestock, and forest products are held for an extended period of time until they are mature for sale or inclusion in a finished product. Recognized trade practices is to classify such inventory items as current assets despite the required aging process.

h. Spare parts

To service their customers, many companies (particularly equipment dealers and manufacturers) maintain a supply of spare parts for their products. Also, transportation companies hold spare parts to allow their fleets to operate continuously. If spare parts are not more appropriately classified as property, plant, and equipment typically they will classified as inventory as they are either held for sale or will be consumed in the production of a good or service for sale.

1) Miscellaneous.

Many other types of products may be classified as inventory for financial reporting purposes. Examples include by products (secondary products that result from the manufacturing process, particularly in the chemicals and the gas industries), reusable items (such as beverage containers), and extractive products.

### 3. Inventory System

Rich et al (2010:286) stated that inventory is at the heart of the operating cycle, the inventory accounting systems that record purchases and sales and track the level of inventory are particularly important in such companies. These systems provide the information needed to determine cost of good sold and perform financial statement analysis. In addition, these systems signal the need to purchase additional inventory or the need to make special efforts to sell existing inventory. They also provide information necessary to safeguard the inventory from misappropriation or theft. In short, these systems provide the information that managers need to manage and control inventory.

Companies use one of two types of inventory accounting systems, a perpetual inventory system or a periodic inventory system.

a. Perpetual Inventory System

This type of system requires that detailed records be maintained on a transaction by transaction basis for each purchase and sale of inventories. In a perpetual inventory system, the accounting system keeps an up-to-date record of both ending inventory and cost of good sold at any point in time. However, a company that uses a perpetual system should still take a physical count of inventory at least once a year to confirm the balance in the inventory account.

b. Periodic Inventory System

A periodic inventory system does not require companies to keep detailed, up-to-date inventory records. A periodic system only produces balances for ending inventory and cost of good sold at the end of each accounting period (periodically).

Besides that, statement above supported by another expert like Horngren and Harrison (1992:428-429) in which stated that the different businesses have different inventory information systems. In periodic system, the business does not keep a continuous record of the inventory on hand. Instead, at the end of the period, the business makes a physical count of the inventory on hand and applies the appropriate standard end-of-period inventory entries. This system is also called the physical system because it relies on the actual physical count of inventory. The periodic system is used to account for inventory items that have a low unit cost. Low-cost items may not be valuable enough to warrant the cost of keeping a running record of the inventory on hand. While in perpetual system, the business keeps a continuous record for each inventory item. The records thus show the inventory on hand at all times. Perpetual records are useful in preparing monthly, quarterly, or other interim financial statement. The business can determine the cost of ending inventory and the cost of goods

sold directly from the accounts without having to physically count the merchandise. The perpetual system offers a higher degree of control than the periodic system because the inventory information is always up to date. Consequently, businesses use the perpetual system for high-unit-cost inventories, such as gemstones and automobiles. Nevertheless, company physically counts their inventory at least once each year to check the accuracy of their perpetual records.

#### **4. Definition of Inventory Accounting System**

Mulyadi (2001:553) stated that inventory accounting system has objective to record the movement all types of inventory that stored in warehouse. Inventory accounting system close related with the inventory control procedure which is the procedure is part of inventory accounting system that influences the inventory.

Rich et al (2010:286) stated that inventory is at the heart of the operating cycle, the inventory accounting systems that record purchases and sales and track the level of inventory are particularly important in such companies. According to Boundless (2013:237) that an inventory management system is a series of procedures, often aided by computer software, that tracks assets progression through inventory. For example, assume a set amount of raw material is acquired by the company. When the company receives that material, the amount should be noted in the inventory management system. As the material is processed into the goods for resale, the amount of raw

material used should be deducted from the “raw material inventory” and the amount of goods that result from the process should be added to the “finished goods inventory”. As each finished item is sold, the “finished goods inventory” should be decreased by that amount. The benefit of a properly used and maintained inventory management system is that it allows management to be able to know how much inventory it has at any given time.

A good inventory management system provides information to efficiently manage the flow of materials, effectively utilize people and equipment, coordinate internal activities and communicate with customers. Inventory management does not make decision or manage operations, but provides information to managers who make more accurate and timely decision to manage the operations (Narayan and Subramanian, 2008:3).

## **5. Related Function**

Hall (2008:19) stated that the objective of materials management is to plan and control the materials inventory of the company. A manufacturing firm must have sufficient inventories on hand to meet its production needs and yet avoid excessive inventory levels. Every dollar invested in inventory is a dollar that is not earning a return. Furthermore, idle inventory can become obsolete, lost, or stolen. Ideally, a firm would coordinate inventory arrivals from suppliers such that they move directly into the production process. As a practical matter, however, most organizations maintain safety stocks to carry

them through the lead time between placing the order for inventory and its arrival. Materials management has three sub functions:

- a. **Purchasing**  
Purchasing is responsible for ordering inventory from vendors when inventory levels fall to their reorder points. The nature of this task varies among organizations. In some cases, purchasing is no more than sending a purchase order to a designated vendor. In other cases, this task involves soliciting bids from a number of competing vendors. The nature of the business and the type of inventory determines the extent of the purchasing function.
- b. **Receiving**  
Receiving is the task of accepting the inventory previously ordered by purchasing. Receiving activities include counting and checking the physical condition of these items. This is an organization's first, and perhaps only, opportunity to detect incomplete deliveries and damaged merchandise before they move into the production process.
- c. **Stores**  
Stores takes physical custody of the inventory received and releases these resources into the production process as needed.

According Mishra (2007:6) stated that there are three functions of materials management:

- a. **Material Requirement Planning**  
Based on the production schedule of end items, material requirement planning determines how much of sub-assemblies, parts and raw materials are needed and how to buy them.
- b. **Buying or Purchasing**  
Purchasing is done to facilitate resale (trading) and consumption or conversion. Buyers of materials for consumption or conversion include buyers for manufacturing firms, service business, institutions, government agencies etc. purchasing process has several phases including:
  - 1) Purchase requisition
  - 2) Selection of suppliers
  - 3) Ordering: pricing, terms and conditions and placement of purchase order
  - 4) Follow-up
  - 5) Receipt and inspection
  - 6) Maintain records
  - 7) Supplier management, supplier relations, evaluation and development.

c. Logistics -- Transportation and Warehousing

Logistics is concerned with the management of warehousing (receiving, storing and issue of materials) and flow (transportation) of materials, service and information in a supply chain with a view to enhance the product's value. Warehousing includes receipt of materials, physical identification of materials, physical control of stored materials, physical verification of inventory, valuation of stock, and issue.

