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Implementation of Accounting Information System For Raw Material Control

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ABSTRACT

The use of information systems is currently required by the business to support business operations so that the implementation of various processes, including the accounting system for controlling raw materials, can go smoothly and be focused on achieving the business's objectives. The control of a company's raw material inventory is related to one aspect of the accounting system. Inventory control must be taken into account because it directly affects the costs that the business must bear as a result of inventory. As a result, the inventory currently in place must be balanced with needs, as raw material inventory is the primary factor in the business that supports a productive production process. With the help of activities and procedures related to accounting information systems, raw material inventory control systems, and company sales targets, this study seeks to analyze the function of accounting information systems in controlling raw material inventory. Along with resolving issues with the company's financial transaction data recording, a system that can generate thorough raw material recording reports must be developed in order to improve the company's raw material recording. The design of the raw material control accounting information system has been successfully made in accordance with the company's business processes and user needs analysis, as shown by the results of system development using the System Development Life Cycle (SDLC) method, so that system testing with blackbox testing demonstrates the system can function as expected..

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1. INTRODUCTION

Every business requires a system to regulate and monitor operational processes. The use of information technology to support the company's activities is intended to facilitate the implementation of various processes that are geared toward achieving the company's objectives. For instance, the use of information systems in managing data (Susanto, 2018)(Salehfar, 2011) into information to increase the transparency (Sudipa & Lestari, 2019) of financial statement information in companies necessitates a digital financial

reporting accounting system (Anan, 2021). A portion of a company's accounting system relates to the management of raw material inventory control.

Inventory management is a method of regulating the acquisition, receipt, and allocation of inventory materials in a running business so that the business becomes effective, particularly in terms of the costs incurred for the efficient operation of the business or its production. Inventory control must be considered because it is directly related to the costs that must be borne by the company as a result of inventory; consequently (Saputra et al., 2021), the existing inventory must be balanced with needs, as raw material inventory is the most important factor in the company to support the smooth production process, for both large and small businesses (Ardiansyah et al., 2020). Errors in determining the amount of investment in controlling raw materials that are too large relative to the company's needs will increase interest expense, maintenance and storage costs in the warehouse, as well as the possibility of depreciation and unsustainable quality, all of which will decrease the company's profits. Inversely, if the company has an insufficient supply of raw materials, production bottlenecks will occur, and the company will incur losses (Khasanah, 2022).

A company in the food industry, UD. Buana Sari, is one that uses an accounting system in raw material control management. By using raw materials in the production of goods that are suited to market demand, the end result is in the form of fast food consumption. How to utilize the unfinished goods in the UD warehouse. The FIFO (First in First out) principle is used at Buana Sari. The first raw material to enter the warehouse will also be the first raw material used. Due to the fact that many of the issued raw materials frequently do not correspond with production requests, the warehouse party finds it challenging. Production activities are hampered because raw materials frequently run out prior to the arrival of new raw materials(Layona et al., 2021). Since the processing of goods is still done by hand rather than using computers, there are often inconsistencies in the data that the employee in charge of the section checks against the stock of raw materials that are currently on hand. Due to the lengthy raw material inspection procedure, financial statement audit activities are never performed. Due to officers' ignorance of the equipment being used, current computer equipment is not being used to process data in an efficient manner (Adawiah, 2018)(Pertiwi et al., 2020). In the end, it led to the inability to make fast food in accordance with customer requests, which also delayed delivery to customers. Another challenge is the owner's inability to accurately recapitulate the preparation of financial statements, as well as sales and purchase income at the end of the month, and perform conventional bookkeeping as a result of the recording of financial transactions (Hutasoit & Sitompul, 2021). The cycle of expense accounting includes buying raw materials from suppliers. Either buying products for the kind of trading company, or buying raw materials for the kind of manufacturing company. Warehouse (request), purchases, receipts, accounts payable, finance, and accounting are just a few of the components that go into a purchase transaction.

