

**ACCOUNTING INFORMATION
SYSTEM DESIGN IN PURCHASING
RAW MATERIALS AT PT. CAHAYA
MUTIARA INDAH**

RESEARCH ARTICLE

**Fatihah Putri Rindawan
105020307121016**



**INTERNATIONAL PROGRAM IN ACCOUNTING
DEPARTMENT OF ACCOUNTING
FACULTY OF ECONOMICS AND BUSINESS
UNIVERSITY OF BRAWIJAYA
MALANG
2014**

Accounting Information System Design in Purchasing Raw Materials at PT. Cahaya Mutiara Indah

Fatihah Putri Rindawan

International Program in Accounting, Economics and Business Faculty
fatia.rindawan@gmail.com

ABSTRACT

This study aimed to analyze and identify the accounting information system related to purchasing raw materials that runs in PT. Cahaya Mutiara Indah. Case study was employed as the research method to answer the research questions. The data used are primary and secondary data. The data collection methods were literature study which is from reviewing the literature, journals and other sources related to the topic and also from observation, interviews, and documentation. The results achieved in this study is the accounting information system purchases in PT. Cahaya Mutiara Indah still has some weaknesses in organizational structure, internal control and purchasing processes procedures. PT. Cahaya Mutiara Indah also does not have a written Standard Operating Procedure (SOP). The researcher proposes some ideas to eliminate these weaknesses, namely a proposal of organizational structure, the proposal of purchasing processes procedures, management policy proposals and accounting policy proposal. The proposals are expected to generate useful information for decision making and bring improvements to the business operations of PT. Cahaya Mutiara Indah and the system in the company can be more effective.

Key words: Accounting Information System, Purchasing, Raw Materials

A. INTRODUCTION

The growth of business in this past few years is led to intense competition among companies. It encourages them to manage their operational activities to become more effective and efficient in order to follow the development of business. Management operational activities, through defined policies influence the company's goals to increase achievement in producing a better product, achieving maximum profits and survival.

The most important element in achieving these goals is the working capital in the form of raw materials used in the company's internal operations daily. Procurement of raw material is made by purchasing department who is responsible for getting the quality and quantity of raw materials available at the proper time. Good management and supervision of the purchasing department will bring a good impact on other parts of the company, in particular the production and sales activities. In manufacture of products, purchasing activity is the starting point to begin a process of production, if purchasing activity is late, so the production process will have some problems that have an immediate impact on the finished product inventory and sales activities of the company.

Therefore, purchasing activity play an important role in the smooth production process. In order for the company's operations run effectively and efficiently and to obtain optimum profit, the company must consider the application of the accounting system in accordance with the conditions of their own company. The enterprise has various form, the accounting information system also vary, but the point remains the same that is to present the information. For example, manufacturing company would require accounting information system that can provide information on cost of goods production and cost of goods sold. Meanwhile, the companies that have specific characteristics such as advertising agencies, accounting firms, insurance, construction services will require accounting information system that essentially can show gross income, expenses, and net income earned (Widjajanto, 2001).

According to Romney (2006:5) the effective accounting information system is important for long term success in any organization. Information is very important for every company to direct and facilitate the daily activities of the company as information is useful for decision making. The information needed is information that is relevant, accurate, and timely. Management requires adequate information in order to carry out his duties well and to work efficiently and

effectively. To obtain relevant information, accurate and timely, management must be supported with an adequate accounting information system.

Accounting information system can be considered to be effective if there are elements of internal control. An effective accounting information system is essential for long-term success of company, because the accounting information system serves to provide a sufficient internal control of the company's assets. Every company should be able to make the improvement in internal control that is part of a system that should be possessed in carrying out its operations. Internal control which includes organizational structure, methods, and coordinated measures to maintain the organization wealth, check the accuracy and reliability of accounting data, encourage efficiency, and encourage adherence to management policies (Mulyadi, 2008).

In purchasing accounting system, the separation responsibility strictly functional responsibilities, the system authorizes and good records procedures, and practices healthy. It was all the controls in the accounting system. Control is intended to prevent the occurrence of irregularities or fraud in purchasing raw materials, such as price and quantity cheating recording materials purchased. Therefore, purchasing accounting system is needed by a company to provide a complete record of accountability and protection of corporate wealth.

PT. Cahaya Mutiara Indah is already have systems and support functions in accordance with the needs of the company itself to run the activities of the company operations, but there are a variety of phenomena that encourages the redesigning of the existing system on the PT. Cahaya Mutiara Indah. There is a double duties / double responsibilities in PT. Cahaya Mutiara Indah, for example the administration staff is an individual with the combined responsibilities of writing checks, posting to the cash account, archiving data administration, as a cash company holder, and maintaining account payable. Administration staff could establish fraudulent account payable (to an associate in a nonexistent vendor company) and then write checks to discharge the phony obligations. Furthermore, administration staff could withdraw cash and then adjust the cash account to hide the transaction. This condition can increase the possibility of moral hazard caused by a lack of internal control.

