IMPLEMENTATION OF MOBILE COMMERCE ON 3A JAYA MSME PRODUCTS

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Abstract

Mobile Commerce is used as an online sales medium. With Mobile Commerce provides convenience for consumers because information is conveyed faster through their mobile devices with a wider marketing reach. Only by accessing M-Commerce via the internet can you choose the goods you want, know the types of goods available, and can make transactions without being limited by time and distance. Mobile Commerce was built with the aim of increasing sales of 3A Jaya. Therefore, a website was designed to be used as a place for selling snack products. The application is created using PHP and database language using MySQL with XAMP web server. Method system development using Waterfall method. The results of the development of the M-Commerce website application as a medium for online buying and selling transactions and help market and promote 3A Jaya products.

I. INTRODUCTION

Internet technology at this time has proven to be a very effective and efficient medium because it is in the dissemination of information that can be accessed anywhere. The development of technology, especially information technology, encourages people to get information quickly and easily. Mobile Commerce is the development of e-commerce towards mobile, which has business processes, the latest technology, and services in it (Ratih et al., 2018) [1]. Data from https://wartaekonomi.co.id/ in the last 4 years, eCommerce Companies in Indonesia have increased by up to 500%. Google's latest research shows that Indonesia's digital economy reaches 27 billion US dollars or around 391 trillion rupiah. The data makes Indonesia the country in Southeast Asia that has the largest E-Commerce [2].

Some of the previous researchers such as the research conducted by Fenando (2020) Implementing online sales using the concept of E- Commerce at Denia Donuts Stores to help increase store sales [3]. Research conducted by Ratih

Wahyuningrum (2018) Creating an Online Store using the concept of Mobile Commerce at T-shirt stall stores [1]. The research carried out on Achmad Zaky Alatas Created an online store at the Qonita Pekalongan Batik Shop [4]. Research on Kresna Prasmadewa (2016) Creating an online store using a Mobile-based concept to communicate the promotion process and facilitate the buying and selling process at the Tingkir Lor-Salatiga MSME Center [5].

Based on the previous, the author can conclude that the Electronic Commerce Application can facilitate and promote snack products online, can expand marketing, make it easier to transact and place product orders, make it easier to access information about the latest products and can increase competitiveness. Mobile Commerce (Buying and selling via the Internet) Allows merchants to sell products online. M-Commerce is a form of commerce that is widely used by businesspeople to promote products to be sold [6]. This Mobile Commerce application aims to increase sales of 3A Jaya snack products, to provide added product value and increase opinions for 3A Jaya MSMEs.

II.   LITERATURE REVIEW

2.1   Basic Concepts of Information System

A system is a set of elements that are interconnected to achieve a specific goal. Information is data that has been processed so that it becomes something easy to understand for the recipient [Mohamad Fikriyansah Taba, Popon Handayani; 2020][7]. Information System can be interpreted as a system that combines the anatra of masnusia and technoloogy activities to support operational activities. Information System is a component in an organization to achieve goals and manage data, as well as provide information to users that will be used in decision making and designed to provide data in the form of information [2].

2.2   Definition of E-Commerce

E-Commerce according to Triton in Adi Prasetya Nanda and Anggi Maharani, (2018) as electronic commerce to carry out transactions either buying or selling carried out electronically on the internet network [6]. *Electronic* Commerce or E- Commerce is the sale or purchase of electronics through a network or the internet. E-Commerce is sales made remotely, even in distant places, sellers and buyers meet in cyberspace and there are websites that can provide *get and deliver* services [2].

2.3   Components of E-Commerce

E-Commerce has several advantages that are not owned by business transactions carried out online, including:
1. Products: There are many types of snack products that can be marketed and sold via the internet.
2. Where to Sell Products: The place to sell products is the Internet, which must have a domain and hosting.
3. How to Receive Orders: Phone, SMS, WhatsApp, or Email.
4. Payment Method: Cash, PayPal, Ceredit Card.
5. Delivery Method: JNE, JNT, Postal.
6. Consumer Service: Phone, email, Contact us, Chat available in software.

