



International Journal of Multidisciplinary Research and Growth Evaluation



International Journal of Multidisciplinary Research and Growth Evaluation

ISSN: 2582-7138

Received: 12-12-2020; Accepted: 14-01-2021

www.allmultidisciplinaryjournal.com

Volume 2; Issue 1; January-February 2021; Page No. 190-196

The role of the Microsoft office visio in supporting computerized cash sales accounting information systems

Romaito Ritonga¹, Sonya Fransiska BR Ginting², Iskandar Muda³

^{1, 2, 3} Universitas Sumatera Utara, Medan, Indonesia

Corresponding Author: **Romaito Ritonga**

Abstract

This study aims to: (1) Know the cash sales accounting information system that has been implemented by grocery stores. (2) Designing a computerized cash sales accounting information system in the grocery store. Methods of data collection using the method of observation, interviews, documentation. The data analysis technique used the SDLC method, namely: weakness analysis of the old system with PIECES analysis, system requirements analysis, and system

scaling analysis with TELOS analysis. System design includes database modeling, process modeling, interface design. Based on the TELOS analysis, the system is feasible to develop. The database modeling system design is described through ERD, process modeling using DFD, interface design which includes database design with tables, input design with forms.

Keywords: Design, Accounting Information Systems, Cash Sales, Computerization, Grocery Store

1. Introduction

Utilization of information technology is one of the effective steps in data processing, as well as business transactions using increasingly sophisticated computer devices as a work medium that will be able to help a business or facilitate the work done in increasing work productivity and performance quality, both from hardware resources (hardware), software (software), and human (human). At the beginning of the use of information technology, the design of flowcharts used office applications such as word processing, spreadsheets and presentations. Along with the increasingly rapid development of information technology, flow chart designs are increasingly varied. One of the vendor companies, namely Microsoft, released an application, namely Visio, with the ability to design flowcharts with more diverse flowchart icons. Visio also helps us as users prepare diagram drawings that are usually needed such as, ERD, DFD, user interface design, gant. graphics and various other features. In this application there are various types of symbols and some of them are needed in designing accounting system procedures (Anggraini, 2018) ^[2].

The object of this research is the cash sales accounting information system at the grocery store. The grocery store is one of the businesses that is engaged in the trading business by providing various kinds of goods for sale, including groceries, stationery, home cleaning tools, etc. A trading business that has many customers and can be said to be never lonely so there are many buying and selling transactions every day. So far, wholesale stores still use a manual cash sales system. The cash sales system is carried out by recording sales transactions in a book which is also a wholesale store sales report. These records cannot last long, because the books used for these records may be damaged or lost. As the grocery store business grows, More and more customers are coming to make purchase transactions so that the manual cash sales accounting information system that has been implemented by wholesale stores is considered less effective and efficient. The manual sales accounting information system implemented by the grocery store is considered not fast enough in providing services to customers and in generating information about cash sales. Therefore, grocery stores need a computerized cash sales accounting information system. The manual sales accounting information system implemented by the grocery store is considered not fast enough in providing services to customers and in generating information about cash sales. Therefore, grocery stores need a computerized cash sales accounting information system.

Previous research conducted by Anggraini, (2018) ^[2] with the title "Designing Computerized Cash Sales Accounting Information Systems at Green Berbah Stores" using the help of Microsoft Visio researchers tried to build a computerized system in terms of making it easier to record transactions that occur in the Green Berbah Shop. Based on the various things that have been mentioned

above, the authors chose a grocery store that will be the object of research to compile a journal with the title "The Role of Microsoft Office Visio in Supporting Computerized Cash Sales Accounting Information Systems"

