Design of Merchandise Inventory Accounting Information System Using Web-Based SAK ETAP Standard at Frozen Food Distribution Store

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ABSTRACT
Inventory of trade goods is important in the process of buying and selling activities in a trading company, in this case it can be concluded that inventory is important for every company to supervise and manage the inventory owned. This research was conducted at the Frozen Food Distribution Store located at Rajawali Timur Street No. 68, Ciroyom, Andir, Bandung City, West Java 40182. Frozen Food Distribution Store is a trading company, selling products in the form of Frozen Food types. The method to be used in the implementation of research is the descriptive method is the process of solving problems that will be researched by describing situations that are objects or subjects. There are three data collections, namely, observation, interview and literature review. The author made the design of this application based on the website, the purpose of making this information system is expected that this system will help in carrying out daily activities in trading at the Frozen Food Distribution Store. The use of this information system is to manage inventory well with inventory cards. The results of the author's research on frozen food distribution stores do not yet have a merchandise inventory information system in which financial statements are made, the information system is made to have inventory card features to financial reporting and receive income statements every month to see profits, according to applicable accounting standards. Merchandise inventory information systems can help with weaknesses in the running system.

Keywords: Merchandise Inventory, Accounting Information System, Frozen Food

Introduction
Along with the times, technology is very influential and has a very important role in every company that runs. This system can help companies in data management, and can be an information that can be accepted as decision making. Companies need a system that can be useful to ensure that there are no errors that occur during the running of a company activity [1]. Current rapid development Technology really helps and makes all areas of life easier, especially in managing accounting Information Systems. Increasing business needs affect much business competition [2]. A system is characterized as an assemblage of subsystems, parts, or constituents that collaborate to generate a pre-established result. Existing data is what constitutes information [3].

Processed for a person, organization or anyone who needs it. Companies use technology to manage company finances. A trading company is defined as a company whose activity is to purchase goods merchandise and resell it without changing the form to obtain profit [4]. Information technology (IT) refers to the associated systems, software, and hardware components that a business uses to create computer-based information systems. It is utilized to accelerate reaction times, make it easier for businesses, volunteers, government agencies, and relief organizations to work together, among other coordination tasks [5].

Accounting information systems play a very important role in companies. To help make financial reports easier. The development of time and technology continues to progress. Companies must follow current developments by developing a running accounting information system. Some companies still maintain making financial reports using manual bookkeeping, where
manual bookkeeping can cause errors in writing, such as wrong numbers, the wrong number of zeros recorded [6].

Good inventory will determine whether every production process of a company will be carried out smoothly. Inventory is a resource that will be used in the future. In order to ensure that there will not be more or no shortage of stock, the company must continue to review the presence or absence of stock of the product. The amount of a cost in the warehouse that a business will incur can be affected by more and less inventory. Every company must have the best inventory control capabilities so that production can run smoothly. With inventory control, businesses can achieve business goals by responding quickly to customer requests and minimizing inventory costs [7].

Inventory is an investment made for the purpose of obtaining a return proceeds through sales to customers. Many companies tend to maintaining inventory at a certain level, if inventory is insufficient, sales will decrease at a low level of achievement and vice versa. If the business has too much inventory, it will have to deal with issues related to funding, insurance, taxes, storage, and financial as well as physical harm. Because keeping inventory entails internal risks and it takes longer to turn over inventory into cash. Most people agree that inventory is the most illiquid current asset when compared to accounts receivable [8].

In the absence of inventory, a company will be exposed to threats, namely unable to meet customer needs. Therefore, in a supply, it must be faced with an investment that is not small but not too high. Some experts have expressed opinions about the inventory. Some of these experts have expressed their opinions about inventory, that is, the wealth that a company already has, is also available for sale in various interests in business, namely goods that will be used to produce production, goods to be sold. From this conclusion, inventory is a major complementary asset in every company because inventory is the main asset in creating profits in the company [9].

Financial Accounting Standards for Entities Without Public Accountability is one of the financial standards set to make it easier for entities without public accountability to prepare and present more informative financial reports with the aim of making it easier for information users and managers to make decisions [10].