This study aims to develop an accounting information system information system for controlling raw material inventory at UD. Sari Bhuana in the form of accounting information system-related activities and procedures, raw material inventory control systems, and sales targets (Al-Delawi & Ramo, 2020). System requirements analysis, system design, system implementation, and system testing comprise the System Development Life Cycle (SDLC) method utilized by the system development method (Wiguna et al., 2021). The system is intended to be able to overcome difficulties in recording financial transaction data in the company in order to improve the company's recording of raw materials by developing a system that can generate detailed recording reports on raw materials.

2. RESEARCH METHOD

2.1. Accounting information system

The information system is a system that is used on a regular basis within an organization, that helps with day-to-day tasks, that is managerial in nature and the activities of a company, and that supplies relevant parties with reports necessary for the management of the company (Hutahayan, 2020). The accounting system is made up of people (actors), processes (procedures), and computers (information technology) that all work together to achieve common goals. The information gleaned from the routine processing of accounting transactions is what accounting systems deliver, along with the expected accounting and financial data. Accounting is the process of keeping and using organized financial records, along with related forms and reports, to provide decision-makers with an accurate picture of an organization's financial management (Rizqi et al., 2022).

2.2. Raw Material Control

Internal raw material control is an organizational plan and method used to maintain or protect assets, generate accurate and trustworthy information, increase efficiency, and promote compliance (Khomarudin, 2018) with management policies. Warehouse functions, purchasing functions, receiving functions, and accounting functions are interrelated purchasing accounting system functions (Chandra et al., 2019)(Khomarudin, 2018). The related functions of the purchasing accounting system are defined as follows:

a) Warehouse Work In the purchasing accounting system, the warehouse function is in charge of including the inventory position in the warehouse on purchase requisitions and is also in charge of keeping goods that the receiving function has received and received.
b) Purchasing Capability The purchasing function is responsible for obtaining information on the price of goods, identifying the supplier chosen for the procurement of goods, and issuing purchase orders to the chosen supplier.
c) Receiving Capability In the purchasing accounting system, this function verifies the type, quality, and quantity of goods received from suppliers to determine whether or not the goods are accepted by the business.
d) Accounting The recording of accounts payable and the recording of inventory are functions related to purchase transactions.

Inventory is the most essential component of a trading company, so internal control over inventory is crucial. Every year, a physical inventory count must be performed in order for the company to know with certainty the quantity of inventory on hand. A computerized inventory system aims to assist businesses in maintaining inventory levels (Putra, 2018).

3. RESULTS AND DISCUSSIONS

Several stages of research are conducted in accordance with the SDLC system development methodology, namely system requirements analysis, system design, system implementation, and system testing.

3.1. System Requirements Analysis Stage

The analysis of the need for an accounting information system for controlling raw materials is tailored to the company's business processes. The interviews and observations were conducted to determine the process flow from raw material management to financial report production, which was then modeled using a flowchart system. The raw material control management flowchart is depicted in Figure 1.

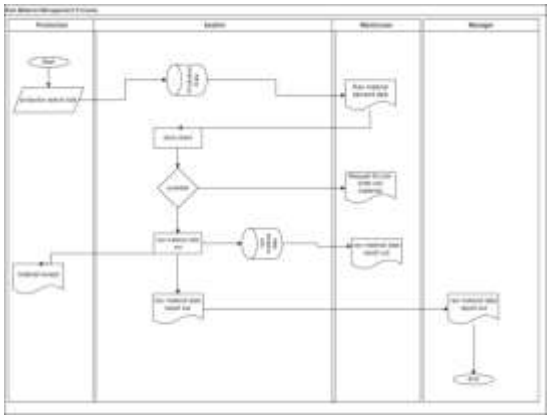

Figure 1. Raw Material Control Management Flowchart

As shown in Figure 1, an employee in the production department creates production planning data, which is then transported to the raw material warehouse where it is processed. The warehouse will then verify whether or not the requested materials are in stock. The warehouse will keep track of outgoing raw materials if they are available. If the warehouse runs out of raw materials, however, it will contact purchasing to request a pre-order. Along with supplying the requested raw materials, the warehouse also provides the production department with a receipt for raw materials. After that, the warehouse will take stock and record the incoming raw materials. Following that, the report will be delivered to the relevant authority, be it a manager or owner.