Jiao & Li (2012:49) stated that Inventory management has an important influence on operating performance of the enterprises. Inventory management is the management of the enterprise inventory, mainly including the information management of inventory and decision-making based on this information analysis, taking effective control of inventory management to achieve the ultimate goal, and raise economic benefits. Inventory management includes the processes of purchase, acceptance, storage, custody, and sales, which involves both technical approaches, the management system and mechanism.

Inventory purchases are the first important part in the process of enterprise inventory management, which determines the amount of corporate inventory, and also directly affects the subsequent production and business activities. Acceptance of the inventory is an important part before inventory storage in enterprise. In some enterprises, the inspection of acceptance of inventory is not enough, which cause losses to the enterprise. And inspection person and purchase person are often the same one, who is easily to increase the likelihood of malpractice. Some enterprises do not have the inventory classified according to the nature of the required, and they unify all the

inventory management in the same way, which is not helpful to take key controls.

Generally in the production site, there are inventories remained after consuming each day, these remaining inventories are often neglected as they are stored in the different production sites, which will cause losses to the enterprise. Other inventories have expiration date and they will turn bad if the expiration date passed, which will also cause a loss. Finally, nobody is responsible for the requisition of materials, materials stolen or unauthorized use by workers will result in the loss of business. In many enterprises, inventory requisition and return system is not generally set, and the step of inventory requisition has a weak internal control. Industrial product sales generally start from receiving customer orders, but the internal sales orders are relatively simple, and after receiving orders inventory delivery has a time range, which is not convenient for the enterprises' internal management.

## **6. Document Used**

Warren, Reeve, and Duchac (2009:313) stated that controls for safeguarding inventory begin as soon as the inventory is ordered. The following documents are often used for inventory control:

- a. Purchase order
- b. Receiving report
- c. Vendor's invoice

The purchase order authorizes the purchase of the inventory from an approved vendor. As soon as the inventory is received, a receiving report is completed. The receiving report establishes an initial record of the receipt of the inventory. To make sure the inventory received is what was ordered, the receiving report is compared with the company's purchase order. The price, quantity, and description of the item on the purchase order and receiving report are then compared to the vendor's invoice. If the receiving report, purchase order, and vendor's invoice agree, the inventory is recorded in the accounting records. If any differences exist, they should be investigated and reconciled.

Recording inventory using a perpetual inventory system is also an effective means of control. The amount of inventory is always available in the subsidiary inventory ledger. This helps keep inventory quantities at proper level. For example, comparing inventory quantities with maximum and minimum levels allows for the timely reordering of inventory and prevents ordering excess inventory. Finally, controls for safeguarding inventory should include security measures to prevent damage and customer or employee theft.

## **7. Definition of Raw Material**

. Raw material is required by some of corporation which is a main source to conduct the production process. Basic goods that will be used in production but have not yet been placed into production (Weygandt, Kieso, and Kimmel, 2008:263). Besides that, Carmichael, Whittington, and Graham (2007:20.3)

also stated that raw material is goods to be incorporated into a product or used in the production process that have not yet entered the process are referred to as raw materials inventory. Raw materials inventory is made up of goods that will be used in the production of finished products, e.g., nuts, bolts, flour, sugar (Muller, 2003:19). Based on the explanations from some experts, the raw material is materials on hand that used by company to distribute into production process.

#### **8. Definition of Raw Material Inventory Procedure**

Mulyadi (2001:553-554) stated that inventory accounting system has objective to record the movement all types of inventory that stored in warehouse. One of inventory types is raw material inventory. There are five transactions that influence the raw material inventory such: purchasing, purchase return, usage of warehouse goods, return of warehouse goods, and counting of physical inventory. Because of those explanations, it can be concluded that raw material inventory procedure has objective to record the movement of raw material inventory that is purchased, returned to supplier, usage and return of warehouse goods, and counted the physical inventory.

#### **9. Related System and Procedure of Raw Material Inventory**

According to Mulyadi (2001:554), there are five transactions and related system and procedure of raw material inventory.

**Table 1. Type of Inventory, Related Transaction, Related System and Procedure of Raw Material**

Type of Inventory	Transaction	Related System and Procedure
Raw Material Inventory	a. Purchasing	a. Procedure of Recording Inventory Cost of Goods Purchased
	b. Purchase Return	b. Procedure of Recording Inventory Cost of Goods are Returned to the Supplier
	c. Usage of warehouse goods	c. Procedure of Requesting and Warehouse Expenditures
	d. Return of warehouse goods	d. Procedure of Additional Recording Inventory Cost of Goods Sold because the Returns of Goods Warehouse
	e. Counting of Physical Inventory	e. Physical Inventory Counting System

Source: Mulyadi (2001:554)

a. Procedure of Recording Inventory Cost of Goods Purchased

The source document used in the procedure of recording inventory cost of goods purchased is reporting the receipt of goods and proof of cash disbursement. Report the receipt of goods used by the Warehouse Department as the basis for the recording the additional quantities of goods from the purchase into the warehouse card. Proof of cash disbursement that enclosed with the report of receipt the goods, purchase order, and invoice from supplier is used as a source document in the recording of inventory cost of goods purchased in the voucher register. Proof of cash disbursement is also used as basis for the recording of additional quantity and inventory cost of goods into inventory card.

The figure 1 illustrates flowchart of the procedures of recording the inventory cost of goods purchased. The Debt Department make proof of cash disbursement as source document of recording inventory cost of goods purchased based on supporting documents: letter of purchased order received from Purchasing Department, report of goods receipt from Receiving Department, and invoice from supplier through Purchasing Department. Based on the proof of cash disbursement, Inventory Card Department records detail of purchased inventory in the concerned inventory card. Warehouse Department record the additional quantity of inventory purchased in the Warehouse Card based on report of goods receipt is received by Warehouse Department from Shipping Department.

b. Procedure of Recording Inventory Cost of Goods are Returned to the Supplier.

