

## INNOVATIONS

### **Analysis of accounting information system of car spare parts inventory in increasing the effectivity of internal control**

**Yanti<sup>1</sup>**

Graduate Student  
Universitas Sultang Agung Tirtayasa  
Banten, Indonesia

**Tubagus Ismail<sup>2</sup>**

Profesor : Departemen Of Economic, Postgraduate Of Accounting, Phd Program  
Universitas Sultang Agung Tirtayasa  
Banten, Indonesia

**Imam Abu Hanifah<sup>3</sup>**

Lecturer : Departemen Of Economic, Postgraduate Of Accounting, Phd Program  
Universitas Sultang Agung Tirtayasa  
Banten, Indonesia

**Munawar Muchlish<sup>4</sup>**

Lecturer : Departemen Of Economic, Postgraduate Of Accounting, Phd Program  
Universitas Sultang Agung Tirtayasa  
Banten, Indonesia

Corresponding Author & Email: **Yanti** , [7778320004@untirta.ac.id](mailto:7778320004@untirta.ac.id)

**Received:** 10 February 2022 **Accepted:** 24 March 2022 **Published:** 15 April 2022

---

**Abstract**—The purpose of this study is to analyze the flow of the car spare parts inventory system as well as the effectiveness of internal control. This research was conducted at PT. ASTRA International TBK - AUTO 2000 Karawang. Data analysis was done by analyzing the accounting information system of car spare parts inventory, as well as the level of effectiveness of internal control by paying attention to the elements of internal control. The data were obtained through observation, interview, and documentation directly in PT. Astra International TBK. Based on the research that has been conducted, it was revealed that there are still many shortcomings in the application of inventory accounting information system and internal controls. The shortcomings include the presence of traps of functions and tasks by the inventory warehouse section. In addition, there are also unavailable documents, numbered printed sequences, and no accounting function. Last, the SOPs was also not provided and not done firmly. Therefore, in this case, since there are several weaknesses in the internal control over spare parts inventories, it is necessary to improve the existing internal control in order to achieve effectiveness.

**Keywords**—1. Accounting information system; 2.Inventory; 3.Internal control

---

## **Introduction**

The business world in this globalization era is growing very rapidly. This is seen by the intense competition in the business world, both in trading and industry as well as the increase in customer demands for a product offered. Therefore, companies must be able to maximize their performance and ability to develop a business environment to be able to continue to compete. Companies that can increase their market share more, can produce optimal profits.

Due to the increasingly fierce competition, company is required to have accurate and relevant information to maintain the company's operational activities and achieve goals (Hutahayan, 2020). Such information should play a role to assist the company's leaders in making appropriate business decisions according to the information systems applied to each company (Hariyati et al., 2019). Thus, information systems are very important for the company.

Information systems that are useful for companies are accounting information systems that generally discuss the accounting system that runs within a company (Hariyati et al., 2019). According to (Hutahayan & Yufra, 2019), accounting information systems are very important for companies because the system can describe whether the company runs well or not. The system covers the overall number of activities within the company such as sales, purchases, receipts, cash expenditures to financial statements of the company (Hutahayan & Yufra, 2019). The most important part of the accounting information system is inventory because inventory becomes one of the most important assets in the company when carrying out its activities. (Typhoon et al., 2018). Merchandise inventories are essential for the company's survival. Inventory becomes the main source of income in companies' trading. The company always pays great attention to the inventory because without inventory, the company will encounter risks, in which the company cannot meet the needs of its customers. The inventory of goods in companies' trading is very vulnerable to damage or theft, so the company needs to have internal controls to keep the company's inventory from damage, theft or other irregularities. To avoid irregularities in the company, the internal control system must be implemented properly in accordance with the elements of the internal control system.

Internal control systems include organizational structure and all coordinated procedures and tools used from within the organization with the aim of maintaining the security of the company's inventory (Polotski et al., 2020). Internal control over inventory accounting systems includes company activities designed in a company's methods, networks and procedures for inventory control (Cuganesan & Donovan, 2011). According to (Aljaaidi & Bagais, 2020), the main reason that causes attention to inventory control problems will result in obstacles that will cause disappointment in customers and loss of customers (Islam et al., 2019). Meanwhile, excess inventory will incur additional costs that can make a meaningful contribution to the company's profits (Van der Auweraer et al., 2021). In this case, internal controls ensure that management policies and briefings are strictly adhered to. For this reason, an effective and efficient inventory system is needed so that the company can carry out its operational activities properly.