2. Literature Review

2.1 Microsoft Office Visio

Microsoft office Visio is software known as a diagrammaker or chart maker application. This application is often used to create flowcharts, diagrams, brainstorm, and network schemes released by Microsoft Corporation and other illustrative charts to illustrate information and systems, ranging from explanations in text to diagrams accompanied by brief explanations (Nurwulan, 2020) ^[11]. full-featured Microsoft office applications, Visio enables fast professional diagramming. Microsoft office Visio has templates and shapes to meet the basic needs of the business industry. To increase productivity, optimize the appearance, Microsoft Office Visio provides smart shapes and attractive themes. Here are some diagrams you can create in Microsoft Office Visio: (1) A program flow chart is a flow diagram similar to a system flow diagram, which describes the procedures that exist in the system. (2) Data Flow Diagram (DFD) is a system model to describe the distribution of a smaller modular system. (3) Entity Relationship Diagram (ERD). Is a network model that uses an abstract arrangement of data stored in the system. ERD is used by systems professionals to communicate with high-level executive users in an organization. is a network model that uses an abstract arrangement of data stored in the system. ERD is used by systems professionals to communicate with high-level executive users in an organization. is a network model that uses an abstract arrangement of data stored in the system. ERD is used by systems professionals to communicate with high-level executive users in an organization.

2.2 Information Systems

According to Romindo (2020), information systems are a combination of information technology and human activities that use technology to support operations and management. To support the delivery and processing of information, information technology is needed and the role of computer technology which is used as the main medium in the delivery and processing of information, this is the development of the term information systems.

2.3 Accounting information system

According to Kurniawan (2020), an accounting information system is a system used to process data and transactions to provide the information that users need to plan, control and run a business. After SIA processes data into information, then SIA can be useful as a decision-making tool for company management.

2.4 Cash sales accounting system

According to Linggariama (2020) ^[8] cash sales transactions New goods and services are delivered by the company to the buyer if the company has received cash from the buyer.

3. Method

This type of research used in this research is research and development (Research and Development). Development research is a type of research used to produce certain products and test the effectiveness of these products (Sugiyono, 2011) ^[15]. The subjects in this study were grocery store owners and employees, while the object of the research was everything related to the cash sales accounting information system implemented by the grocery store. In this study, the data collection methods used were as follows: (1) Observations were made before the author conducted the research. The author made observations by observing the cash sales transaction process at the grocery store,

The development technique in this research uses the SDLC (System Development Life Cycle) method or the system development life cycle. By using the SDLC method, data analysis was carried out in the following stages: System Analysis Several methods were used to perform system analysis, namely (1) PIECES analysis functioned to analyze the weaknesses of the old system that had been used by Toko Hijau. PIECES analysis consists of six analyzes, namely performance analysis, information analysis, economic analysis, control analysis, efficiency analysis, service analysis. (2) Need for System analysis System requirements analysis is based on the results of the old system weakness analysis. The system requirements analysis consists of two parts, namely:

The system design stage starts from: (1) Database Modeling the data model is a way of describing the data used and created in a business system (Fatta, 2007). One way of modeling data is to use ERD in the form of images or diagrams that show information created, stored and used in business systems. (2) Process Modeling, This process modeling stage serves to facilitate the creation of an application model. At this stage the writer will describe the Data Flow Diagram (DFD) with the help of Microsoft Visio. DFD that will be made are Context Diagram, DFD Level Zero and DFD Level 1. (3) Interface design, at this stage the writer will make database design, input design, and output design for cash sales applications to be made.

4. Results and discussion

4.1 Results

4.1.1 Ongoing system design

Current System Analysis the system running in this grocery store is still conventional, following the current flow diagram system design.