2.4 Types of E-Commerce

Electronic Commerce includes several things to distinguish it, therefore m-commerce is divided into several characteristics, namely;

1. Business to Business (B2B)
2. Consumer to Consumer (C2C)
3. Business to Consumer (B2C)
4. Mobile Commerce (M Commerce)
5. Perr-to Peer (P2P)

Electronic commerce or E-Commerce referred to in this research is Business to Business (B2B),which includes buying and selling transactions, and marketing to individual buyers with internet media through mobile commerce service providers, such as bernia.com, good shops and banking which as an institution regarding transaction payment transfers.

2.5 E-Commerce Implementation Support System

a. MySqL

MySqL is a software with an open-source database server. Open Source is equipped with source code (Code used to create MySqL), SQL Also provides commands to manage database access so that data security can be guaranteed, and users can only access certain data [4].

b. Hipertext Preprocessor (PHP)

PHP is an open-source server-side scripting language. Thus, the change in data will make the webpage change along without having to change the code that composes the Web page [6].

c. XAMPP

The web server application used in website development in which there is already a MySqL database that can support PHP integration, XAMPP, can be run on windows, linux or Mac OS operations. Xampp can be obtained for free according to the operating system used [6].

III.   RESEARCH METHODS

3.1 Data Collection Method

1. Observation

To make observations on e-commerce in selling snacks and search for data by surveying for promotional methods.

2. Study Library

Studying references that have been collected such as journals related to the creation of m- commerce.

3. Interview

Researchers conduct direct interviews on the problems studied. Search for data information by asking directly to the source.

3.2 Information System Development Methods

Designing a mobile commerce application onMSMEs 3A Jaya using a waterfall model. The Waterfall method has a systematic nature and has a sequence in developing software. This model is called sequential because the development process goes through several stages [8].
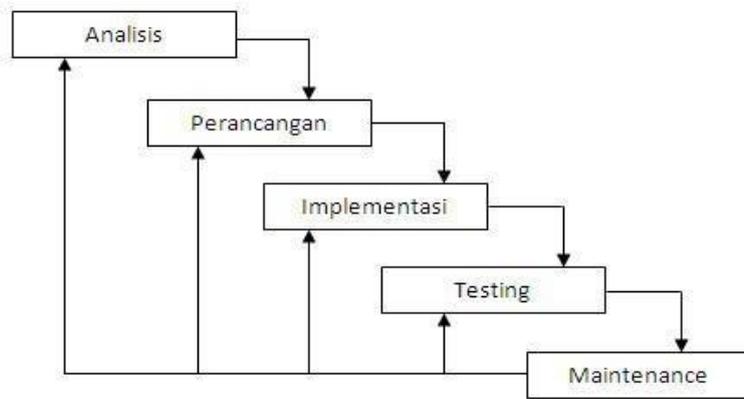

Figure 1. Stages in the waterfall metho

IV. DISCUSSION

4.1 System Design

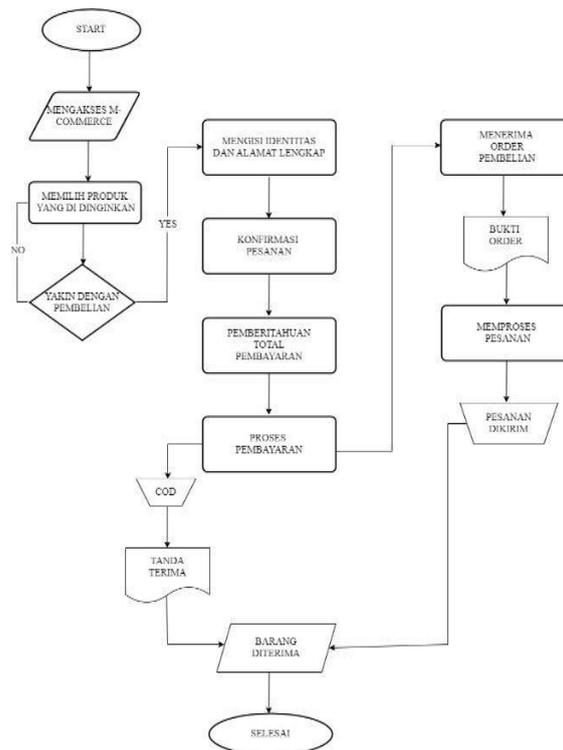Flowchart describes the process of relationships between prses in a relationship.