Internal control requires adequate record in an effort to maintain the company's wealth and analyze the implementation of responsibilities (Zhu et al., 2020). (Alattar et al., 2009) stated that good documentation must be carried out by all parties involved in a transaction. However, all records should allow for checks between areas of accountability. In this case, physical calculations of inventory performed perpetually can be useful for the possibility of inventory running out or errors in inventory records (Orobia et al., 2020). Therefore, it takes different tasks to ensure that no individual or department manages accounting records with the operation of their respective activities.

Spare parts inventory system at PT. Astra International Tbk. - Auto 2000 Karawang is one of the parts that plays an important role in a company engaged in transportation services, especially service and spare parts sales. In this case, the warehouse section takes a role in the procurement of spare parts needed by the workshop to replace damaged car spare parts. In addition, the warehouse also does spare parts processing including recording every

item both entering and exiting. Inaccurate data checking often loses spare parts due to the absence of inaccurate information about inventory.

PT. Astra Internasional Tbk – Auto 2000 Karawang currently often *occurs over stock* for months until it is damaged. This results in the high-cost burden to the store and spare parts supplies. The company also conducts *stock opname* that are done once every six months or per semester, since it is at high risk of misuse or theft of supplies. Then, the function of receiving goods, the function of recording incoming goods, and the function of expenditure of goods are sometimes carried out by the same person. Inventory is an easily manipulable problem if the company does not have an effective control system. A good planning system should be used to find out the amount of inventory that should be stored to avoid risks that arise such as deficiencies, excess, damage, theft, or fraud. Due the problems encountered by PT. Astra International Tbk. – Auto 2000 Karawang to minimize risks and problems in inventories, it requires good internal control to maintain the company's revenue assets.

Research on inventory accounting information systems has been done a lot but mostly employed quantitative methods with different empirical results and somewhat based so that the author comments. Therefore, this study was conducted using the qualitative method. Based on her research, Sarah Van der Auweraer (2021) claimed that information about the size of the current active installed base, determined through product sales (or machine installation) and disposal, is indispensable for good inventory performance. Estimation on the future disposal of machinery, however, have a limited impact on inventory costs under our simulation settings. Sha Zhu Kan (2020) further revealed the results of his research that inventory control should be forward-looking. In this case, he proposed an inventory optimization approach to reflect this. He determined the potential value of the combined forecasting and inventory optimization approach using industry data, and found that the potential savings were enormous: 51% for aerospace care cases, and 23% for rail maintenance cases. Furthermore, Khaled Salmen Aljaaidi (2020), resulted from his research, discovered that there was a positive relationship \ between inventory management and the company's economic value.

Based on the background, the author tried to carry put research with the theme of this inventory accounting information system with the formulation of the following research problems:

- 1: How does the application of spare parts accounting information system by the company of PT. Astra International Tbk. – Auto 2000 Karawang?
- 2: How does the accounting information system for car spare parts inventory in improving the effectiveness of internal control in PT. Astra International Tbk. – Auto 2000 Karawang?

Furthermore, based on the formulation of the problems above, the purposes of this study are as follows to find out and evaluate the accounting information system of car spare parts inventory applied by PT. Astra International Tbk. – Auto 2000 Karawang and to find out the accounting information system of car spare parts inventory in improving the effectiveness of internal control in PT. Astra International Tbk. – Auto 2000 Karawang.

## **Literature Review**

### **INVENTORY ACCOUNTING SYSTEM**

Based on (Van der Auweraer et al., 2021), "Inventory accounting system is an accounting system that aims to record mutations of each type of inventory stored in the court. Furthermore, (Nasution, 2020) claimed that inventory accounting system is closely related to the sales system, buying system, sales return system, and purchase return system. The accounting system of the inventory of trade goods relates to the inventory of goods purchased for resale without changing the nature of the goods. According to (Van der Auweraer et al., 2021), the Functions of Inventory Accounting Systems are

### ***Warehouse Function***

According to (Nasution, 2020), the warehouse function is responsible for the storage of inventory goods. In addition, the warehouse function also has a role in the physical calculation of inventory in warehouse cards based on the results of physical calculations of inventory.

### ***Goods Receipt Function***

According to (Nasution, 2020), the function of receiving goods is to check the type, quality, and quantity of goods received from suppliers. The purpose of the examination is to determine the feasibility of the goods received. In addition, this function is related to the return of goods from buyers.

### ***Accounting Function***

Based on (Phornlaphatrachakorn, 2020), the Accounting function acts as a registrar of the exit and entry of cash or money, which occurs from the purchase and sale of goods. The responsibilities of the accounting function are as follows:

- Making list the cost of the unit of inventory calculated into the results of physical calculations.
- Increasing the quantity and price of principal per unit listed in the results of physical calculations.
- Making list of *adjustment*sto inventory cards based on the data from physical inventory calculations.
- Creating memorial evidence to record adjustmentof inventory data in general journals based on the results of physical inventory calculations.