There is a need of management tool that can control and monitor any purchasing incurred in the company. To give optimal contribution for the management, it is necessary to have an appropriate internal control system to reach companys goals. In order to create an appropriate internal control system in purchasing aspect, it is necessary to have a good accounting control system so that management needs for daily and precise purchasing information can be fulfil. Based on the phenomenon above, it indicates the importance of a good purchase accounting information system within a company. The objective of the study are (1) to identify the accounting information system in purchasing raw materials that already exists in PT. Cahaya Mutiara Indah (2) to show adequate accounting information system procedure in purchasing raw materials at PT. Cahaya Mutiara Indah

B. LITERATURE REVIEW

Accounting Information System

Accounting information system is a subsystem that serves to record, process, and present the accounting information system and financial that will benefit to those who need it. A company must obtain accurate information in order to attain projected result in accordance with the original purpose of the company. Therefore, the role of information as a resource of business is very important for a company to survive. The information is very important for the decision maker because it reduces uncertainty and increases knowledge about the particular area of concern.

According to Romney and Steinbart (2009: 28) there are seven characteristics that make up the quality of the information. The seven characteristics are relevant, reliable, complete, timely, understandable, verifiable and easily accessible. That seven characteristics are complement each other to form a quality. The more complete the character contained in information, the more quality of such information to the decision-making process.

Accounting Information System Design

Accounting information systems should follow the development of the information needs accordance with the development of the company and the development of technologies (particularly tools for processing the data), it requires a new rearrangement system. The steps for preparing the accounting information system consists of stages, as follows:

a. **Analysis of Existing Systems**

This step is intended to determine the strength and weaknesses of the prevailing system. This analysis is conducted with the research (survey) system.

b. **Accounting Information System Design**

The design of the system in an entity is an activity composing a new system to replace the old system as a whole or improving existing systems. According to Jogiyanto (2002:35) there are several things that caused the old system needed to be replaced or repaired, namely:

- 1) The existence of the problems that arise in the old system.
- 2) To seize the opportunity.
- 3) The existence of the instructions

Purchasing Process

Purchasing is an event related to the acquisition of goods or services from another entity and repayment of liabilities associated with the acquisition (Bodnar and Hopwood, 2010: 128). The main focus in this process is the exchange of information between companies and suppliers. The main purpose of purchasing is to reduce the total cost of the acquisition. Management should be able to monitor and evaluate the level of efficiency and effectiveness in the purchasing process. Management should know the employees involved, the causes of transactions, and other agents involved in the transaction.

Internal Control

One of the most important aspect of an AIS is the role of organization's internal control process. Control ensures that management policies and directives are properly adhered. Management is far removed from the scene of operations in a large organization, whereas personal supervision of employees is impossible. As a substitute, management must rely on various control techniques to implement its decisions and goals and to regulate the activities for which it has ultimate responsibility. Control extends over a wide range of activities, such as the maintenance of inventory quantities, the consumption of supplies in production and administration, and the payment of bills within allowed discount periods. Good internal control is a key factor in the effective management of an organization.

According to Bodnar and Hopwood (2010), internal control is a process designed to provide reasonable assurance regarding with the achievement of objectives in reliability of financial reporting, effectiveness and efficiency of operations, and compliance with applicable laws and regulations. Internal control as defined by the AICPA (American Institute of Certified Public Accountants) includes organizational structure and all the ways and coordinated tools used by the company aimed at maintaining the security of corporate property, checking the accuracy and correctness of accounting data, promoting operation efficiency, and assisting in maintaining the compliance of predetermined management policies.

Raw Material

According to Carter WK (2009) raw material is divided into two: direct materials and indirect materials. Direct materials are all materials that form an integral part of the finished product and explicitly included in the calculation of product costs. Whereas indirect materials are the raw materials needed to complete a product but classified as direct materials because these materials are not part of the product.

Documentation Technique

In the accounting information system, there are six basic documentation techniques, namely:

1. Data Flow Diagram
2. Entity Relationship Diagram
3. Documents Flowchart
4. System Flowchart
5. Program Flowchart
6. Record Layout Diagram

From these six techniques, the researcher would like to take a document flowchart techniques. A document flowchart is used to depict the elements of a manual system, including accounting records (documents, journals, ledgers, and files), organizational departments involved in the process, and activities that are performed in the departments. A flowchart is a graphical representation of a system that describes the physical relationships between its key entities.

C. RESEARCH METHOD

This study employs descriptive qualitative method with a case study approach. Cooper and Schindler (2008:710) define qualitative research as interpretive technique which seeks to describe, decode, translate, and otherwise comes to terms with the meaning, and is not the frequency of certain phenomena. Moreover, this study is categorized as descriptive case study in order to describe an intervention or phenomenon and the real-life context in which it occurred. In case study, a single or multiple entity or phenomenon and activity (program, event, process, institution or social group) are observed from time to time and explored; detailed information is collected by employing a variety of data collection procedure during a sustained period of time (Merriam, 1988; Yin, 2003). In addition, Kumar (1996:99) defines case study method as an approach for studying a social phenomenon by utilizing a thorough analysis of an individual case. The case can be a person, group, episode, process, community, society or any other unit of social life. This approach holds an assumption that the case being studied is typical cases of a certain type so that, by conducting intensive analysis, generalisations can be made and applied in other cases of the same type. The reason for using a case study approach at PT. Cahaya Mutiara Indah is to analyze whether the accounting information system in purchasing raw materials has fulfilled the elements of internal control or not.