Figure 2. Program Flow Flowchart

Context Diagram

The system to be designed uses a context diagram. From this diagram, you can see the flow of the system process.

Figure 3. Context Diagram

Data Flow Diagram (DFD)
From the context diagram data, the data flow in the system is described in more detail using the data flow diagram.
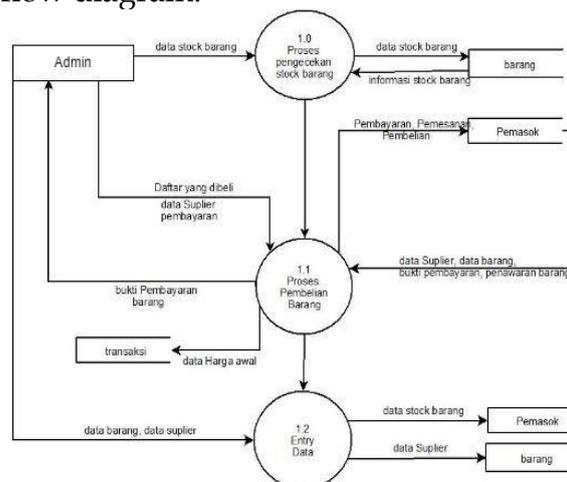

Figure 4. DFD Level 0

Data Flow Diagram Level 1 is a more in-depth view of the entire system or breakdown from acontext diagram to a zero diagram.
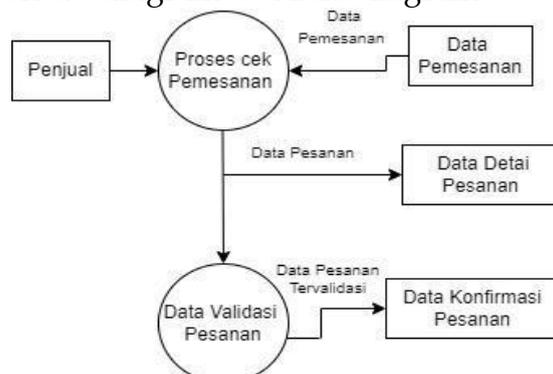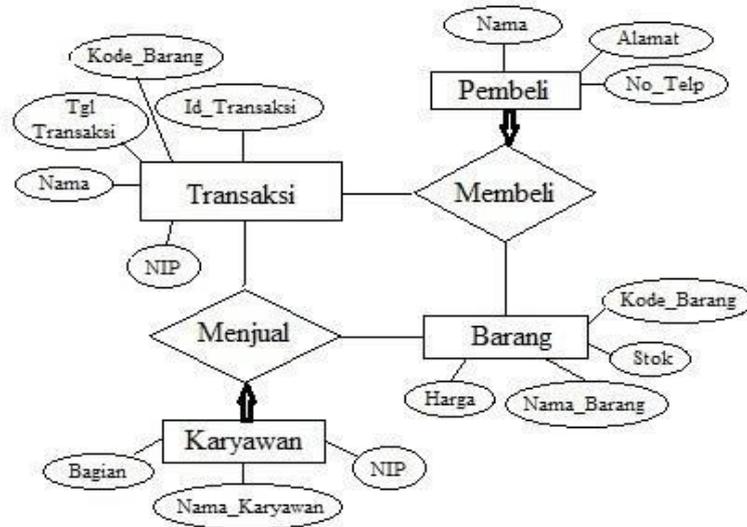

Figure 5. DFD Level 1

Entity Relationship Diagram (ERD)

ERD is a way to describe the relationship of a data in a database based on the basic object of data that has relationships between relationships. To describe it used several notations and symbols.