The inventory has been bought by company and is returned to supplier so the transaction of purchase return will influence the related inventory. It will reduce the quantity of inventory in warehouse card that be held by warehouse department and reduce the quantity and inventory cost of goods that recorded by inventory card department in related inventory card. Documents used in this procedure are the report of good shipping and debit memo. The report of good shipping used by warehouse department to record the inventory quantity is shipped back to supplier into warehouse department. Received debit memo from purchasing department used by inventory card

department to record the inventory quantity and cost of goods returned to supplier into inventory card.

In this procedure, warehouse department record the reducing of inventory because there is a transaction of purchase return based on the debit memo received from purchasing department. Debit memo is recorded by warehouse department into warehouse card. While debt department record the debt reducing as result from purchasing return with archives the debit memo and its enclosure (the report of good shipping) in the archive of unpaid cash disbursement proof. And inventory card department record the reducing of inventory as a result purchasing return in the warehouse card based on debit memo and its enclosure (the report of goods receiving). Journal department record the reducing of debt and inventory as result of purchasing return in the journal of purchasing return based on debit memo that have been filled a cost of goods per unit and total of cost of goods by warehouse card department.

c. Procedure of Requesting and Warehouse Expenditures

The source document used in these procedures is proof of requesting and warehouse expenditures. This proof is used by the Warehouse Department to record inventory reduction because internal usage. This proof is used by the Inventory Card Department to record the reduced of quantity and inventory cost of goods because internal usage. This proof is also used as source document in recording of inventory consumption into raw material inventory journal or general journal.

Figure 2 describes that the Journal Department records the raw material usage in the raw material usage journal based on the proofs of warehouse goods requesting and expenditures that had been filled with cost of goods by Inventory Card Department.

- d. Procedure of Additional Recording Inventory Cost of Goods Sold because the Returns of Goods Warehouse.

Raw material that has been requested by production department, not all of raw material used up consumed to produce the specific order. If there is an excess of requested raw material by production function, raw material must be returned to warehouse department. The document that used in this procedure is the proof of warehouse goods return. It is used by warehouse department to record the additional quantity of inventory in the warehouse card. Besides that, it is used by inventory card department to record the additional quantity and inventory cost of goods sold into inventory card, to record the reducing of cost into cost card, and to record the goods warehouse return into journal.

- e. Inventory Physical Counting System

All of inventory types which is include finished good inventory, work in process inventory, raw material inventory, auxiliary material inventory, spare part inventory provide a inventory physical counting system. Generally, inventory physical counting system is used by company to count inventory in warehouse physically. The result of counting will be used to inquire the responsibility to warehouse department concern the implementation of

storage function, and responsibility inventory card department related the reliability of inventory recording that is held, and to do adjustment on inventory recording in inventory card department.

Recording the all of inventory physical counting result, the corporation needs to provide some documents such as follows:

a. Inventory Tag

This document is used to capture the inventory physical counting result. In counting the physical inventory, every kinds of inventory is counted twice independently by counter and checker.