In analyzing this qualitative study the authors tried to describe the data in accordance with the findings and the reality of the situation. The author also tries to be objective and not make personal interpretation. Data analysis techniques include (1) Data reduction and (2) Validity test during and after data collection (Robert K. Yin, 2004: 101). Data reduction is the process of selecting, focusing on simplification, and transformation of raw data that emerged from the record library. Data reduction includes summarize the data, coding, searching theme, and create groups (Moleong, 2006: 303). In this study, the authors perform data reduction by selecting / choosing the data that is relevant and meaningful, focusing on the data that leads to problem solving and transformation of raw data that emerged from the field of written records. This data reduction starts from the beginning of data collection to the preparation of the report. The validity comes from the validity word that has the meaning of the extent to which the precision and accuracy of a measuring instrument in performing measuring function. Each technique requires research that addresses issues of compatibility validity of research results with the actual situation, what are the benchmarks and tools used to measure the validity.

To test the validity of this study, the authors use a triangulation technique, which checks the validity of data by utilizing other data (Moleong, 2006: 330). Triangulation techniques used in the study is the triangulation of sources. Triangulation techniques used by researcher is to compare the data with information on the observation information from the interview then concluded the results, comparing the results of data from key informants (primary) with information obtained from other informants (secondary).

D. FINDINGS AND DISCUSSION

Operational Activities in PT. Cahaya Mutiara Indah

PT. Cahaya Mutiara Indah is a developer company that builds housing to be marketed and sold to the public. Marketing and sales system are made during the construction, which the customer can make a reservation based on the type and location of the house by paying a down payment as a sign of approval order. Before the company conducts its activities, there must be a payment agreement between the company and customer. Payment can be made with cash or a mortgage. If the customer chooses to pay with cash, he or she can pay by installments of the house 3 to 5 times until the house is completed. If the customer will take the mortgage (KPR) from bank there are several undertaken by company. After the mortgage process, the project manager will start the construction.

Analysis towards organizational controls

- a. Double duties in one function in the company

Based on the interview with Vice director, she stated that responsible for recording the purchase transaction, paying the bill and issuing the check are performed by administration staff. So it can be inferred that there is a double duty in the company. Administration staff is an individual with the combined responsibilities of recording the transaction, paying the bills, writing checks then posting them to the cash account. This means that the administration staff is being responsible for archiving administration data and being a treasurer. Whereas, the accounting staff who should assist the administration staff in recording the transaction does not function properly because the staff just prepares financial statements, budget receipts and expenditures of the company. This shows the presence of weak internal controls in the company because the individual, the administration staff, with such access could withdraw cash and then adjust the cash account accordingly to hide the transaction. In addition, he or she could establish fraudulent Account Payable (to an associate in a nonexistent vendor company) and then write checks to discharge the phony obligations. If the company does not segregate these functions, the fraudulent transactions could happen and it is very detrimental to the company. By segregating these functions, it can reduce this type of exposure.

b. The absence of sanction for irresponsible behavior of employees.

Based on the interview with Vice director, sometimes the quality of goods arrived is not good, as when the company ordered the Tenggara white sand, there were black particles of coal that mixed in the sand and reduced the quality of the sand. So, the construction staff must separate the sand and coal; it was wasting time. In addition, when the company complained about this to the vendor, they did not want to change the sand because the receiving clerk had signed the packing slip as a proof that the company had received the goods delivered. Warehouse staff as a receiving clerk was irresponsible with the job. The warehouse staff did not examine the quality of goods and directly received the goods and put them in the warehouse. This case illustrates that the company has lack of internal controls where there is no warning or sanctions for employees who are not responsible and do not do their job properly. This will cause the production process become longer and the production cost will be bigger.

Analysis towards documentation control

a. Purchase Order

Purchase order is an official document generated by Purchasing Department and submitted to vendors for delivery goods. This form is a formal document signed by Logistics as a buyer and authorized by Director. Based on observations, there is no blind copy of purchase order for receiving clerk as an important tool to force them to physically count and inspect the goods arrived. This will bring disadvantages for company because with the absence of blind copy, there is no tool which can ensure whether the warehouse clerk has counted and checked the items correctly. If there are errors detected in the future, then the supplier will not be responsible for these things because in the receiving process, the goods have been approved and accepted. Blind copy has all of the relevant information about the goods received except for the quantities and prices. If receiving clerks are provided with quantity information, they may transfer this information to the receiving report without performing a physical count. If receiving clerks are provided with price information, it will encourage them to steal expensive items from the acceptance place before they are stored in the warehouse. That is why, blind copy is an important tool to reduce this exposure.

