

Cash Purchase Information System Design (Case Study Of Mekar Jaya Farming Cooperative)

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Abstract

The Mekar Jaya Farmers Cooperative is a business unit that serves farmers in the supply of fertilizers, seeds and various other agricultural needs. This cooperative buys goods in cash from factories and then sells them to farmers using a credit system. The problem that is often faced is the difficulty in controlling the stock of fertilizer and the process of purchasing fertilizer which is still done manually. This causes a shortage of fertilizer stocks. This study tries to develop a solution in the form of a cash purchase information system design, where this system works in managing purchases and automatically counting inventory, this system is also useful for facilitating cash purchase transactions. The designed system is supported by SQL Server 2005 software as a database and Visual Basic 2008 Programming Language as a programming language in the cash purchase system. The results obtained if this system can be implemented are, making it easier for the Mekar Jaya Farmers Cooperative in every cash purchase transaction and making it easier to input goods, making reports that are more accurate than using a manual system and in making decisions if problems occur in the future, and make it easier to report every transaction that occurs to the owner/chairman of the cooperative.

Keywords: Information System, Stock Purchase, SQL Server 2005, Visual Basic 2008

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INTRODUCTION

The Mekar Jaya Farmers' Cooperative is a multi-purpose cooperative engaged in the provision of agricultural needs such as fertilizers, seeds and others. Agricultural goods provided by the cooperative can be taken by cooperative members and paid after harvest, for the procurement of goods needed by the cooperative to buy cash from the factory.

Data processing is still done using a manual system, this causes difficulties in making inventory and financial reports, especially on purchase reports. It often happens that data is lost, it is difficult to know

stock information. Data management and preparation of purchase reports require an information system to assist in compiling purchase reports in order to obtain more accurate and faster data results, if there is no computerized purchase report recording system, information about purchases will hinder the smooth running of other systems in the cooperative, because In cooperatives there are interrelated jobs.

For this reason, the authors conducted research on the Design of Cash Purchase Information Systems, a case study of the Mekar Jaya Farmers' Cooperative. With a design concept that is easily understood by in preparing purchase reports with the aim of obtaining precise and accurate data and information and speeding up decision making.

Information Systems

According to Abdul Kadir (2009) Information system is a system within an organization that brings together the daily transaction processing needs that support the managerial functions of the organization's operations with the strategic activities of an organization to be able to provide certain outside parties with the information needed for decision making.

Information system is a unity of elements that interact systematically and regularly to create and shape the flow of information that will support decision making and control the running of the company (Oetomo, 2002).

Purchase

Purchasing is the activity of buying a trade item for resale at an additional price which aims to provide profits for the company.

According to Diana (2013), Purchase of merchandise is goods purchased for immediate resale, without any activity to add value to the product.

A cash purchase is a business transaction carried out by a company for the continuity of activities within a company with the aim of securing the stock of goods with the intention that there should be no congestion in every activity within the company just because the goods in a company run out, by making direct payments / cash for cash purchases. goods that have been received by the company.

METHODOLOGY

The method used in the study is as follows:

Analysis Method

The initial stage is to conduct an analysis by observing and interviewing users, namely the Mekar Jaya Farmers Cooperative on Jl. Mount Arjuna, Bhakti Karya Village, Binjai Tuesdayn District, Binjai Municipality. The data and information obtained will be used as the basis for the design in the next step.

Data analysis

From the results of observations and interviews, it was obtained information that the purchase recording system was still done manually, namely by using an order invoice and a payment invoice, this led to frequent missing documents. For this reason, it is necessary to design a new information system that can facilitate the process of recording and ordering goods and facilitating data processing. To produce a good system, it takes several components in the form of software and hardware as well as users/operators.

Design Method

The next stage is the design, the design in the form of matters relating to cases in research, namely:

1. Design of the user interface (User Interface)
2. The rules (rules)
3. Application prototype (Prototype)

RESULTS AND DISCUSSION

System Analysis

System analysis is the decomposition of a complete information system into parts its components with a view to identifying and evaluating problems, opportunities, obstacles that occur and expected needs so that improvements can be proposed [4]. Identification of the problem obtained weaknesses in the difficulty of making cash purchase reports, so it is necessary to build a cash purchase information system.

So that it can make it easier to make reports and reduce errors in recording purchases. This system also records the stock of goods making it easier to control the stock of goods.

Design

To facilitate the development of a cash purchase information system, a system design is designed that provides a clear picture of the system to be developed. System design in the form of:

Data Flow Diagrams (DFD)

Context Diagram

The context diagram of the system to be built is presented in Figure.1

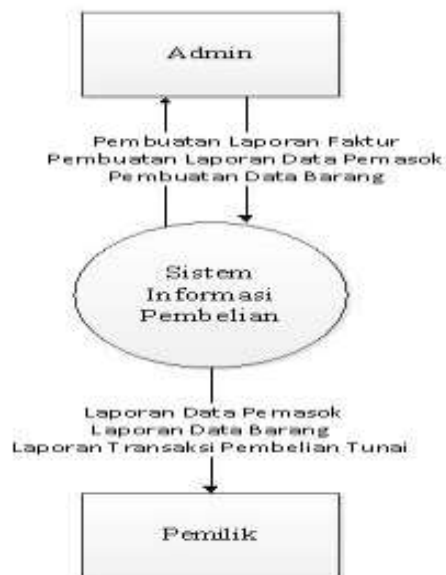


Figure 1. Context Diagram

1. DFD Level 1

DFD level 1 is presented in Figure 2 below:

1. Unit : @id_unit + unit_name +description

5. Purchase Transaction : @no_faktur + purchase_date + item_id + purchase_price + purchase_amount + VAT + Total + supplier_id id_user

2. System Implementation

Implementation activities are carried out by the basis of activities that have been planned in the implementation plan. This stage is the stage making the system using the VB 2008 programming language and building a database using SQL Server 2005 from the system design that has been made at the design stage.

The result is an information system that has 5 tables, 11 forms and 3 output interfaces. The main page interface in Figure 4,



Figure 4. Home & login

Figure 5 presents the appearance of the goods data input form.



Figure 5. Goods Data Input Form

The supplier data input interface can be seen in Figure 6 below.



ID_PEMASOK	NAMA_PEMASOK	ALAMAT_PEMASOK	NUMOR_HP
PR0001	UD Mekar Sari	Bakel	08786431345
PR0002	Delta Pagar	Km. 12 Jln. Pagar Besar	085146472801
PR0003	UD Sukan Jaya	Bakel	08547791100

Figure 6. Supplier Data Input Form

The following shows the interface for the purchase transaction.



Figure 7. Purchase Transaction Data View Form

CONCLUSION

Based on the research that has been done, the following conclusions can be drawn:

1. With a computerized cash purchase system, it can provide convenience in every purchase transactions that have been carried out by the Mekar Jaya Farmers Cooperative.
2. To assist the Mekar Jaya Farming Cooperative in making reports purchase of fertilizers in order to be able to quickly and accurately make decisions.
3. Provide convenience in the manufacture and printing of cash purchase transaction reports, goods and supplier reports.
4. Can provide cash purchase reports to the owner or chairman of the Mekar Jaya Farming Cooperative which is more effective and accurate than the recording system previously created by the cooperative manager manually so far.

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