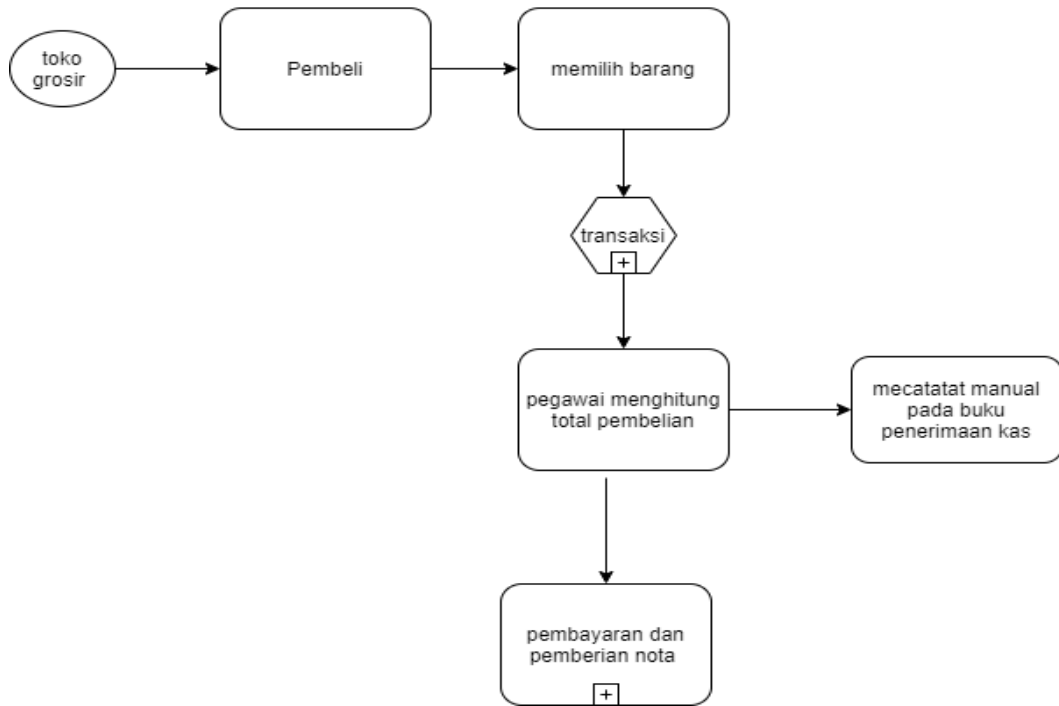


Fig 1: The running system flowchart

4.1.2 Design of the proposed system

The system proposed by the researcher is based on the

identification of problems in the running system. The following is a proposed system flow chart design

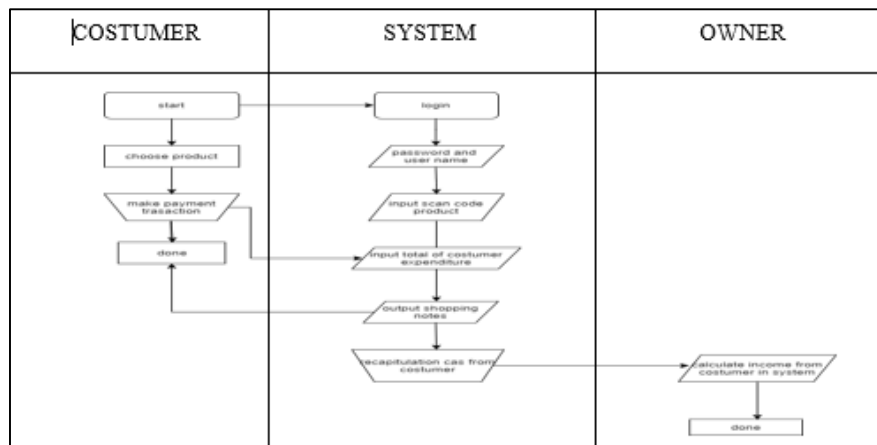


Fig 2: Flowchart of the proposed system

4.1.3 Process Modeling

a. Context diagram

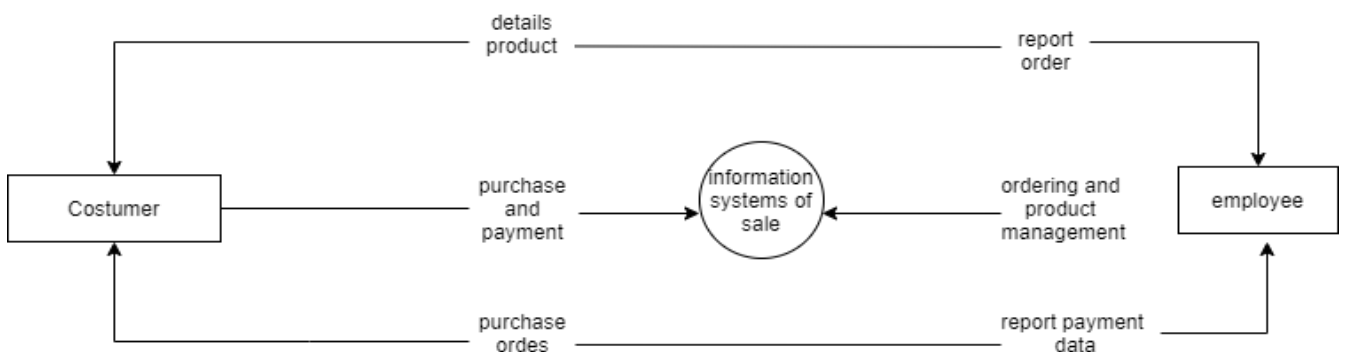


Fig 3: System context diagram

b. Zero DFD level

Zero level DFD only describes the flow of data from input to output.