b. Receiving Report

The Receiving Report is a document that records the received goods. Based on the observation, the researcher found that there is a deviation for preparing the receiving report. It is prepared and signed by Logistics even though the person who receives the goods from supplier is warehouse function. The warehouse staff as a receiving clerk does not prepare the receiving report but logistic which is also in charge for ordering goods to the supplier. This will raise the misappropriation of authority.

c. Packing Slip

Packing Slip is generated by vendor and attached with the goods sent to the company. This document is designed to aid recipients of the shipment in confirming that all items that are supposed to be included in the shipment have actually arrived. This document checked by receiving clerk in order to determine whether the required standards are met with the items. All items must pass this examination and after examination, the receiving clerk signs this document. Based on the interview with Vice director, sometimes the quality of goods arrived is not really good. It is because the warehouse staff as receiving clerk directly carelessly signs the packing slip without checking the quality of the goods arrived.

d. Cash disbursement voucher

Based on the observation, there is a lack of document control over cash disbursements voucher in PT. Cahaya Mutiara Indah. To prepare the cash disbursement voucher, it must be attached with the complete supporting document such as purchase orders as a proof that the goods have been ordered by Logistics, and receiving report as a proof that the goods have been received from the supplier in predefined type, quantity, quality and condition. However, the company does not have a purchase requisition from warehouse as a report that the ordered goods are as needed by the company.

e. The documents are already put in numbered form.

Based on the observation that is conducted by the researcher, the documents and records used by the company are already put in numbered form. All documents have been properly fulfilled. This is reflected from every document which shows good format including inclusion date and document name, so users can easily understand the content of the document. Numbered form can minimize and prevent fraud which might be performed by employees because non-numbered form is easier to be manipulated by the staffs.

Analysis towards Asset Accountability Control

a. Theft of assets

Based on the interview with Vice director, the warehouse key that should be only owned by head of warehouse or authorized parties is not saved in a safe place, it is only on the table in the front office. In addition, the researcher found that the company does not provide limited access for entering warehouse. This can be detrimental for the company because the theft of assets in the warehouse would be very easy done by the irresponsible parties. Improper inspection procedures added with inadequate supervision can create a situation that is prone to the theft of inventories.

b. Preparation and sufficient storage of documents

The documents storage is already good. According to the observations, the company protects documents and archived files in the folders which are sorted according to the number and types of documents, and then saved in locked shelf. The only person who holds the key is authorized party or administration staff.

Analysis towards Management Practice Control

a. Analysis on Standard Operating Procedures (SOP)

SOP is made to keep maintaining employees' consistency in carrying out their daily work and it is also the clear reference of work. SOP also aims to give employees an understanding of the roles and responsibilities of each position. Based on the interview with Vice director, there is no written Standard Operating Procedure (SOP). She said that the written SOP is less urgent, since job description and each employee's duties are explained by Director. The researcher thought that the absence of a written SOP will make the company rules become unclear because there is no clear and written description of the duties of each employee and who is responsible for an activity. If the company does not have the clear rules, it can affect the effectiveness and efficiency of internal control. Moreover, employees tend to underestimate the company regulation. Whereas, the internal control issue will be bigger, if the company opens several branches with no written Standard Operating Procedure (SOP) and job description and can cause difficulties for employees in performing their duties.

b. Analysis of employee recruitment control

Based on the observation, employees at PT. Cahaya Mutiara Indah have family relationship, most of the employees recruited are based on family relation and not based on the competence or education of the prospective employee. It can be seen from the fact that Vice director is a daughter of Director, one of the logistic staff is a husband of Vice director and the administration staff is a niece of Director. It should be noted that the employees who have family relation may not be able to distinguish professional relation with kinship. The prospective employees' competence needs to be considered as it gives positive influence towards the development of the business. When it is neglected, it will bring disadvantage for the company.

Analysis towards Data Center Operation Controls

Based on interview with Vice director and observation in PT. Cahaya Mutiara Indah, the company saves the transaction data manually, is not using computerized system. Purchase orders, receiving report and others are manually written. Besides, manual system of data transaction, PT. Cahaya Mutiara Indah also runs semi-computerized systems, it means that the computer is only used for typing. The management of PT. Cahaya Mutiara Indah has not implemented server as a

central data operation. Practice review of the company performance is based on monthly reports and annual printed documents.

Analysis towards Authorization Control

Based on the observation, the authorization control in purchasing raw materials at PT. Cahaya Mutiara Indah is already well performed. It can be seen from the authorization system in each document through the use of a signature on a column in the form; it indicates that the document signed has been approved by related functions. The descriptions are as follow:

- a. Purchase orders are authorized by the Logistics as a purchase order clerk and approved by the Vice director.
- b. Packing slips are authorized by the warehouse as a receiving clerk.
- c. The cash disbursement vouchers are authorized by administration and approved by the Director.

Analysis towards Access Control

Based on the observation, the warehouse key that should only be owned by the head of the warehouse or authorized parties is not saved in a safe place; whereas, it is only put on the table in front office. Company does not provide limited access for entering the warehouse. This can be detrimental for the company, because the theft of assets in the warehouse would be very easily done by the irresponsible staff. Improper inspection procedures and inadequate supervision can create a situation that is prone to the theft of inventories. In contrast to control access for documents, the documents are well preserved by company. It can be seen from the limitation of access to the document storage area. The documents are archived in the folders sorted by number and types of documents and saved in locked shelf. The only person who holds the key is the administrator.