Within a corporation, the presence of inventory significantly impacts the portrayal of financial statements. This is crucial because the resultant financial statements accurately reflect the genuine financial status of the company, whether it is experiencing profits or losses. Inventory holds great importance in financial statements, as both the income statement and balance sheet cannot be formulated without determining the value of inventory [11]. However, currently many businesses in the implementation of their business have not run an Accounting Information System, especially on Merchandise Inventory, to achieve effective control of the supply of goods so that good information is obtained. Researchers conducted research on Frozen Food Distribution Stores located on Rajawali Timur Street No. 68, Cioroym, Andir, Bandung City, West Java, 40182. Frozen Food Distribution Store is a trading company that sells various kinds of Frozen Food. This research was conducted in the Warehouse and Accounting section.

The definition of a system is a network of stages that are interrelated, collected to carry out an activity in other words to clean up a certain target [12]. The definition of information is even broader, that the data that has been studied will be shaped and useful for recipients of information that is useful for delivering current and future decisions [13]. The Financial Accounting Standards for Entities Without Public Accountability (SAK ETAP) are designed for usage by entities that lack substantial public accountability and issue financial reports for general purposes [14].

Understanding Information systems is a system that has an association that relates payment processing needs and is supported by an operation in the form of a manager. Information systems today are the main thing for companies, besides that the development of information systems is an advantage in a company. Similarly, this Frozen Food Distribution Store has had an information system that has been running for a long time, but along with the development, the information
system used still has problems in recording incoming and outgoing goods in the warehouse. Likewise, the financial reporting is not in accordance with accounting standards.

Problems with the Frozen Food Distribution Store Information System, the author by updating the system that has been running in the company and is still not in accordance with Accounting Standards and also Systems that often experience errors in the stock of goods in the warehouse. In making the information system uses various types of programming languages including using PHP. PHP is the program language used by the website to be in the form server-side scripting PHP dynamic shaped.

Based on some of the above, researchers designed a web-based inventory accounting information system using PHP and PostgreSQL with inventory methods, the information system that has been made has the advantage of having inventory cards to income statements which aims to make it easier for companies to see finances according to accounting standards with the aim of managing data to be more effective and efficient, with that the researcher titled "Design of Merchandise Inventory Accounting Information System Using Web-Based SAK ETAP Standard in Frozen Food Distribution Stores."

Method

The unit of analysis is the subject of research. Design Merchandise inventory analysis unit in the Frozen Food Distribution Store in the Warehouse section and other related sections. Population is the overall object in a study. The population the researchers examined was the Frozen Food Distribution Store Merchandise Inventory for the 2023 period. The object of research is something that is targeted in research. The research target used is the design of Merchandise Inventory in Frozen Food Distribution Stores. Research design is a framework for making research. The method to be used in the implementation of research is the descriptive method is the process of solving problems that will be researched by describing situations that are objects or subjects. There are three data collections, namely, observation, interview and literature review. Research is the design of a sales accounting information system in Frozen Food Distribution Stores. The methods used by researchers are descriptive research methods and surveys. Research methods and surveys are descriptive because the author needs an overview of the running system. Development can be done and designed in this application, namely with waterfalls. The explanation is as follows: Waterfall is a type of SDLC used to develop an information system. The waterfall uses a structured approach [15]. Figure 1 is an illustration of the waterfall model.

Based on figure 1. The author uses the waterfall model as a development model in designing an information system for the availability of merchandise at Frozen Food Distribution stores.
Results and Discussion

Frozen Food Distribution Store is a trading company that sells various kinds of Frozen Food. This research was conducted in the Warehouse and Accounting section. The Frozen Food Distribution Store has had an information system that has been running for a long time, but along with the development, the information system used still has problems in recording goods in and out of the warehouse. Likewise, financial reporting is not in accordance with accounting standards. The author makes a merchandise inventory information system in accordance with mere accounting standards, in the information system made has advantages in financial reporting and also has an inventory card that makes it easier for users to see inventory of goods.

Problems in the Accounting Information System of the Frozen Food Distribution Store by updating the system that has been running in the company and is still not in accordance with Accounting Standards and also Systems that often experience errors in the stock of goods in the warehouse. That way the author conducted a study to fix the problems that occurred, the author designed a Web-based SIA using PHP and PostgreSQL.

1. Flowchart

![Flowchart](image)

In Figure 2. The flowchart of the Store entity will request goods and will be sent to the warehouse entity, then the warehouse will check the inventory of goods available in the warehouse...
when the goods are available, they are immediately sent back to the Store according to the demand for the goods needed. However, if the goods are not available in the warehouse, they will be processed and submit the goods to the Manager.