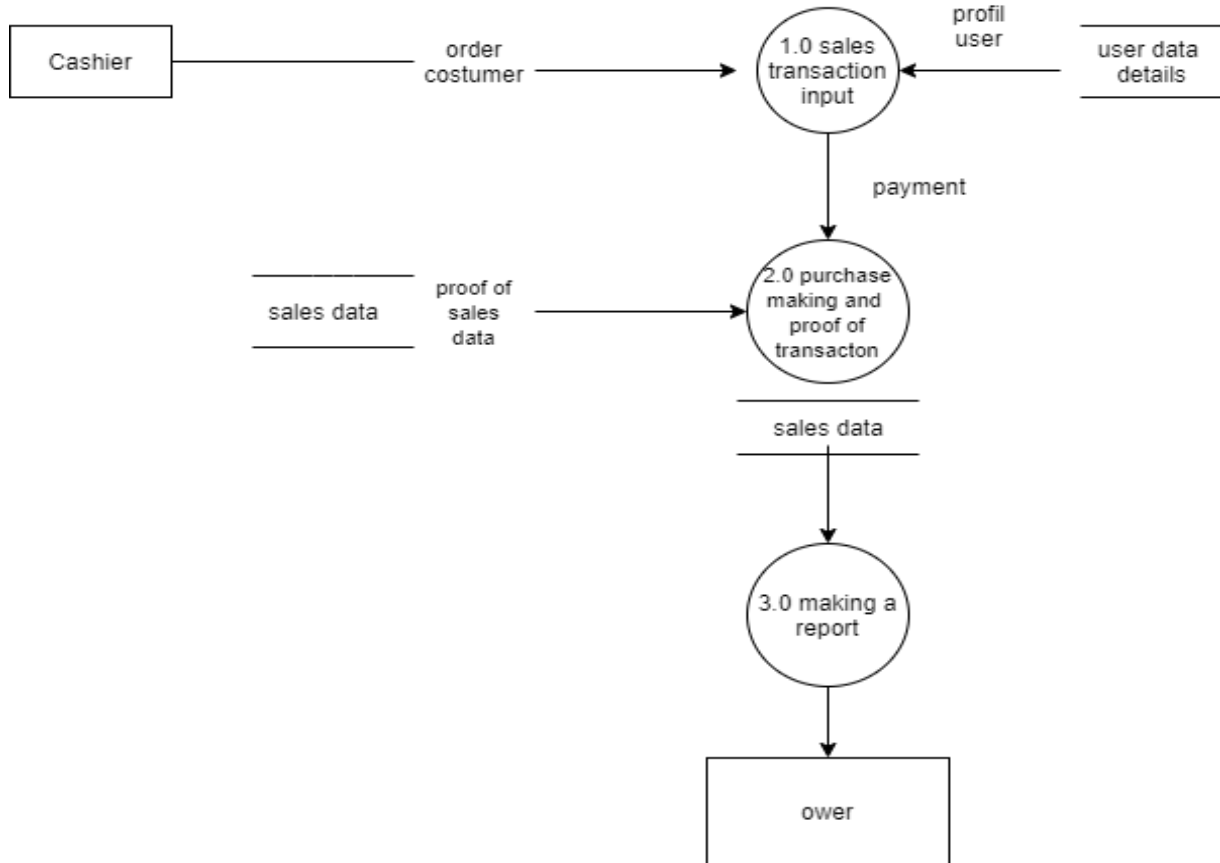


Fig 4: Zero level DFD

c. DFD level 1

Data Flow Diagram Level 1 is a system detail process to make it easier for a data manager to carry out the process of

system development and development.