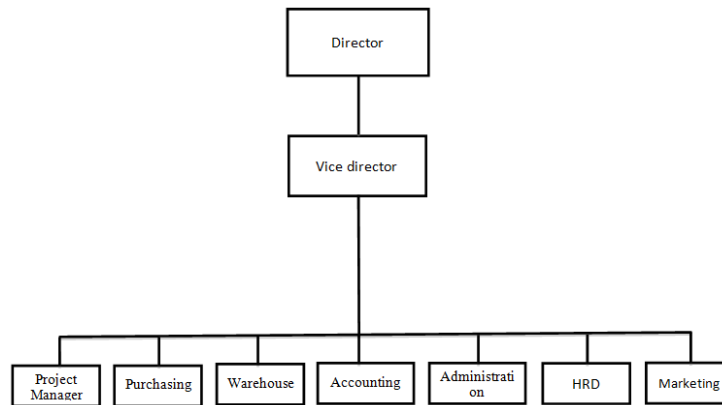
Suggestion for Organizational Structure

PT. Cahaya Mutiara Indah has already completed organizational structure but in the implementation, there are some staffs have double duties/double positions. For example, administration staff is an individual with the combined responsibilities of writing checks, recording all transaction, being a cash company holder, paying the incoming bills, conducting the performance assessment and the absentee for every employee and also being responsible for archiving data administration. This is due to there is no division of duty and authority that is firm and clear. Some suggestions toward organizational structures made by the researcher are:

1. Creating a clear division of duties between administration and accountant. The administration position is being responsible for paying incoming bills and playing a role as treasurer. While the accountant is being responsible for journalizing, recording, and preparing financial reporting.
2. Creating Human Resource Department. This department is responsible for calculating employees' salary and also for monitoring employees' attendance, particularly employees in the building construction because they often leave the construction during their working hours.

Providing a clear division of duties between logistic and warehouse. Logistic is become purchasing department which focuses primarily on selecting the most suitable suppliers or vendors from whom to order goods and service. Purchasing department is also responsible for purchasing raw material from supplier and preparing purchase order. Warehouse function is responsible for accepting only those goods that were ordered, verifying their quantities and condition, and moving the goods to the store room. Warehouse function is also has the responsibilities of safeguarding the goods from theft, loss, deterioration and of assembling them promptly when proper requisitions or requests are presented. The researcher does not separate the receiving functions and warehouse function, this is due to the labor cost savings.

Figure 1: Suggestion for Organizational Structure



Suggestion for Ordering Goods Procedure

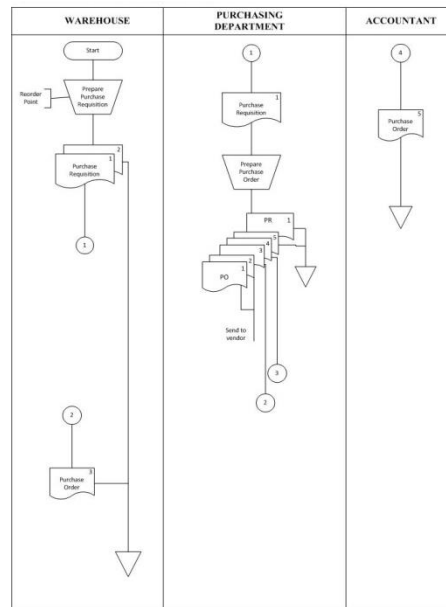
The researcher found that there is a lack of documentation in the current procedure in ordering goods in the company. There is no written notification or purchase requisition when the Warehouse requests the needed goods to Logistics. Therefore, there is no evidence that there has been a report of ordering goods needed by the company from the Warehouse. The researcher suggests the warehouse function should prepare purchases requisition for Purchasing Department as a proof that the ordered goods are as needed by the company.

Warehouse function should be given a blind copy of purchase order to force them to physically count and inspect the goods. Blind copy has all of the relevant information about the goods being received except for the quantities and prices. If warehouse staff is provided with quantity information, they may be tempted to transfer this information to the receiving report without performing a physical count. If the warehouse staff is provided with price information, it will encourage them to steal expensive items from the acceptance place before they are stored in the warehouse. Blind copy is an important tool to reduce this exposure.

Narratively, The Procedure of Ordering raw materials is:

1. Warehouse staff checks if the raw materials has reach the reorder point. The warehouse staff will prepare 2 copies of Purchase Requisition. The first copy will be submitted to the Purchasing Department and the second copy will be archived by the Warehouse.
2. After receiving a first copy of purchase requisition from the warehouse, Purchasing Department will issue a Purchase Order as many as 5 copies.
3. The first copy will be submitted to the supplier as an official order issued by the company.
4. The second copy is handed over to the supplier, and then signed by supplier. The supplier will send it back to the company as evidence that the purchase order has been received and approved. This shows the ability of suppliers to fulfill the agreement for delivering raw materials as written in the document.
5. The third copy will be submitted to the Warehouse that the goods requested have been ordered and as authorization to accept that type of item, specification, quality, quantity and supplier as written in the document
6. The fourth copy is sent to Accounting Department as a basis to record the arising liability from purchasing transaction.
7. The fifth copy is saved by Purchasing Department according to the expected date of receipt of goods, as a basis to investigate when the goods do not arrive at a predetermined time.