### ***Inventory Card Function***

The function of the inventory card is as follows:

- Calculating the total cost of the product from the finished product report into the product-based price card.
- Making memorial evidence.
- Recapitulating the cost of goods sold periodically.
- Filling the principal price of goods on the credit memo.
- Filling the unit principal price and total principal price on the debit memo.

### ***Delivery Function***

According to (Phornlaphatrachakorn, 2020), the delivery function has the role of sending goods and making a report on the delivery of goods.

- Purchase Function: the purchase function has responsibility for the price information of goods, information about the supplier to be selected and making a purchase order letter that will be sent to the supplier.
- Sales Function: The sales function is responsible for serving the order needs of customers, then, working with the warehouse and shipping sections to prepare goods and make deliveries to customers.
- Inventory Physical Calculation Committee: The physical calculation committee of inventory is responsible for the physical calculation of inventory and submits the results to the inventory card section in the inventory card. Each section has a role to explain the condition of the supplies for which it is responsible.
- Debt Function: The debt function has the role of comparing the type and quantity of goods on the debit memo with the shipping report.

### **INFORMATION REQUIRED BY MANAGEMENT**

According to(Orobia et al., 2020), the information required by management in an inventory accounting system is:

- The type of inventory that reaches the reordering point.
- Purchase orders that have been sent to suppliers.
- Purchase orders fulfilled by suppliers.
- Additional quantity and cost of inventory from purchase.
- The quantity of the product returned to the buyer.
- The number of reduced receivables due to sales returns.
- Authorization of authorized officials.

Furthermore, (Orobia et al., 2020) claimed that the documents used in inventory accounting systems are:

***Sales factor***

This document is filled out by the sales section of the sale transaction. This document will further be received by the billing section.

***Purchase invoice***

This document created by the purchase section based on the purchase order letter of goods. The purchase invoice which is addressed to the supplier. This journal which is used when recording debt using *payable account procedures*.

***Credit Memo***

A credit memo is a document used by the inventory card section to record the quantity and cost of goods returned by consumers to the inventory card.

***Proof of cash***

Proof of cash is a document that contains a cash expenditure order to the cash section. In addition, this document is a letter of notification to creditors and serves as a source document recording reduced debt.

***Purchase Request Letter***

This document is filled by the warehouse function or the function of using goods to request the purchase function to make purchases of goods according to the type, quality, and quantity listed in the purchase request letter.

***Price Request Letter***

The price supply request letter is used for the purpose of requesting a price quote for an item whose procurement is not repeated.

***Purchase Order Letter***

This document is used to order goods to selected suppliers.

***Receipt of Goods Report***

The receipt of goods is a document that records the addition of quantity of goods from suppliers to warehouse cards. This document is held by the warehouse section.

***Freight Report***

A freight report is a document used by the warehouse section to record the quantity of inventory delivered back to the supplier into the warehouse card.

***Debit memo***

A debit memo is a document used by the inventory card section to record the quantity and cost of the principal of inventory returned to the supplier into the inventory card.

### ***Proof of Demand and Expenditure of Warehouse Goods***

Proof of demand and expenditure of warehouse goods is a document used to see the inflow and outflow of goods to and from the warehouse.

### ***Proof of Return of Warehouse Goods***

Proof of return of warehouse goods is used by the warehouse section to record the additional quantity of inventory into the warehouse card and is used by the inventory card section to record the additional quantity and cost of the inventory into the inventory card.

### ***Physical Calculation Card***

The purpose of using a physical calculation card is to record the results of physical calculations of supplies.  
List of Physical Calculation Results

- To summarize the data that have been recorded to the second part of the physical calculation card.
  - As a Memorial Evidence
- To book inventory account adjustments as a result of certain transactions or physical recalculation of inventory.

## **INTERNAL CONTROL**

According to (Sumaryati, et al., 2020), internal control is a process implemented by the board of directors, management, and all staff and employees to provide adequate assurance of the achievement of control objectives, which include: "

- Effectiveness and efficiency of operation
- Reliability of financial reporting
- In accordance with existing rules and regulations.