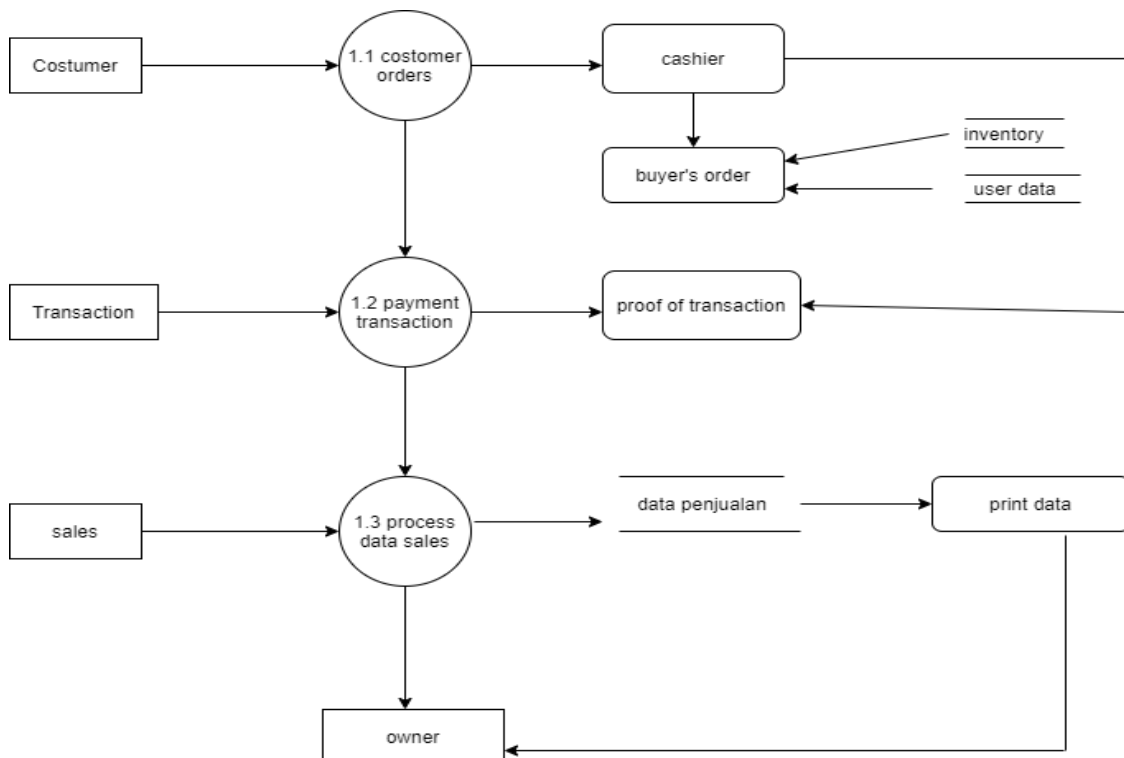


Fig 5: DFD level 1

d. ERD (Entity Relationship Diagram)

ERD (Entity Relationship Diagram) is a form of diagram that

explains between data objects that have relationships between relationships.