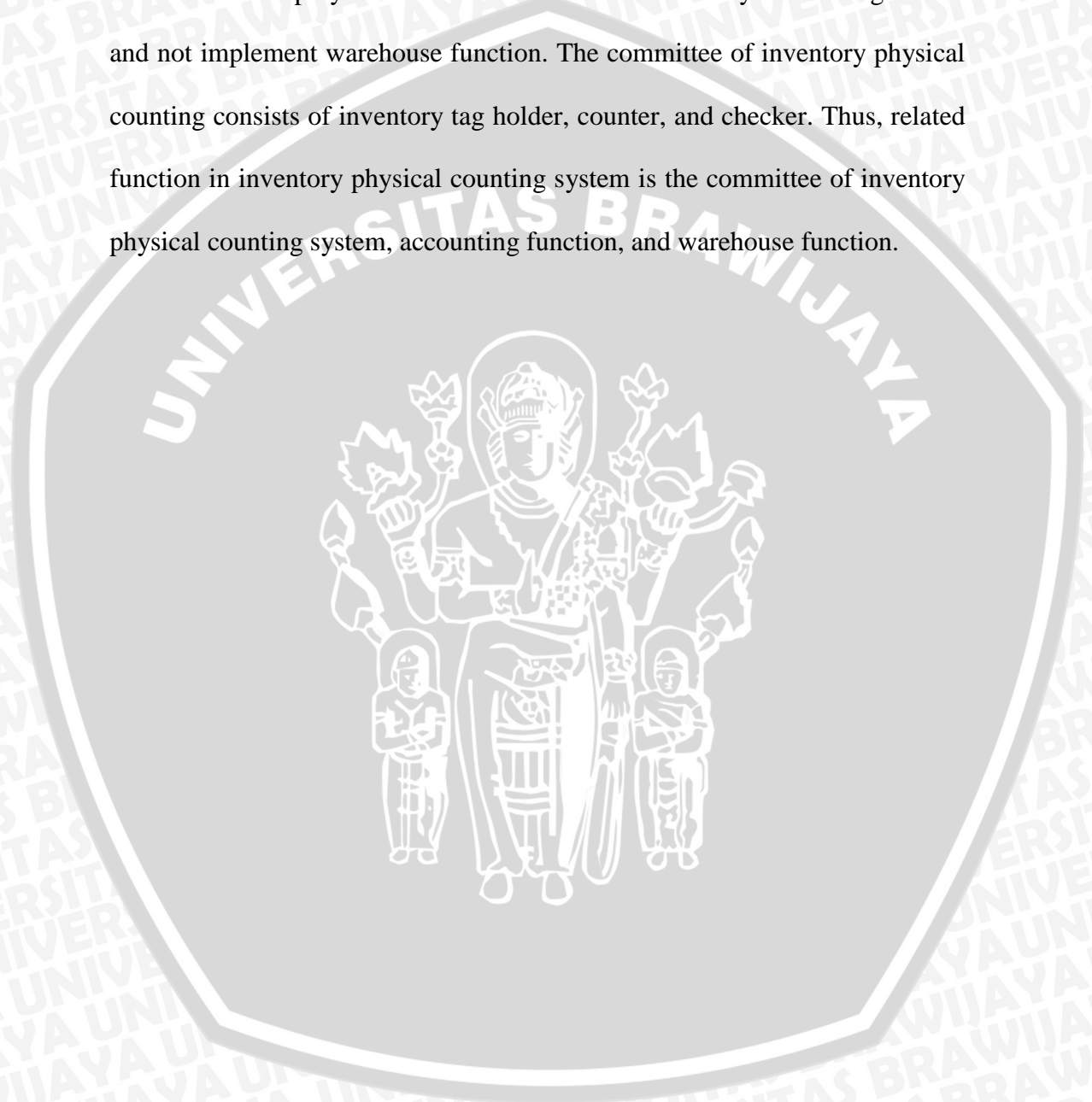
b. Inventory Summary Sheet

This document is used to summarize all of data that have been captured. Data summarized such as number of inventory tag, number of inventory code, name of inventory, quantity, and unit. The list of inventory physical counting result that has finished be processed then will be signed by chief of committee physical counting and authorized by general manager. This list will be used to ask the responsibility from warehouse department related the implementation of goods storage function and responsibility of inventory card department related reliability of inventory accounting record implementation.

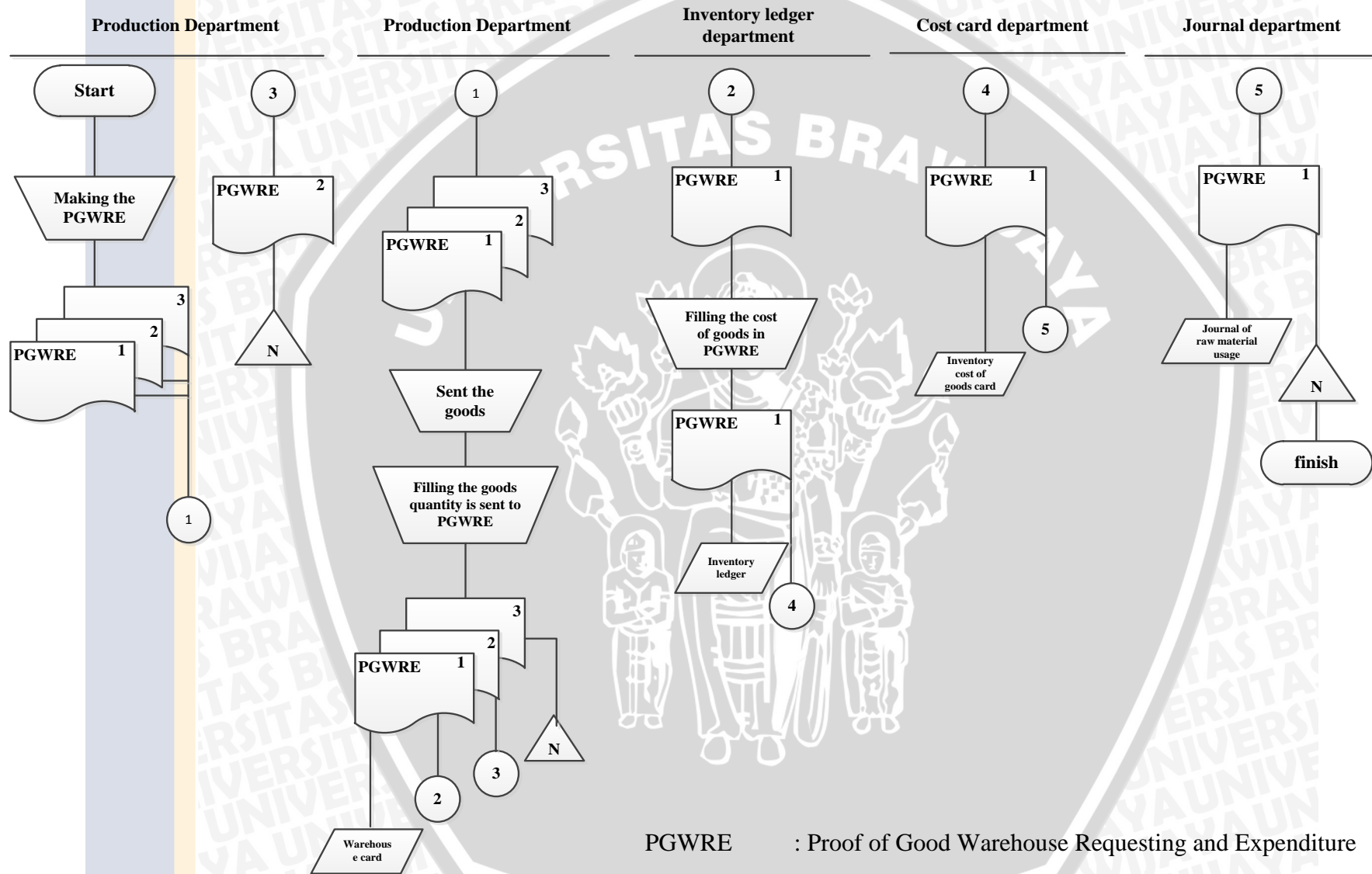
c. Memorial Proof

This document is source that be used to accounted adjustment of inventory account as a result from physical counting result into journal.

Related function in doing the inventory physical counting generally tentative that commonly provides a committee which is the member will be chosen from employee who is not declare the inventory accounting record and not implement warehouse function. The committee of inventory physical counting consists of inventory tag holder, counter, and checker. Thus, related function in inventory physical counting system is the committee of inventory physical counting system, accounting function, and warehouse function.







**Figure 2. Flowchart of Requesting and warehouse expenditure procedure**  
(Source: Mulyadi 2001:437)

## C. Internal Control

### 1. Definition of Internal Control

Internal control is very important for superintendence of corporations' activities. It is conducted to restrain an underhand way of doing something. According to the Committee of Sponsoring Organizations (COSO) of the Tread way Commission (2011:1), internal control is a process, affected by an entity's board of directors, management and other personnel, designed to provide reasonable assurance regarding the achievement of objectives in the following categories:

- a. Effectiveness and efficiency of operations
- b. Reliability of financial reporting
- c. Compliance with applicable laws and regulations.

Reeve et al (2012:392) stated that internal control is broadly defined as the procedures and processes used by company to safeguard its assets, process information accurately, and ensure compliance with laws and regulations. Internal controls help businesses guide the company's operations and prevent theft and other abuses. Therefore, internal control is process and procedure that cover organizational structure and methods designed by company to provide the safeguarding assets, process information accurately, support the effectiveness and efficiency of operation, and compliance with applicable laws and regulation.