## **OBJECTIVES OF INTERNAL CONTROL**

Based on (Carolina et al., 2020), internal control carried out within a company must have several objectives, namely as follows:"

- Maintaining the wealth and the security of the company's property including physical supervision that can be done by:
  - 1) Supporting a clear responsibility to a person or physical supervision of the company.
  - 2) Accounting supervision is the adequate security of property, where only one transaction can enter and this procedure is designed in such a way as to filter every transaction that occurs.
- Checking the accuracy and reliability of accounting data, namely internal control which is designed to provide assurance of accounting data processing processes in order to produce precise and reliable information since accounting data reflects changes in a company's wealth.
- Encouraging efficiency, i.e., internal control in the company is shown to prevent duplication of effort that is not necessary or at least can reflect the occurrence of waste of resources that are not efficient.
- Encouraging compliance with management policies to achieve the goal of managers to carry out procedures or rules of implementation. The internal control system is intended to assure managers that all procedures outlined are easily predictable and identifiable and can easily implement authentication and repair actions quickly and appropriately in the event of irregularities.

## **ELEMENTS OF INTERNAL CONTROL**

According to (Carolina et al., 2020), the main elements of internal control in the company are as follows:"

- An organizational structure that separates functional responsibilities unequivocally. Organizational structure is the framework of the division of functional responsibility to organizational units formed to carry out the company's basic activities. The division of functional responsibility in this organization is based on the following principles:
  - 1) It must separate operating and storage functions from accounting functions. An operating function is a function that has the authority to carry out an activity such as purchase. A storage function is a function that has the authority to store company assets. Meanwhile, an accounting function is a function that has the authority to record a company's financial events.
  - 2) A function cannot be given full responsibility for all stages of a transaction.
- A system of authority and recording procedures that provide sufficient protection against wealth, debt, expense, and income. In organization, each transaction occurs only on the basis of authorization from the official who has the authority to approve the occurrence of the transaction. Therefore, in the organization, a system that governs the division of authority for authorization and use of forms must be supervised. A good recording procedure will produce meticulous and reliable information about an organization's wealth, debt, income, and costs.
- Healthy practice in carrying out the duties and functions of each unit of the organization. The ways that are generally taken by companies in creating healthy practices are:
  - 1) The use of printed sequence numbered forms whose use must be accounted for by the authorities.
  - 2) A surprise *audit* which is carried out without prior notice to the party to be examined, with an irregular schedule.
  - 3) Any transaction shall not be executed from start to finish by one person or one unit of the organization, without interference from another person or organizational unit.
  - 4) Job *rotation*. The turnover of positions held regularly will be able to maintain the independence of officials in carrying out their duties, so that conflicts between them can be avoided.
  - 5) Employees are eligible to take time off. Employees of the company are required to take leave for which they are entitled.
  - 6) Conducting periodic physical matching of wealth with records to maintain the wealth of the organization and check the accuracy and reliability of its accounting records.
  - 7) The establishment of an organizational unit with the task of checking the effectiveness of other elements of the control system.
- Employees whose quality is in accordance with their responsibilities.

To get competent and trustworthy employees the following ways can be taken:

  - 1) Selection of prospective employees based on the requirements demanded by their work.
  - 2) The development of employee education during his time as an employee of the company, in accordance with the demands of his job development.

### **INTERNAL CONTROL COMPONENTS**

According to (Sumaryati, et al., 2020), there are 5 interrelated components of internal control as follows:"

- Environmental control, which is the first component of control including:
  - 1) Philosophy of management and operations
  - 2) Commitment to integrity and ethical values
  - 3) Commitment to competence
  - 4) Audit committee of the board of directors
  - 5) Organizational structure
  - 6) Methods of assigning authority and responsibility
  - 7) Human resource policies and practices
- Risk Assessment. The three types of controls that management can choose in addressing any risks that may be faced by the company, namely preventive control, detective control, and corrective control.
- Control activities. The control activities related to financial reporting are:

- 1) Good document design and printed sequence numbers
  - 2) Separation of tasks
  - 3) Adequate authority over any business transactions that occur
  - 4) Securing company property and records
  - 5) Creating an independent check on the work of other employees
- Information and communication, the main objectives of an accounting information system include:
    - 1) Identifying and recording all valid transactions
    - 2) Classifying transactions as they should
    - 3) Recording transactions in accordance with the right monetary value
    - 4) Recording transactions in the right accounting period
    - 5) Presenting the relevant disclosures in financial statements appropriately
  - Performance supervision, the main activities in performance mastery include:
    - 1) Effective supervision, namely training employees, monitoring employee performance, correcting their mistakes, and securing property by supervising employees who have access to company property.
    - 2) Accountability accounting, i.e., accountability for budgeting, performance reporting, and procedures for investigating irregularities.
    - 3) Internal auditing, which includes a *review* of the reliability and integrity of operational information and financial assessment of the effectiveness of internal controls, evaluation of employee compliance with management policies and procedures, as well as evaluation of management effectiveness and efficiency.