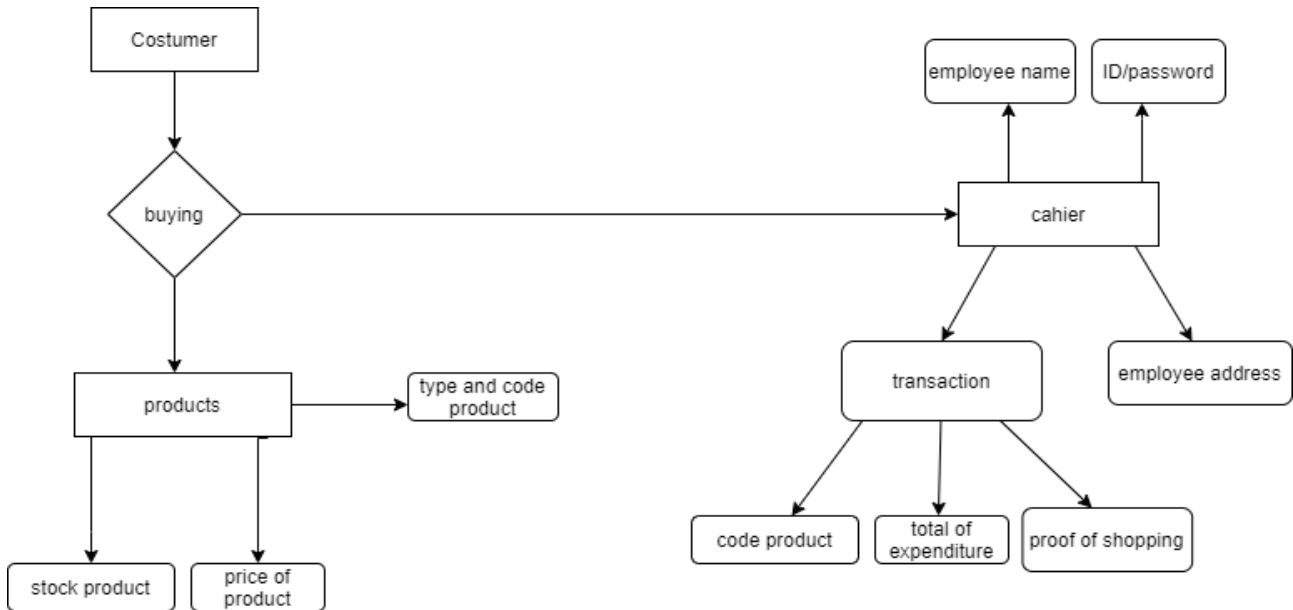


Fig 6: ERD notation

4.2 Discussion

In general, the Accounting Information System applied to several grocery stores is still relatively simple and cash receipts are generally sourced from cash sales of merchandise. Then the recording is still manual, therefore a computerized cash sales system is designed, with the aim of optimizing or maximizing the business processes at the grocery store. Where in designing a microsoft office Visio system acts as a provider of accounting information, this is because before making a system the system must be designed first, in designing a system of course it requires that the model be designed in diagrams such as flow charts, erd , dfd, context diagram. So the work of this diagram will be made easier by using Microsoft Office Visio where we can use various features available in Visio, so that we can produce the desired model. This design model can be implemented in building a computerized cash sales system, the model of this design that we can use as an accounting information system. Accounting for cash sales at grocery stores consists of three stages, namely the process modeling stage, the database modeling stage, and the interface design stage. the model of this design that we can use as an accounting information system. Accounting for cash sales at grocery stores consists of three stages, namely the process modeling stage, the database modeling stage, and the interface design stage. the model of this design that we can use as an accounting information system. Accounting for cash sales at grocery stores consists of three stages, namely the process modeling stage, the database modeling stage, and the interface design stage. At the process modeling stage, the system is illustrated using ERD to describe the designed system process. At the database modeling stage, the system performance flow designed is described using DFD. DFD is divided into three parts, namely context diagram, DFD level zero, and DFD level 1. At the interface design stage the system is divided into three parts, namely database design, input design, and output design. The output design of a computerized cash sales accounting information system includes inventory reports, proof of sales transactions, sales reports of all transactions, daily sales

reports, monthly sales reports, annual sales reports, sales reports within a certain timeframe, cash receipts reports of all transactions, receipts reports daily cash, monthly cash receipts report, annual cash receipt report, cash receipt report within a certain time. The design of a computerized cash sales accounting information system program has been designed in order to overcome the weaknesses that exist in Toko Hijau. A computerized cash sales accounting information system makes it easier for Green Stores to operate a trading business and can improve the Green Shop's performance, especially in the process of selling merchandise and processing sales transaction data.

5. Conclusion

Conclusion Based on the research that has been carried out at the grocery store related to the design of a computerized cash sales accounting information system, the following conclusions can be drawn:

- a. The cash sales accounting information system at the grocery store still uses a manual system and is relatively simple. The manual system resulted in the information generated by the old system not fulfilling the information needs of the grocery store. Functions related to the cash sales accounting information system with the old system include cashier functions, warehouse functions, and inventory functions. Accounting documents and records used by grocery stores include sales records and cash sales transaction records which are also daily sales reports. The internal control system at Toko Hijau has not met the criteria because there is still a large possibility of fraud. The documents and records held by Toko Hijau are incomplete.
- b. The design of a computerized cash sales accounting information system at wholesale stores is carried out using the development life cycle (SDLC) system development method. System analysis carried out includes analysis of the old system weaknesses using the PIECES method, system requirements analysis, and system feasibility analysis using the TELOS method.

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