## 2. Objectives of Internal Control

The objectives of internal control are to provide reasonable assurance that (1) assets are safeguarded and used for business purposes, (2) business information is accurately, and (3) employees comply with laws and regulation (Reeve et al, 2012:394). Internal control can safeguard assets by preventing theft, fraud, misuse, or misplacement.

Accurate information is necessary for operating a business successfully. The safeguarding of assets and accurate information often go hand-in-hand. The reason is that employees attempting to defraud a business will also need to adjust the accounting records in order to hide the fraud. Business must comply with applicable laws, regulations, and financial reporting standards. Mulyadi (2001:163) stated that the objectives of internal control system are: (1) to keep the organization wealth, (2) to check the carefulness and reliability of accounting data, (3) to encourage the efficiency, and (4) to encourage the management policy to be obeyed.

## 3. Types of Internal Control

Fess and Niswonger (1980:276) stated that internal controls are classified as (1) administrative controls and (2) accounting controls. Internal administrative controls consist of procedures and records that assist management in achieving business objectives. For example, with records of defective work by production employees, management can evaluate personnel performance and thus control the quality of the product manufactured.

Internal accounting controls consist of procedures and records that are primarily concerned with the reliability of financial records and reports and with the safeguarding of assets. For example, procedures established to assure that all transactions are recorded in conformity with Generally Accepted Accounting Principles help assure reliable financial records. Access to assets should be limited to authorized personnel in order to help safeguard the assets. Another means of safeguarding assets is to require periodic comparison between recorded assets and physical assets by the employment of physical inventory procedures.

Besides that, Mulyadi (2001:163) also stated that according to the objectives of internal control, the internal control system can divided into two types: internal accounting control and internal administrative control. Internal accounting control is a part of internal control system which is cover the organizational structure, method and size that coordinated especially to keep the organization wealth and check the carefulness and reliability accounting data. The good internal accounting control will guarantee the safety of wealth of investor and creditor who invested the wealth in the company and will provide the reliable financial report. Internal administrative control consists of organizational structure, method and size that coordinated especially to encourage the efficiency and management policy can be obeyed.

#### 4. Principles of Internal Control

To safeguard assets and enhance the accuracy and reliability of accounting records, companies follow specific control principles. These measures vary with the size and nature of the business and with management's control philosophy. There are six principles are applied to most enterprises as follows (Weygandt, Kieso, and Kimmel, 2008:339-344):

- a. **Establishment of Responsibility**  
An essential principle of internal control is to assign responsibility to specific employees. Control is most effective when only one person is responsible for a given task. Establishing responsibility includes authorization and approval of transactions.
- b. **Segregation of Duties**  
Segregation of duties is indispensable in an internal control system. there are two common applications of this principle:
  - 1) Different individuals should be responsible for related activities
  - 2) The responsibility for record keeping for an asset should be separate from the physical custody of that asset.

The rationale for segregation of duties is the work of one employee should, without a duplication of effort, provide a reliable basis for evaluating the work of another employee.
- c. **Documentation Procedures**  
Documents provide evidence that transactions and events have occurred. Companies should establish procedures for documents. First, whenever possible, companies should use prenumbered documents, and all documents should be accounted for. Prenumbering helps to prevent a transaction from being recorded more than once, or conversely, from not being recorded at all. Second, the control system should require that employees promptly forward source documents for accounting entries to the accounting department. This control measures helps to ensure timely recording of the transaction and contributes directly to the accuracy and reliability of the accounting records.
- d. **Physical, Mechanical, and Electronic Controls**  
Use of physical, mechanical, and electronic controls is essential. Physical controls relate to the safeguarding of assets. Mechanical and electronic controls also safeguard assets and enhance the accuracy and reliability of the accounting records.
- e. **Independent Internal Verification**  
Most internal control systems provide for independent internal verification. This principle involves the review of data prepared by

employees. To obtain maximum benefit from independent internal verification:

- 1) Companies should verify records periodically or on a surprise basis
- 2) An employee who is independent of the personnel responsible for the information should make the verification
- 3) Discrepancies and exceptions should be reported to a management level that can take appropriate corrective action

Large companies often assign independent internal verification to internal auditors. Internal auditors are company employees who continuously evaluate the effectiveness of the company's internal control systems. They review the activities of departments and individuals to determine whether prescribed internal controls are being followed. Internal auditors also recommend improvements when needed. In fact, most fraud is discovered by the company through internal mechanisms such as existing internal controls and internal audits.

f. Other Controls

Human resource control measures include the following:

- 1) Bond employees who handle cash. Bonding involves obtaining insurance protection against misappropriation of assets by employees. It contributes to the safeguarding of cash in two ways: first, the insurance company carefully screens all individuals before adding them to the policy and may reject risky applicants. Second, bonded employees know that the insurance company will vigorously prosecute all offenders.
- 2) Rotate employees' duties and require employees to take vacations. These measures deter employees from attempting thefts since they will not be able to permanently conceal their improper actions.
- 3) Conduct thorough background checks. Many believe that the most important and inexpensive measure any business can take to reduce employee theft and fraud is for the human resources department to conduct thorough background checks. Two tips: (1) check to see whether job applicants actually graduated from the school they list. (2) Never use the telephone numbers for previous employers given on the reference sheet; always look them up yourself.