Figure 2: Suggestion for Ordering Goods Procedure



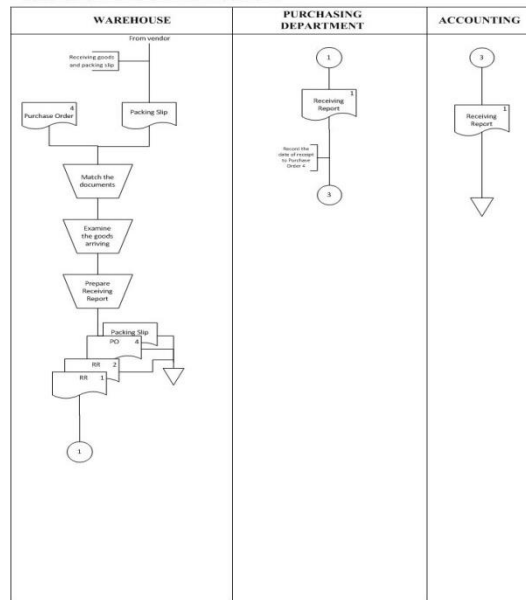
Suggestion for Receiving Procedure

The researcher found a weakness, warehouse function as receiving clerk is not provided with a purchase order to verify the goods arrived with the order. The receiving clerk should be given a blind copy of purchase order to force them to physically count and inspect the goods. Blind copy has all the relevant information about the goods being received except for the quantities and prices. If receiving clerks were provided with quantity information they may be tempted to transfer this information to the receiving report without performing a physical count. If receiving clerks are provided with price information, it will encourage them to steal expensive items from the acceptance place before they are stored in the warehouse.

The author recommends the company to use blind receiving system for Warehouse as receiving clerk. This action is intended to improve internal control procedures for the receiving goods. By the presence of this system, the receiving clerk will really count the goods arrived. Thus, blind copy is an important tool to reduce this exposure. In narrative, Receiving Goods Procedure is as follow:

1. Supplier comes to the company to send the raw materials that have previously been ordered by the company and bring the packing slip.
2. Warehouse accepts the goods from the vendor, along with packing slip.
3. Warehouse must inspect items for proper quantities and condition (damage, spoilage, and so on) then fill the blind copy if the goods received are qualified.
4. If the goods are not qualified, the clerk will reject the goods from supplier but if the goods are qualified, the clerk will accept the goods and sign the Packing slip
5. Warehouse prepares 2 copies of receiving report.
6. Warehouse will authorize Receiving Report, and then give the first copy of receiving report to Purchasing Department. The second copy is saved by the warehouse function and used as a data to update the inventory card.
7. Purchasing Department accepts the first copy of receiving report, records the date of delivery on the fourth copy of Purchase Order then submit the Receiving Report to the Accounting Department.
8. Accounting Department will archive the first copy of receiving report that has been authorized and fourth copy of Purchase Order based on the due date for debt payment.

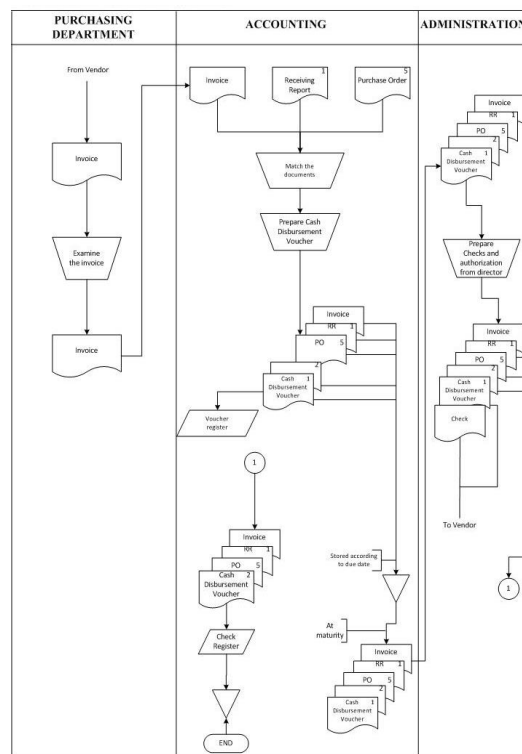
Figure 3: Receiving Procedure Flowchart



Suggestion for Cash Disbursement Procedure

1. About one week after the goods received, the supplier sends an invoice to the Purchasing Department to collect debt.
2. Purchasing Department receives the invoice, then checks the invoice and gives it to the Accounting Department.
3. Accounting Department receives the invoice and match it with the purchase order and receiving report
4. After examining the invoice with supporting documents, the accountant prepares 3 copies of cash disbursement voucher.
5. Cash disbursement voucher is recorded in voucher register.
6. Recording cost of inventory is based on cash disbursement voucher that has been made at the time of the vendor sent the invoice to company.
7. At maturity, the cash disbursements voucher shall be accompanied by supporting documents (Purchase Order, Receiving reports, and invoices) submitted to the administration.
8. Administration prepares a check and asks for signatures from director.
9. The cashier gives the check to vendor accompanied by a cash disbursement voucher as a notice (remittance advice).
10. The second copy of cash disbursement voucher and its supporting documents after stamped paid are submitted to the Accounting Department to be recorded in check register.