3.2. System Design Stage

The design phase is based on the analysis of system requirements performed in the previous phase. The design of an accounting information system for controlling raw materials entails the creation of a database to store raw materials-related tables and the generation of financial accounting reports. It is crucial that the design of the table corresponds to the flow of the raw material control process, as the table is a data repository for user input related to the implementation of the system interface. The table modeling utilizes the Conceptual Data Model (CDM) to make it simpler to determine which fields are required for each table. The system's table layout is depicted in Figure 2 below.

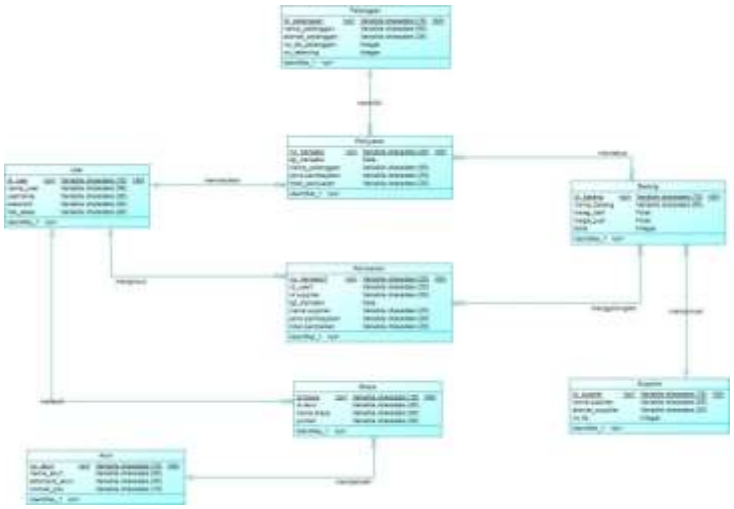

Figure 2. System Table Design

The analysis of system requirements resulted in the creation of several tables, including tb user, which is used to store user data information, tb barang, which is used to store information on goods data, tb_penjualan, which is used to store transaction history of goods sales data, and tb_pembelian, which is used to store transaction history of material purchase data. raw material, tb_supplier to store raw material supplier data, tb_biaya to store the number of transactions executed, and tb_akun to store account data for accounting transactions.

3.3. System Implementation Stage

Several users, including admin users, employee users, and user owners, can currently access the system interface. In order to produce system features on each page of the system interface, the raw material control accounting information system's interface display adjusts to the analysis of user requirements and the table design.

Figure 3. Page of the Item Management Interface

The page depicted in Figure 3 is the raw data management interface. Admin users can access this page to enter information on raw material goods, and there is a feature for adding raw material data related to purchase transactions to suppliers. On the item data interface page, the details of the raw materials to be purchased, including the quantity, purchase price, and selling price, as well as the selected supplier and remaining raw material inventory, are entered.