## 5. Elements of Internal Control

Management is responsible for designing and applying five elements of internal control to meet the three internal control objectives. These elements are (1) the control environment, (2) risk assessment, (3) control

procedures, (4) monitoring, and (5) information and communication (Reeve et al, 2012:395).

a. Control Environment

A business's control environment is the overall attitude of management and employees about the importance of controls. One of the factors that influence the control environment is management's philosophy and operating style. A management that overemphasizes operating goals and deviates from control policies may indirectly encourage employees to ignore controls. For example, the pressure to achieve revenue targets may encourage employees to fraudulently record sham sales. On the other hand, a management that emphasizes the importance of controls and encourages adherence to control policies will create an effective control environment. The business's organizational structure, which is the framework for planning and controlling operations, also influences the control environment. Personnel policies also affect the control environment. Personnel policies involve the hiring, training, evaluation, compensation, and promotion of employees. In addition, job descriptions, employee codes of ethics, and conflict-of-interest policies are part of the personnel policies.

b. Risk Assessment

All organizations face risks. Examples of risk include changes in customer requirements, competitive threats, regulatory changes, change in economic factors such as interest rates, and employee violations of company policies and procedures. Management should assess these risks and take necessary actions to control them, so that the objectives of internal control can be achieved. Once risks are identified, they can be analyzed to estimate their significance, to assess their likelihood of occurring, and to determine actions that will minimize them.

c. Control Procedure

Control procedures are established to provide reasonable assurance that business goals will be achieved, including the prevention of fraud. Control procedures that can be integrated throughout the accounting system. These procedures are:

1) Competent Personnel, Rotating Duties, and Mandatory Vacations

The successful operation of an accounting system requires procedures to ensure that people are able to perform the duties to which they are assigned. Hence, it is necessary that all accounting employees be adequately trained and supervised in performing their jobs. It may also be advisable to rotate duties of clerical personnel and mandate vacations for no clerical personnel. This policy encourages employees to adhere to prescribed procedures. In addition, existing errors or fraud may be detected.

- 2) Separating Responsibilities for related Operations  
To decrease the possibility of inefficiency, errors, and fraud, the responsibility for related operations should be divided among two or more persons.
  - 3) Separating Operations, Custody of Assets, and Accounting  
Control policies should establish the responsibilities for various business activities. To reduce the possibility of error and fraud, the responsibilities for operations, custody of assets, and accounting should be separated. The accounting records then serve as an independent check on the individuals who have custody of the assets and who engage in the business operations.
  - 4) Proofs and security Measures  
Proof and security measures should be used to safeguard assets and ensure reliable accounting data. This control procedure applies to many different techniques, such as authorization, approval, and reconciliation procedures.
- d. Monitoring  
Monitoring the internal control system locates weakness and improves control effectiveness. The internal control system can be monitored through either ongoing effort by management or by separate evaluations. Ongoing monitoring efforts may include observing both employee behavior and warning signs from the accounting system. Separate monitoring evaluations are generally performed when there are major changes in strategy, senior management, business structure, or operations. In large businesses, internal auditors who are independent of operations normally are responsible for monitoring the internal control system. Internal auditors can report issues and concerns to an audit committee of the board of directors, who are independent of management. In addition, external auditors also evaluate internal control as a normal part of their annual financial statement audit.
- e. Information and Communication  
Information and management are essential elements of internal control. Information about the control environment, risk assessment, control procedures, and monitoring is needed by management to guide operations and ensure compliance with reporting, legal, and regulatory requirements. Management can also use external information to assess events and conditions that impact decision making and external reporting.

Mulyadi (2001:164) stated that there are four main elements of internal control system. Those elements are as follows:

- a. Organizational structure that separate the functional responsibility explicitly.

Organizational structure is a framework of distributing the functional responsibility to every organization units that formed to conduct prior company activities. The distributing of functional responsibility in the organization based on the following principles:

- 1) Must be separated the operation and storage functions from accounting function. Operation function is function that has an authority to do an activity (i.e., purchasing). Every activity in the company needs the authorization from manager of function that has authority to conduct certain activity. Storage function is function that has authority to store the company's asset. Accounting function is function that has authority to record the event of company financial.
  - 2) A function may not be given a full responsibility to conduct all of transactions.
- b. Authorization system and recording procedure that provides sufficient protection on wealth, debt, revenue, and cost.

In organizations, each transaction only occurs on the basis of the authorization of officials who have the authority to approve the transaction. Therefore, in the organization should be created a system that regulates the dividing of authority to authorize the implementation of each transaction. Form is used to capture of authority using to authorize the implementation of the transactions within the organization. Therefore, the

use of form should be supervised to control the implementation of authorization. Good record-keeping procedures will ensure the captured data in the form will be recorded in the accounting records with a level of accuracy and possibly high. Thus, the authorization system will ensure it generates reliable bookkeeping document, so it will become a reliable input for processing the accounting. Healthy practice in doing the assignment and function every units of organization.

- c. A healthy practice in carrying out the duties and functions of each unit in the organization. The distribution of responsibilities for functional and system authority and record-keeping procedures that have been implemented will not be fulfilled properly if not created ways to ensure a healthy practice in its execution. There are some ways that are generally taken by company in creating a healthy practices are:
  - 1) The use of numbered forms printed that its using must be responsible by official functionary.
  - 2) Surprised audit
  - 3) Every transaction should not be conducted from beginning to end by a single person or a single organizational unit, without any interference from the unit or other organization.
  - 4) Job Rotation
  - 5) Must taking the leave for an employee
  - 6) Physical match held in periodic of wealth with the record
  - 7) Establishment of the organizational unit that is responsible for checking the effectiveness of the system elements of internal control the other.
- d. Quality and ability of employee appropriate with responsibilities. If the company has employees who are competent and honest, the other control elements can be reduced to a minimum, and limit the company remain capable of producing reliable financial accountability. Employees who are

honest and expert in the field who became his responsibility will be able to carry out its work efficiently and effectively, although only a few elements of a system of internal control that supports it.

## 6. Control Activities

Control activities are very important way of implementing internal control.

The goal of these activities is to safeguard a company's assets and ensure the reliability of its accounting records. Controls activities include the following (Needles, Powers, and Crosson, 2011:323):

- a. Authorization  
Authorization means the approval of certain transactions and activities. In a retail store, for example, cashiers customarily authorize cash sales, but other transactions, such as issuing a refund, may require a manager's approval.
- b. Recording transactions  
To establish accountability for assets, all transactions should be recorded. For example, if a retail store uses a cash register that records sales, refunds, and other transactions on a paper tape or computer disk, the cashier can be held accountable for the cash received and the merchandise removed during his or her shift.
- c. Documents and records  
Well-designed documents help ensure that transactions are properly recorded. For example, using prenumbered invoices and other documents is a way of ensuring that all transactions are recorded.
- d. Physical controls  
Physical controls are controls that limit access to assets. For example. In a retail store, only the person responsible for the cash register should have access to it. Other employees should not be able to open the cash drawer when the cashier is not present. Similarly, only authorized personnel should have access to warehouses and storerooms. Access to accounting records, including those stored in company computers, should also be controlled.
- e. Periodic independent verification  
Periodic independent verification means that someone other than the persons responsible for the accounting records and assets should periodically check the records against the assets. For example, at the end of each shift or day in a retail store, the owner or manager should count the

cash in the cash drawer and compare the amount with the amount recorded on the tape or computer disk in the cash register.

f. Separation of duties

Separation of duties means that no one person should authorize transactions, handle assets, or keep records of assets.

g. Sound personnel practices

Personnel practices that promote internal control include adequate supervision, rotation of key people among different jobs. Insistence that employees take vacations, and bonding of personnel who handle cash or inventory. Bonding is the process of carefully checking an employee's background and insuring the company against theft by that person. Bonding does not guarantee against theft, but it does prevent or reduce loss if theft occurs. Prudent personnel practices help ensure that employees know their jobs, are honest, and will find it difficult to carry out and conceal embezzlement over time.