In Figure 3. Flowchart Manager Entity will receive the submission of goods for approval then an order will be placed with the supplier then later in the finance department will be inputted and made Inventory Card, General Journal, General Ledger, Balance Sheet to Income statement.
2. Context Diagram

A running context diagram is one that illustrates the alignment of a running system. The following is an overview of the running context diagram at a Frozen Food Distribution Store:

![Context Diagram](image)

Figure 4. Context Diagram

In Figure 4, the author describes the overall flow in the merchandise inventory information system at frozen food distribution stores.

3. Data Flow Diagram

Definition Data Flow Diagram (DFD) is a chart that will illustrate a data flow within the company, which can be depicted by various symbols in order to illustrate the turnover of data that occurs in business process. Here is the Data Flow Diagram (DFD) that the author made:

![DFD Level 0](image)

Figure 5. DFD Level 0

In Figure 5, the author describes the overall data flow in the merchandise inventory information system of frozen food distribution stores.
4. Entity Relationship Diagram (ERD)

ERD that is a diagram in the form of notation that is in the process of creating a database that will connect between one data and another data. Proposed ERD:

![Entity Relationship Diagram](image)

Figure 6. The author designed ERD as a database creation process that will link between data from the merchandise inventory information system at frozen food distribution stores.
5. Menu Structure

Menu Structure The program to be created is divided into 4 parts, namely there is a structure of Shops, Warehouses, Finance, Managers.

Figure 7. Menu Structure

In figure 7. The author makes a menu structure of what is contained in the merchandise
inventory information system at frozen food distribution stores.

6. Inventory Information System Display

![Figure 8. Log in View of Warehouse, Store, Finance, and Manager](image)

In figure 8. Login display on Warehouse, Store, Finance, and Manager users. All users can access the section still in accordance with the menu structure that has been created.

![Figure 9. Data Item](image)

In figure 9. display of goods data on the warehouse user. The warehouse can input any item contained in the frozen food distribution store.

![Figure 10. Data Supplier](image)

In Figure 10. Supplier data on the Warehouse user. The warehouse can input any supplier in
the frozen food distribution store.

Figure 11. Goods Request

In Figure 11, request goods to the Warehouse user. Where the warehouse can approve if there is a demand for goods in the store if the goods are available.

Figure 12. Purchase Application Data Table

In Figure 12, display of purchase submission data on Warehouse users. Where the warehouse process purchases to be approved by the manager on the user manager before being submitted to the purchasing department.

Figure 13. Incoming Goods Table
In Figure 13, Table view of incoming goods in the user warehouse. Where the warehouse can input any goods that enter according to the purchase submission data that has been submitted and approved.

![Figure 14. Table of Outgoing Goods](image)

In Figure 14, The Item Table view comes out on the user's warehouse. Where the warehouse can input any goods that come out of the warehouse after a request for goods from the store user.

![Figure 15. Stock Table](image)

In Figure 15, Display of the stock table of goods on the Warehouse user. Where the warehouse can see how many goods enter and goods go out and stock available in the warehouse.
Figure 16. Item Supply Table

In Figure 16, is the display of the Inventory Card on the Warehouse user. Where the warehouse can see how many goods enter and goods go out and stock available in the warehouse.

Figure 17. Main Table of General Journal

In Figure 17, is the main table view of the general journal of goods on financial users. The finance department can access the general journal.

Figure 18. General General Ledger Main Table
In Figure 18. is the display of the Main Table of the General Ledger of goods on financial users. The finance department can access the ledger.

![Figure 19. Main table Balance Sheet](image1.png)

In Figure 19. Is the main table view of the balance sheet in financial users. The finance department can access the balance sheet.

![Figure 20. Profit and Loss Taking](image2.png)

In Figure 20. This is the main table view of profit and loss for financial users. Finance can access the final report.

**Conclusion**

In this research I created a merchandise inventory accounting information system, After doing this research food distribution stores can see inventory cards that conform to accounting standards and can also view financial statements. With this information system, it can make it easier to see financial statements in this frozen food company and also in the application process to facilitate users and have an impact more efficiently and effectively. Researchers can conclude that Frozen Food Distribution Stores already use information systems but are not the same as accounting standards that are run, and there are no inventory cards and financial statements for merchandise inventory in stores. Researchers try to provide a solution, namely evaluating the merchandise inventory information system to conform to applicable accounting standards based on the web
designed by the PHP programming language and PostgreSQL database. This information system can help companies record inventory and make income statements so that it can be easier to see the profits earned by stores. The suggestion for the next researcher is that the title section can be redeveloped so that the scope is wider and the application created can be added more features regarding Merchandise Inventory Accounting.

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References

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