### **Method**

The research method used in this study is qualitative method which is conducted to find out and analyze the Accounting Information System of car spare parts inventory in improving the effectiveness of internal control in PT. Astra International Tbk. – Auto 2000 Karawang in depth to provide a complete description of a particular subject.

Data Sources and Data Collection Techniques

#### **Data sources in this study include:**

##### **a. Primary Data Source**

Primary data sources are data obtained directly from the original source (not through intermediary media). Primary data collected in the current research are in the form of systems and procedures in the implementation of accounting and internal controls inventory, while the data source is the spare parts officer pt. Astra International Tbk. – Auto 2000 Karawang.

##### **b. Secondary Data Source**

Secondary data sources are data obtained by researchers indirectly through intermediary media (obtained and recorded by others) of other sources related to research, in the forms of literature studies, using documentation and literature related to the problem.

#### **Data collection techniques in this study:**

##### **a. Observation**

Observation is *the* basis of all science. Direct observation of the objects studied systematically by recording the collected data. Researchers record information as they see, hear and feel, which is then recorded objectively.

##### **b. Interview**

Interviews are used as a data collection technique, where researchers or data collectors have known for sure about what information will be obtained. Therefore, in conducting interviews, data collectors have prepared research instruments in the form of written questions that alternative answers have been prepared. Researchers will conduct interviews with company leaders and employees who are considered able to



provide the information needed. In this research in the form of a system used by the company in recording every transaction or activity in and out of car spare parts inventory.

**c. Documentation**

In this process written data were collected in the form of reports and relevant company documents

**1.1. Data Analysis Techniques**

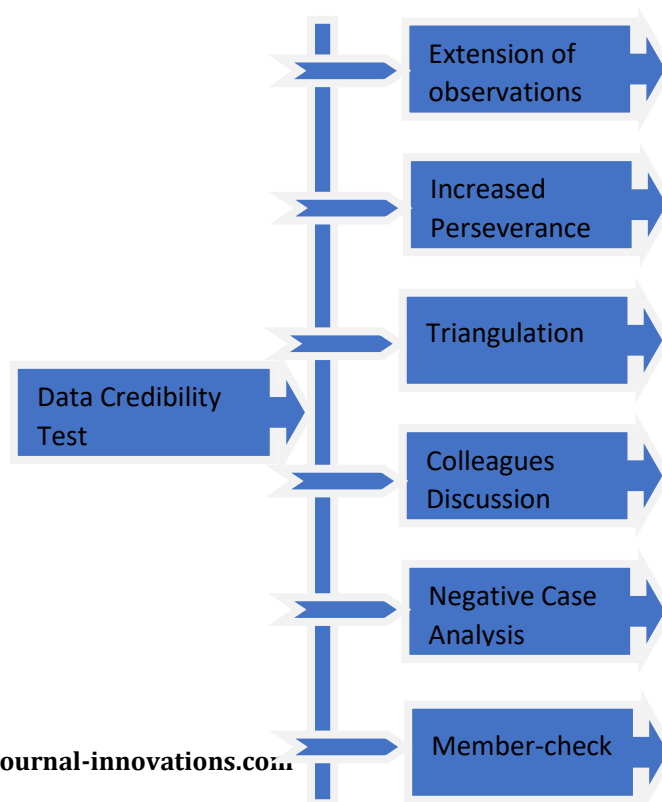
The data analysis technique used in this study is qualitative analysis through interviews, observations and documentation with spare parts staff in the company and conducting an analysis of the effectiveness of the internal control system of inventory in PT. Astra International Tbk. – Auto 2000 Karawang. Qualitative data analysis is inductive, i.e., an analysis based on the data obtained, then developed into a hypothesis. After the data were collected, it must be analyzed on the existing data. In this case, data analysis techniques are ways or steps taken to process data, both primary and secondary data.

The steps of data analysis techniques are as follows:

1. Studying the theories from books related to the accounting information systems of car spare parts inventory in improving the effectiveness of internal control.
2. Conducting direct research on the company concerned in order to see directly the state of the object to be examined and ask for the data needed for research by conducting an interview with pt. Astra International Tbk. – Auto 2000 Karawang related to inventory system processes and internal controls.
3. A comparison of evaluations from the results of direct research at PT. Astra International Tbk. – Auto 2000 Karawang with theories related to inventory systems and internal control.
4. Providing advice related to inventory accounting information systems and internal controls as well as inventory records that are in accordance with standards and overall, in company inventory.