## 7. Internal Control Procedures

Management establishes policies and procedures on a number of different levels to ensure that corporate objectives will be met. Some procedures are formulized in writing. Others may not be written but are just as important. Certain administrative controls within a company are more concerned with the efficient operation of the business and adherence to managerial policies than with the accurate reporting of financial information. For example, a company policy that requires all prospective employees to be interviewed by the personnel department is an administrative control. Other accounting controls primarily concern safeguarding assets and ensuring the reliability of the financial statements. Some of the most important internal control procedures (Porter and Norton, 2013:306):

a. Proper authorizations

Management grants specific departments the authority to perform various activities. Along with the authority comes responsibility. Most large organizations give the authority to hire new employees to the personnel department. Management authorizes the purchasing department to order

goods and services for the company and the credit department to establish specific policies for granting credit to customers. By specifically authorizing certain individuals to carry out specific tasks for the business, management is able to hold those same people accountable for the outcome of their actions. The authorizations for some transactions are general in nature; others are specific.

b. Segregation of duties

Segregation of duties is one of the most fundamental of all internal control procedures. Without segregation of duties, an employee is able not only to perpetrate a fraud but also to conceal it. A good system of internal control requires that the physical custody of assets be separated from the accounting for those same assets. Like most internal control principles, the concept of segregation of duties is an ideal that is not always attainable.

c. Independent verification

Related to the principle of segregation of duties is the idea of independent verification. The work of one department should act as check on the work of another. For example, the physical count of the inventory in a perpetual inventory system provides such as check. The accounting department maintains the general ledger card for inventory and updates it as sales and purchases are made.

d. Safeguarding of assets and records

Adequate safeguards must be in place to protect assets and the accounting records from losses of various kinds. Cash registers, safes, and lockboxes are important safeguards for cash. Secured storage areas with limited access are essential for the safekeeping of inventory. Protection of the accounting records against misuse is equally important.

e. Independent review and appraisal

A well-designed system of internal control provides for periodic review and appraisal of the accounting system as well as the people operating it. The group primarily responsible for review and appraisal of the system is the internal audit staff. Most large corporations have a full-time staff of internal auditors. They provide management with periodic reports on the effectiveness of control system and the efficiency of operations.

f. Design and use of business documents

Business documents are the crucial link between economic transactions entered into by an entity and the accounting record of those events. They are often called source documents. Many of them are generated by computer, but a few may be completed manually. The source document for the recognition of the expense of an employee's wages is the time card. The source documents for a sale include the sales order, the sales invoice, and the related shipping document. Business documents must be designed so that they capture all relevant information about an economic event. They are also designed to ensure that related transactions are properly classified. Business documents must be properly controlled.

## 8. Related Function in Internal Control

Related functions are required in keeping the internal control.

According to Committee of Sponsoring Organizations (COSO) of the Treadway Commission (1992:6-7), everyone in an organization has responsibility for internal control.

- a. Management. The chief executive officer is ultimately responsible and should assume “ownership” of the system. More than any other individual, the chief executive sets the “tone at the top” that affects integrity and ethics and other factors of a positive control environment. In a large company, the chief executive fulfills this duty by providing leadership and direction to senior managers and reviewing the way they’re controlling the business. Senior managers, in turn, assign responsibility for establishment of more specific internal control policies and procedures to personnel responsible for the unit’s functions. In a smaller entity, the influence of the chief executive, often an owner-manager is usually more direct. In any event, in a cascading responsibility, a manager is effectively a chief executive of his or her sphere of responsibility. Of particular significance are financial officers and their staffs, whose control activities cut across, as well as up and down, the operating and other units of an enterprise.
- b. Board of Directors. Management is accountable to the board of directors, which provides governance, guidance and oversight. Effective board member is objective, capable, and inquisitive. They also have knowledge of the entity’s activities and environment, and commit the time necessary to fulfill their board responsibilities. Management may be in a position to override controls and ignore or stifle communications from subordinates, enabling a dishonest management which intentionally misrepresents results to cover its tracks. A strong, active board, particularly when coupled with effective upward communications channels and capable financial, legal and internal audit function, is often best able to identify and correct such a problem.
- c. Internal Auditors. Internal auditors play an important role in evaluating the effectiveness of control systems, and contribute to ongoing effectiveness. Because of organizational position and authority in an entity, an internal audit function often plays a significant monitoring role.
- d. Other Personnel. Internal control is, to some degree, the responsibility of everyone in an organization and therefore should be an explicit or implicit part of everyone’s job description. Virtually all employees produce information used in the internal control system or take other actions needed to effect control. Also, all personnel should be responsible for communicating upward problems in operations, noncompliance with the code of conduct, or other policy violations or illegal actions.

A number of external parties often contribute to achievement of an entity's objectives. External auditors, bringing an independent and objective view, contribute directly through the financial statement audit and indirectly by providing information useful to management and the board in carrying out their responsibilities. Others providing information to the entity useful in effecting internal control are legislators and regulators, customers and others transacting business with the enterprise, financial analysts, bond raters, and the news media. External parties, however, are not responsible for, nor are they a part of the entity's internal control system.