Figure 4: Suggestion for Cash Disbursement Flowchart



Management Policies

The researcher found there are some weaknesses in the current management policies at PT. Cahaya Mutiara Indah. Therefore, the researcher suggests some additional in management policies to support the performance related to purchasing procedures in the company, as followed:

1. The company should make a written Standard Operation Procedures (SOP) and give it to each employee. Therefore, the company regulations become clearly understood by all employees. Furthermore, the aim of providing SOP to all staffs is to make them understand their responsibilities and aware of their job descriptions. With the written rules, the employees will be more discipline in performing operational activities of the company. If there are written rules, the sanctions that will be given is clear. If the company does not have clear rules, the employees tend to underestimate the company regulations.
2. Sanctions will be given to every employee who does not adhere to the management policies as much as 3 times. The sanctions are:
 - a. For the first offense, the employee will be given a first warning letter.
 - b. For the second offense, the employee will be given a second warning letter.
 - c. For the third offense, the employee will be given a tougher action such as dismissal.
3. Company should provide limited access for everyone entering the Warehouse. Warehouse key should only be owned by the Head of Warehouse and authorized parties. If there are employees who want to enter / take goods, they must have the permission from Head of Warehouse. For security control, the company should install CCTVs in the warehouse to monitor the activities there.
4. The recruitment of employees should be based on the competence of the employees, not on family relation. Then, the company analyzes the Curriculum Vitae (CV) of applicants in advance and sets the standard criteria for the company. This is conducted to assess the applicants' competence. The applicant's data must include personal data, application data, as well as additional data such as education and work experience, to facilitate the company in assessing applicants. The applicants who will be interviewed are those, who are considered the company fulfilling all the criteria. The required criteria are:
 - a. Capabilities related to intelligence;
 - b. Capacity related to the ability to solve problems and face the high workload;
 - c. Characteristic and manners;
 - d. Commitment;

- e. Creativity in completing the task;
 - f. Compatibility associated with ability to cooperate with others;
5. Receiving report is prepared if all items have been examined and considered good by the warehouse staff.

Accounting Policies

1. The researcher suggests to use the accrual basis in accordance with SAK ETAP (Financial Accounting Standards Entity without Public Accountant). Under the accrual method, transactions are counted when the order is made, the item is delivered, or the services occur, regardless of when the money is actually received or paid. In other words, income is counted when the sale occurs, and expenses are counted when receiving the goods or services. It does not have to wait until the company get the money and pay the bills to record a transaction.
2. Purchasing is conducted by using FOB destination point, it means that the cost of transport of goods is the responsibility of vendor until the goods arrive at the company's warehouse. This means that goods in transit should be reported as inventory by the seller, since technically the sale does not occur until the goods reach the destination. The company should record an increase in its inventory at the same point (since the company is undertaking the risks and rewards of ownership, which occurs at the point of arrival at its warehouse). Also, under FOB destination terms, vendor is responsible for the cost of shipping the product.

E. CONCLUSIONS AND SUGGESTIONS

Conclusions

Based on the results of the analysis in accounting information system in purchasing raw material at PT. Cahaya Mutiara Indah, the researchers were able to conclude that there are some weaknesses and strengths in the implementation of purchasing system as follow:

1. There are some strengths in the implementation of system in the company
 - a. Documentation control at PT. Mutiara Indah is well performed. It can be seen from all the documents used by the company already has a complete format contained the name, date, and number form.
 - b. The asset control for document storage has been done properly by company. The documents are stored in the locked shelf and archived in the folder which are sorted according to the number and types of documents.
 - c. The authorization control in purchasing raw materials at PT. Cahaya Mutiara Indah is already well performed. It can be seen from every documents that has been signed by the related functions as a proof that the document has been approved and authorized.
2. There are some weaknesses in the implementation of system in the company
 - a. In organizational structure of PT. Cahaya Mutiara Indah there is a lack of clarity of authority and responsibility, especially for purchasing raw materials. There are multiple task performed by administration staff that will cause the moral hazard.
 - b. The company did not give the sanction for employees that did not do their job properly. The warehouse staff did not examine the quality of goods and directly received the goods and put them in the warehouse. The company did not provide the warehouse staff with blind copy of purchase order.
 - c. Access control for asset in the warehouse is not done properly by company. All employees can enter the warehouse and possible theft of assets may occur because warehouse keys are not saved properly.
 - d. The company has lack of management practice control. The company does not have written Standard Operating Procedure (SOP). It will make the company rules become vague. Furthermore, most of the employee recruitment is based on family relation not based on their competence.
 - e. The company has not implemented server as a central data operation. The company saves the transaction data manually and does not use computerized system.