**1.2. Data Credibility Testing**

The credibility of data were tested through the extension of observations, increased persistence in research, triangulation, colleagues discussions, negative case analysis and member-check. How data credibility was tested is shown in figure 1



**Figure 1. Data credibility test in qualitative research**

## **Result and Discussion**

### **A. Evaluation of Spare parts Inventory Accounting Information System at PT. Astra International Tbk – Auto 2000 Karawang**

#### **1. Related functions**

Related functions in the accounting information system of spare parts inventory at PT. Astra International Tbk – Auto 2000 Karawang is as follows:

- a. The Warehouse section is required to manage the spare parts inventory in the company, as well as to record the mutation of spare parts that go in and out of the warehouse.
- b. The Bookkeeping section is required to compile each existing document and carry out various processes of recording spare parts supplies.
- c. The Cash section is in charge of making reports of receipts and payment processes from customers.

Therefore, theoretically the implementation of spare parts inventory accounting information system at PT. Astra International Tbk – Auto 2000 Karawang is different from the existing theory and is not yet appropriate because there are still traps of functions and tasks carried out by the warehouse section. With the existence of several functions formed in handling transactions separately, it will be more effective and accountable. However, although it is not yet appropriate, the practice that occurs in PT. Astra International Tbk – Auto 2000 Karawang is already going well.

#### **2. Documents used**

Documents used in PT. Astra International Tbk – Auto 2000 Karawang includes sales invoices, shipping order letters, and proof of outgoing goods. The documentaing aims to monitor the spare parts supplies.

Judging from the documents used, it is not in accordance with the existing theory, which in theory also uses printed inventory stock cards and back-order documents.

PT. Astra International Tbk – Auto 2000 Karawang does not have a printed inventory stock card and does not use back orders because spare parts. Based on the existing systems, orders of spare parts and materials on Toyota Astra Motor (TAM) are placed directly without any official documents.

#### **3. Accounting records used**

Accounting records used in PT. Astra International Tbk – Auto 2000 Karawang is a system inventory card. Based on the records used, PT. Astra International Tbk – Auto 2000 Karawang has not been in accordance with the existing theories. Whereas in theory, it is not only provide information to officers to prevent out of *stock* and excess inventory but there must also be a general journal, while PT. Astra International does not have general journal recording so it cannot provide records of transaction reports made.

### **B. Internal Control System for Spare parts Supplies**

Spare parts inventory is one of the most important assets for companies with *inventory* and *sales* activities. Therefore, it is very influential on the smooth transaction activities of the company. Good spare parts inventory is an inventory that can provide maximum effect and minimum cost. This means that there

can be as many toyota usage needs as possible and as little storage as possible spare parts in the warehouse because spare parts inventory warehouse does not only provide the best service (*After Sales Service*) but must also be profitable (*Profitability*).

Internal control is a process that is carried out to provide adequate assurance that control objectives can be achieved. At PT Astra International Tbk – Auto 2000 Karawang internal control is carried out from the receipt of spare parts from Toyota Astra Motor, storage to the sale of spare parts to customers.

The internal control system on spare parts inventory aims to prevent unwanted things and even things that can harm the company such as weakness against simple error errors, losses, damage that may occur, misappropriation and theft of spare parts. Therefore, the company needs to have effective spare parts inventory control techniques that include controlling activities such as physical calculation of inventory, when orders should be made by estimating the spare parts when they will be installed, and the accuracy of existing bookkeeping records.

PT. Astra International Tbk – Auto 2000 Karawang uses perpetual system in recording spare parts inventory in terms of inventory assessment that uses FIFO (*Fisrt in First Out*) method set in accordance with accounting principles as one of the conditions. In addition, it is also supported by the use of special programs, namely TDMS (*Toyota Dealer Maintenance System*) as a recording of inventory to be an advantage in the company's internal control.

### **C. Evaluation of Internal Control System of Spare Parts Inventory at PT. Astra International Tbk – Auto 2000 Karawang**

#### **a. Organizational Structure**

Internal control systems can be considered good if it is supported by a good organizational structure as well. The existence of organizational structure and division of labor where the spare parts control environment is part of the organizational structure as a control factor that regulates organizational activities and gives influence to employees in carrying out their functions. Internal control activities of spare parts are covered in the structure with the integrity and ethical values of all employees for the authority and responsibility of employees in carrying out their duties.

At PT. Astra International Tbk – Auto 2000 Karawang, internal control of the company is not appropriate because there are still work and function traps, such as:

- 1) Separation of spare parts storage and record keeping.
- 2) Separation of the part that authorizes the transaction and storage of assets.

This will provide a small opportunity or even close the possibility of fraud against spare parts both physically and recording. It can be considered that inventory control of spare parts in PT. Astra InternasionalTbk – Auto 2000 Karawang still has minimum control.