#### **9. Limitations on Internal Control**

Needles, Powers, and Crosson (2011:324) stated that no system of internal control is without weakness. As long as people perform control procedures, an internal control system will be vulnerable to human error. Errors can arise from misunderstandings, mistakes in judgment, carelessness, distraction, or fatigue. And separation of duties can be defeated through collusion by employees who secretly agree to deceive a company. In addition, established procedures may be can effective against employee's error or dishonesty, and controls that were initially effective may become ineffective when conditions change. In some cases, the costs of establishing and maintaining elaborate control systems may exceed the benefits. In a small business, for example, active involvement on the part of the owner can be a practical substitute for the separation of some duties.

## 10. Effectiveness

Different entities' internal control systems operate at different levels of effectiveness. Similarly, a particular system may operate differently at different times. When an internal control system meets a standard, it can be deemed "effective".

According to Committee of Sponsoring Organizations (COSO) of the Tread way Commission (1992:20), internal control can be judged effective in each of the three categories, respectively, if the board of directors and management have reasonable assurance that:

- a. Understand the extent to which the entity's operations objectives are being achieved.
- b. Published financial statements are being prepared reliably.
- c. Applicable laws and regulations are being complied with.

While internal control is a process, its effectiveness is a state or condition of the process at a point in time.

Besides that, Productivity Commission in Australian Government (2013:13) stated that effectiveness is a measure of how well the outputs of a program or service achieve the stated objectives (desired outcomes) of that program or service. Thus, it can be concluded that effectiveness is a state or condition of how well the process of an activity achieve which is the condition is appropriate with the desired outcomes of that activity.

### D. The Internal Control on Raw Material Inventory Accounting System

According to Mulyadi (2001:554 and p.580), all of inventory types which is include finished good inventory, work in process inventory, raw material

inventory, auxiliary material inventory, spare part inventory provide a inventory physical counting system. Generally, inventory physical counting system is used by corporation to count inventory in warehouse physically. The result of counting will be used to ask responsibility to warehouse department related the implementation of storage function, and responsibility inventory card department related reliability of inventory recording that be held, and to do adjustment on inventory recording in inventory card department. Physical counting system is one of internal control element that attributed to all of types inventory, and raw material is included.

Safeguarding in physical counting system is important. It can be conducted with implement some procedures. There are four procedures in form of inventory physical counting system. Those procedures are:

1. Procedure of Physical Counting. In this procedure, every types of inventory in warehouse is counted by numerator and checker independently that the result is recorded in inventory tag.
2. Procedure of Compilation. Inventory tag holder compare the data that is recorded in inventory tag (compare the first counting and second counting that is conducted by different person). And the result will be recorded in inventory summary sheet.
3. Procedure of determining the inventory Cost of Goods. Inventory card department fill the price per unit for every types of inventory that written in inventory tag based on the information in related inventory card. And

multiply price per unit with the quantity of physical counting result to get the total of inventory cost of goods that is counted.

4. Procedure of Adjustment. Inventory card department conduct the adjustment on inventory data that is written in inventory card based on the data of physical counting result which is written on list of inventory summary sheet. Warehouse department also conduct adjustment on data of inventory quantity that is recorded in warehouse card.

Boundless (2013:236) stated that inventory internal controls ensure that a company has sufficient resources to meet its customers' needs without having too many goods. Company should store inventory in secure spacious warehouses so that inventory is not stolen or damaged. Goods and resources of the same or similar type should be kept in the same general area of the warehouse to minimize confusion and to ensure accurate counts. Detail physical inventory counts are a way of ensuring that a company's inventory management system is accurate and as a check to make sure goods are not being lost or stolen. A physical count of a company's entire inventory is generally taken prior to the issuance of a company's balance sheet.

Internal controls over a company's inventory are meant to ensure that management has an accurate count of what materials and goods it has available for sale and to protect those goods from being spoiled, stolen or otherwise made unavailable for sale. This process is affected by the company's structure, its employees, and its informational systems. Since a company's inventory is directly

tied to the business's ability to generate profit, the internal controls must be comprehensive and require significant thought when being designed.

According to Warren, Fess, and Reeve (1996:314-315), the objective of internal controls over inventory is to ensure that the inventory is safeguarded and is properly reported in the financial statements. Control over inventory should begin as soon as the inventory is received. Prenumbered receiving reports should be completed by the company's receiving department in order to establish the initial accountability for the inventory. To make sure the inventory received is what was ordered, each receiving report should be reconciled to the company's original purchase order. Likewise, the price at which the inventory was ordered, as shown on the purchase order, should be compared to the price at which the vendor billed the company, as shown on the vendor's invoice. After the receiving report, purchase order, and vendor's invoice have been reconciled, the company should record the inventory and related account payable in the accounting records.

Internal controls for safeguarding inventory include developing and using security measures to prevent inventory damage or employee theft. For example, inventory should be stored in a warehouse or other area to which access is restricted to authorized people. The removal of merchandise from the warehouse should be controlled by using requisition forms, which should be properly authorized. The storage area should also be climate controlled to prevent inventory damage from heat or cold. Further, when the business is not operating or is not open, the storage area should be locked.

To ensure the accuracy of the amount of inventory reported in the financial statements, a company should take a physical inventory (i.e. count the goods on hand). In perpetual inventory system, the physical inventory is compared to the recorded inventory in order to determine the amount of shrinkage or shortage. If the inventory shrinkage is unusually large, management can investigate further and take any necessary corrective action. Knowing that a physical inventory will be taken also serves to deter (prevent) employee thefts or misuses of inventory.

Internal control in inventory is important because inventory is the lifeblood of a merchandiser. Successful companies take great care to protect their inventory. According to Horngren & Harrison (1992:431-432), elements of good internal control over inventory include:

- a. Physically counting inventory at least once each year no matter which system is used.
- b. Maintaining efficient purchasing, receiving, and shipping procedures.
- c. Storing inventory to protect it against theft, damage, and decay.
- d. Limiting access to inventory to personnel who do not have access to the accounting records.
- e. Keeping perpetual inventory records for high-unit-cost merchandise.
- f. Purchasing inventory in economical quantities.
- g. Keeping enough inventories on hand to prevent shortage situations, which lead to lost sales.
- h. Not keeping too large an inventory stockpiled, thus avoiding the expense of tying up money in unneeded items.

The annual physical count of inventory is necessary because the only way to be certain of the amount of inventory on hand is to count it. Errors arise in the best accounting systems, and the count is needed to establish the correct value of the inventory. When error is detected, the records are brought into agreement with the physical count.