Because of the weakness in the implementation of this purchasing procedure, the researcher also provide recommendations expressed in the form of manual procedures with flowcharts and management policies. Recommendation that researchers are proposing as follow:

1. The company should give a clear division of task to administration staff to avoid moral hazard.

2. The company should impose sanction to every employee who does not obey with the company's policies
3. The company must give a blind copy to warehouse staff to make them actually count and check the goods arrived.
4. The company should limit the access to the warehouse by providing storeroom keys only to warehouse staff and installing cctv in the warehouse.
5. The company should provide a written SOP and give it to each employees, so the employees can clearly understand about the company rules.
6. The company should hire employees based on their competence and education.

Research Limitations

There are limitations in this study that the researcher only focused on the accounting information system in purchasing raw materials procedure. Includes procurement of raw materials until the raw materials arrive at the warehouse and as well as payment for the raw materials. The design of accounting information system is done by manually using the flowchart not the software design.

Recommendation

Management should consider the proposals that have been given by researcher associated with the purchasing system at PT. Cahaya Mutiara Indah. With the limitations of this study, It is expected to the next researcher who conducts the research of accounting information system to analyze not only purchasing procedure but also the other procedures and can make a better accounting information system design and can negate the existing limitations in this study.

References

- Arikunto, Suharsimi 2002, *Prosedur Penelitian Suatu Pendekatan Praktek*, 12th edn, PT Asdi Mahasatya, Jakarta
- Bodnar, George H & Hopwood, William S 2010, *Accounting Information Systems*, 10th edn, Pearson Education Inc, USA 1
- Carter, W.K 2009, *Cost Accounting*, Salemba Empat, Jakarta 1
- Cooper, Donald R and Schindler, Pamela S 2008, *Business Research Methods*, International edition, McGraw-Hill, New York
- Gelinas, UJ & Sutton, SG 1999, *Accounting Information Systems*, 5th edn, South Western, USA 1
- Ghany, Dede Abdul 2011, 'Evaluasi Sistem Informasi Akuntansi Atas Siklus Pendapatan (Studi kasus pada PT. Petrokimia Gresik)', Bachelor Thesis, Brawijaya University
- Hall, James A 2008, *Accounting Information Systems*, South Western Cengage Learning, America 1
- Hartanto, Jogyanto 2002, *Analisis dan Desain Sistem Informasi*, Andi, Yogyakarta 1
- Irawan, Ronny 2012, 'Sistem Informasi Akuntansi Sebagai Alat Pengendalian Internal Dalam Prosedur Penjualan (Studi Kasus pada CV. HC Putra, Kota Batu)', Bachelor Thesis, Brawijaya University
- Kristiyanti, Agustin 2011, 'Sistem Informasi Akuntansi Sebagai Alat Pengendalian Intern Pada Siklus Pendapatan (Studi Kasus Pada Rumah Sakit Kristen Mojowarno)', Bachelor Thesis, Brawijaya University
- Kumar, Ranjit 1996, *Research Methodology: A Step-by-Step Guide for Beginners*, Addison Wesley Longman, Australia
- Mulyadi 2008, *Sistem Akuntansi*, 3rd edn, YKPH, Yogyakarta 1
- Ramadhana, Dwi W 2011, 'Analysis of Internal Control System in Revenue Cycle (Case Study at Cakra Residence Hotel Malang)', Bachelor Thesis, Brawijaya University.
- Romney, MB and Steinbart, PJ 2009, *Accounting Information Systems*, 11th edn, Pearson Education, New Jersey 1
- Sandoro, Canggih Alfa 2011, 'Desain Sistem Informasi Akuntansi Berbasis Enterprise Resource Planning dalam Prosedur Pembelian Bahan Baku', Bachelor Thesis, Brawijaya University
- Sekaran, Uma & Bougie, Roger 2010, *Research Methods for Business: A Skill Building Approach*, 5th edn, John Wiley & Sons Ltd, United Kingdom
- Setya, Rika 2012, 'Analisis Sistem Pengendalian Internal Pada Siklus Persediaan Bahan Baku', Bachelor Thesis, Brawijaya University
- Setya, Sugeng 2012, 'Sistem Informasi Akuntansi Sebagai Alat Pengendali Intern Dalam Penerimaan Kas, Pengeluaran Kas, dan Penggajian (Studi Kasus pada PT. Intan Pramadita)', Bachelor Thesis, Brawijaya University

Widjajanto, Nugroho 2001, *Sistem Informasi Akuntansi*, Erlangga, Jakarta
Wilkinson, Joseph W., Michael J. Cerullo, Vasanth Raval and Bernard Wong-On-Wing 2000,
Accounting Information System, 4thedn, John Wiley Inc, New Jersey 1
Yin, R.K. 2003, *Case study research: Design and methods* (3rd ed.). London, UK: Sage
Publications Inc.