#### **b. A system of authority and recording procedures that provide sufficient protection against wealth, debt, income and costs.**

In the request for inventory purchase, there is no authorization from the management or other parts of the function. According to the authors' analysis, the absence of authorization is a poor control. Every purchase made to Toyota Astra Motor should be notified to the party who authorized the absence of abuse.

#### **c. Sound practice in carrying out the tasks and functions of each unit of the organization**

A good document is a document that has a printed sequence number. In its application, there is no printed number on the stock report of goods used to record inventory of goods in and out according to the name of the goods.

Based on the analysis from the author, the company should make a stock card inventory numbered in printed order. So that every transaction can be accounted for by the authorities. Then, PT. Astra International Tbk – Auto 2000 Karawang *conducts stock opname* only when there is an audit process and there is no reconciliation of spare parts inventory reports in storage with other parties or parts. According to the author's analysis, it cannot be said good since it can result in errors irecord and *over stock*.

**D. Triangulation Theory**

**Table 1.**

**Triangulation of Spare parts Inventory Accounting Information System at PT. Astra International Tbk – Auto 2000 Karawang**

<b>Inventory Accounting Information System Elements</b>	<b>Inventory Accounting Information Systems Theory</b>	<b>Application to PT. Astra International Tbk – Auto 2000 Karawang</b>	<b>Information</b>
Related functions	<ul style="list-style-type: none"> <li>• Reception and Storage functions</li> <li>• Accounting recording function</li> <li>• Delivery function</li> <li>• Cash receipt function</li> <li>• Control function</li> </ul>	Related functions in the inventory accounting system at PT. Astra International Tbk – Auto 2000 Karawang includes reception and storage functions, delivery functions, and cash receipt functions	There has been no separation of reception function and warehouse function. In addition, there is no accounting and control function either.
Documents used	<ul style="list-style-type: none"> <li>• Reorder (<i>back order</i>)</li> <li>• Memorial evidence</li> <li>• Sales invoice</li> <li>• Pick-up card</li> <li>• Credit Memo</li> </ul>	Documents used by PT. Astra International Tbk – Auto 2000 Karawang only meets a few conditions, such as sales invoices, delivery order letters, and proof of outgoing goods	Documents used are still not appropriate because there are documents that do not exist in the company and are not in the SOP.
The resulting report	<ul style="list-style-type: none"> <li>• Receipt report</li> <li>• Goods expenditure report</li> <li>• Financial statements</li> </ul>	The report produced on PT. Astra International Tbk – Auto 2000 Karawang has been well computerized, which are the Goods Receipt Report, Goods Expenditure Report, and Financial Statement.	Appropriate
Accounting	Warehouse Card	The records used	The overall

records used	Inventory Card General Journal	in the company only contain inventory cards	application of accounting records used by PT. Astra International Tbk – Auto 2000 Karawang is still not suitable.
--------------	-----------------------------------	---	--

**Table 2 Triangulation of Internal Control at PT. Astra International Tbk – Auto 2000 Karawang**

<b>Inventory Internal Control Elements</b>	<b>Theory of Internal Control of Supplies</b>	<b>Application to PT. Astra International Tbk – Auto 2000 Karawang</b>	<b>Information</b>
Organizational Structure	<ul style="list-style-type: none"> <li>Organizational structure that must be separated are operating and storage functions.</li> <li>A function cannot be given full responsibility for all stages of a transaction.</li> </ul>	PT. Astra International Tbk – Auto 2000 Karawang has no detailed division of tasks in the inventory warehouse section making all related functions are conducted concurrently in spare parts inventory	The separation of responsibilities is still not going well.
Healthy practice in carrying out tasks and functions	<ul style="list-style-type: none"> <li>The use of printed sequence numbered forms</li> <li>Sudden <i>audit</i>.</li> <li>Job Turnover                             <ul style="list-style-type: none"> <li>The establishment of an organization</li> </ul> </li> </ul>	PT. Astra International Tbk – Auto 2000 Karawang still has a form that does not have a printed sequence number, <i>Stock opname</i> is done every six months, no job turnover, and no special function (internal audit	Phas PT. Astra International Tbk – Auto 2000 Karawang needs to create healthy practices in carrying out tasks. In addition, functions still have a lot of discrepancies.

	with a task of checking the effectiveness of internal control elements.	committee) that authorizes authorized officials.	
Employees whose quality is in accordance with their responsibilities	Selection of prospective employees based on the requirements demanded by their work. Development of employee education during employee hood	PT. Astra International Tbk – Auto 2000 Karawang has conducted proper selection of employees, which is in accordance with the capabilities and requirements submitted by the company.	PT. Astra International Tbk – Auto 2000 Karawang has been good in the selection of employees whose quality is in accordance with its responsibilities.