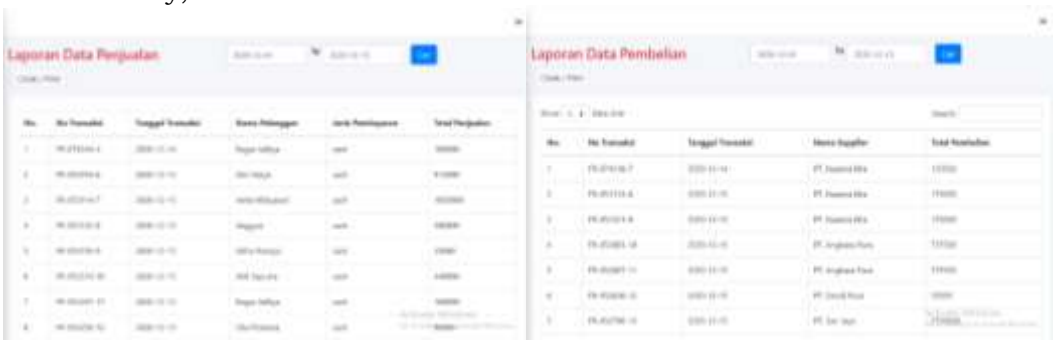

Figure 4. Sales and Purchase Report Interface Page

Figure 4 illustrates the interface page for the monthly recapitulation of reports on sales of goods to consumers and purchases of raw materials from suppliers. The report summary can be filtered based on daily, monthly, and annual transactions.

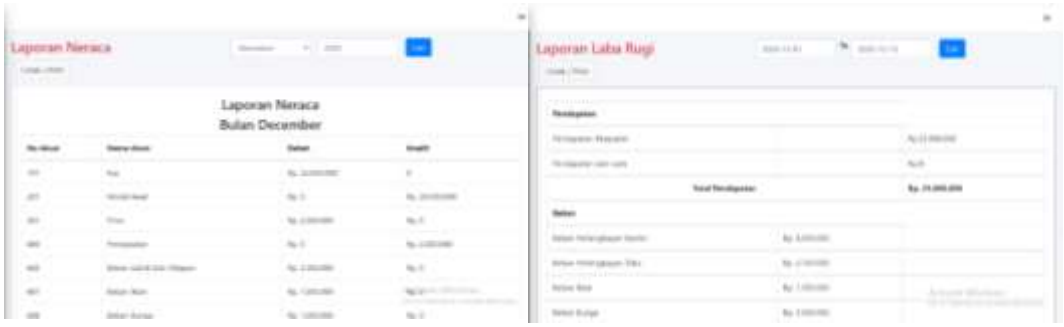

Figure 4. Financial Report Interface Page

Figure 5 depicts a function for printing financial reports. This page is accessible to the user in order to review the company's balance sheet and profit and loss statements. The data displayed on the financial report is derived from sales transaction input data, purchase transaction input data, and cost input data. On the financial report page, you can filter to view the balance sheet financial statements for daily, monthly, and annual transactions.

3.4. System Testing Stages

System testing phases utilizing the Blackbox Testing method. The blackbox method is utilized to determine if the functionality of the system's features is operating in accordance with the needs analysis and the suitability of the expected results. Each module of the system is tested to determine the functionality of each feature. The scenario for the black box test is shown in Table 1 below.

Table 1. Blackbox Test Results

No	Testing Scenario	Result	Description
1	Login Interface	Success	Features and appearance as expected
2	Item Data Interface	Success	Features and appearance as expected
3	Sales transaction interface	Success	Features and appearance as expected
4	Purchase transaction interface	Success	Features and appearance as expected
5	Financial Account Interface	Success	Features and appearance as expected
6	Item Report Interface	Success	Features and appearance as expected
7	Transaction Report Interface	Success	Features and appearance as expected
8	Accounting Report Interface	Success	Features and appearance as expected

4. CONCLUSION

The application of accounting information systems for raw material control at the UD. Buana Sari company is explicable as a research conclusion. System has been successfully implemented to overcome difficulties in monitoring and managing the raw material process using the FIFO concept, which encompasses the incoming raw material process, storage in the warehouse, and the goods production process. The SDLC system development method can accommodate business processes and analyze user needs for the system so that the design phase can be adapted to the needs analysis and the implementation phase of system features can be utilized optimally by the business for managing transactions for purchasing raw materials, selling products, and being able to check and print reports. Accounting relating to UD's financial transactions. At the blackbox testing phase of system testing, Buana Sari, the system has performed satisfactorily. The recommendation from the research is to include inventory management functions that verify the expiration dates of raw materials.

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