Gambar 7. Entity Relationship Diagram (ERD)

Use Case

Use Case Is a model that is functional in a system that uses actors and use cases. The definition of use case itself is a service or function that is already available on the system for its users.
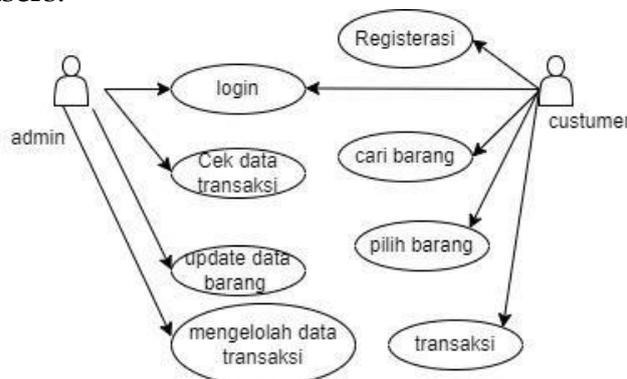

Figure 8. Use Case

Mobile Commerce Implementation

After the design is carried out, the next stage is coding and implementation using HTML and MySQL programming languages. The results of the assessment.
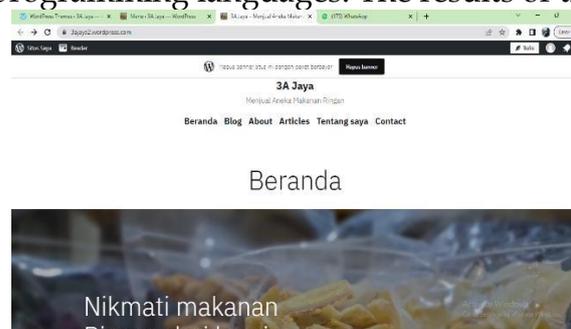

Figure 9. Home mobile commerce menu display

On the Home Menu there are several sub can be seen in figure 9 below menus, namely the product menu, product categoriesand prices. The display of the product menu can be seen in figure 10.
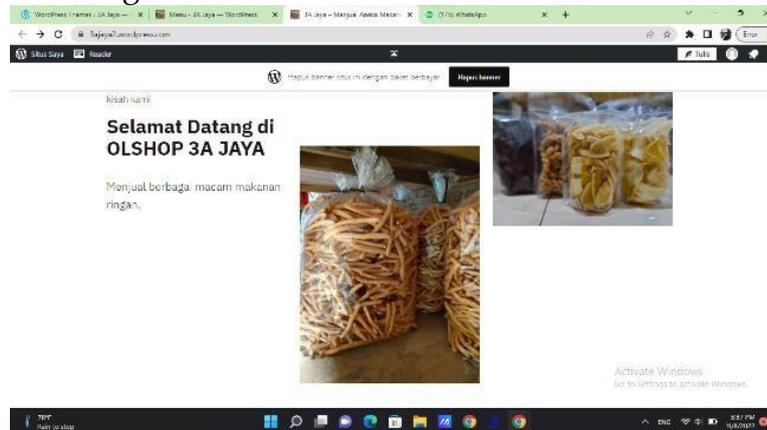

Figure 10. Product Menu Display

On the product detail page, consumers can see the product variations available at the 3A Jaya store. Each product item is given a description of the name, price, and unit of the product item. Consumers can order and view the details of the product by pressing the product item they want tobuy.

V. CONCLUSION

Based on the design and creation of the m- commerce application program carried out, it can be concluded that with the existence of a website for MSME actors 3A Jaya can convey product salespromotions widely and in quick access non time limit. Consumer can order goods from the application directly and can make users comfortable using the application anywhere and anytime. To make payments, Consumer can use the cash on delivery (COD) system or by paying through ATM outlets or can go directly to the mobile banking provided by the application. Consumer can make complaints or complaintsagainst disrespectful service, and orders that are defective in production. For the e-commerce system that has been implemented, it is necessary to develop more complete features, so that it can support online stores, so that there are more visitors. Always provide the latest information so that consumers get information faster.

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