**Conclusion**

Based on the results of research conducted by the author on PT. Astra International Tbk – Auto 2000 Karawang, it can be concluded that there are still many shortcomings in the application of inventory accounting information system and internal control, those are as follows:

1. There are still traps of functions and tasks by the inventory warehouse section.
2. Some documents do not exist and are numbered in printed form.
3. There is no accounting function.
4. There are still SOPs that are not available and are not done firmly.
5. There are still internal control weaknesses in internal control over spare parts supplies.

Based on the results of the conclusions above, the advice that can be given by the author is as follows:

1. The company should make the separation of expenditure, shipping and storage functions and add control functions in the warehouse to be more efficient and create better internal control and no task traps.
2. It is preferably for PT. Astra International Tbk – Auto 2000 Karawang to complete less documents and creates documents with printed sequence numbers, especially stock cards.
3. The accounting function is held to record all inventory activities in order to provide a report that is useful for the company's management for decision making.
4. The company should conduct standard operating procedures where the company can carry out evaluation on a daily basis. If necessary, a control section tasked with controlling and regulating internal control should be made.

**References**

1. Alattar, J.M., Kouhy, R., & Innes, J. (2009). *Management accounting information in micro enterprises in Gaza. Journal of Accounting & Organizational Change*, 5(1), 81–107.
2. Aljaaidi, K. S., & Bagais, O. A. (2020). *Debt finance, inventory management and economic value of energy industry in saudi arabia: Empirical investigation. International Journal of Energy Economics and Policy*, 10(6), 347–353.
3. Carolina, Y., Rapina, R., Silaban, B. T., Sada, C., Widyaningsih, G., & Ayu, F. (2020). *Internal Control, AIS Quality and Accounting Information Quality: Empirical Evidence from Higher Education in West Java-*

*Indonesia. ACM International Conference Proceeding Series, 207–211.*

4. Cuganesan, S., & Donovan, J. (2011). Investigating the links between management control approaches and performance measurement systems. In *Advances in Management Accounting (Vol. 19, Issue 2011)*. Emerald.
5. Hariyati, Tjahjadi, B., & Soewarno, N. (2019). The mediating effect of intellectual capital, management accounting information systems, internal process performance, and customer performance. *International Journal of Productivity and Performance Management*, 68(7), 1250–1271.
6. Hutahayan, B. (2020). The mediating role of human capital and management accounting information system in the relationship between innovation strategy and internal process performance and the impact on corporate financial performance. *Benchmarking*, 27(4), 1289–1318.
7. Hutahayan, B., & Yufra, S. (2019). Innovation speed and competitiveness of food small and medium-sized enterprises (SME) in Malang, Indonesia Creative destruction as the mediation. 10(5), 1152–1173.
8. Islam, S. S., Pulungan, A. H., & Rochim, A. (2019). Inventory management efficiency analysis: A case study of an SME company. *Journal of Physics: Conference Series*, 1402(2). Nasution, A. A. (2020). Effect of inventory turnover on the level of profitability. *IOP Conference Series: Materials Science and Engineering*, 725(1).
9. Orobia, L. A., Nakibuuka, J., Bananuka, J., & Akisimire, R. (2020). Inventory management, managerial competence and financial performance of small businesses. *Journal of Accounting in Emerging Economies*, 10(3), 379–398.
10. Phornlaphatrachakorn, K. (2020). Accounting control system, accounting information quality, value creation, and firm success: An empirical investigation of auto parts businesses in Thailand. *International Journal of Business*, 25(2), 159–177.
11. Polotski, V., Kenne, J. P., & Gharbi, A. (2020). Kalman filter based production control of a failure-prone single-machine single-product manufacturing system with imprecise demand and inventory information. *Journal of Manufacturing Systems*, 56(September 2019), 558–572.
12. Sumaryati, A., Novitasari, E. P., & MACHMUDDAH, Z. (2020). Accounting Information System, Internal Control System, Human Resource Competency and Quality of Local Government Financial Statements in Indonesia. *The Journal of Asian Finance, Economics and Business*, 7(10), 795–802.
13. Typhoon, E., Tan, T., van Houtum, G. J., & Dekker, R. (2018). Using imperfect advance demand information in lost-sales inventory systems with the option of returning inventory. *IIE Transactions*, 50(3), 246–264.
14. Van der Auweraer, S., Zhu, S., & Boute, R. N. (2021). The value of installed base information for spare part inventory control. *International Journal of Production Economics*, 239(June), 108186.
15. Zhu, S., Jaarsveld, W. van, & Dekker, R. (2020). Spare parts inventory control based on maintenance planning. *Reliability Engineering and System Safety*, 193(August 2019), 106600.