DESIGNING A WEB-BASED SALES SYSTEM (E-COMMERCE) IN MSMES TEMPE IBU INDRI

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Abstract

UMKM Tempe Mrs. Indri is an UMKM that processes or makes soybeans into tempeh which can later be sold or marketed. The sales system used is still using the conventional system, namely the buyer must come to the factory or to the market to buy the products offered. With this system, it will take up the buyer's time so it is difficult to come directly to the market, especially if you buy a lot of products. To provide a solution, e-commerce is created where buyers can easily purchase products without having to come to the market.

Keywords: E-Commerce, Sales, Website

INTRODUCTION
Background

Electronic commerce or ecommerce is any buying and selling activity that is carried out through electronic media. Although the means include television and telephone, now ecommerce is more common through the internet. Because of the definition of e-commerce, there are sometimes misconceptions about ecommerce and marketplaces. The term ecommerce is used to describe all transactions that use electronic media. The marketplace itself is one of the ecommerce models, where it serves as an intermediary between sellers and buyers. Sellers who trade on the marketplace only need to serve the purchase. All other activities such as website management are already taken care of by the platform.

Tempe MSMEs Ibu Indri is one of the MSMEs that produces Tempe in fairly large quantities located on Jalan Ciherang. As the sale of tempeh develops, consumer demand for goods is increasing, but currently the existing system in MSMEs is still manual, such as the absence of structured data processing storage. The absence of remote sales facilities can make it easier for MSMEs to expand their marketing area. Consumers must come to the location in person and payment is made in cash. This certainly makes it difficult for potential consumers from inside and outside the city, because they have to spend money to visit the market. So that potential consumers need online purchase and payment services and transfers through accounts. Based on the previous explanation, Tempe Ibu Indri MSMEs need a website-based sales facility or service (E-commerce) that can meet their needs

and can make it easier for MSMEs to carry out business activities such as sales, purchases, promotion of new goods, payments and remote transactions, so that MSMEs can expand their marketing area.

Problem Formulation

Based on the existing problems, several problem formulations can be formulated, namely:
1. How to create a simple, easy-to-use web-based application for Tempe MSME sales so that sales are wider
2. How is the testing and implementation of Web-Based Tempeh Sales (E-Commerce) in MSMEs by Mrs. Indri

Purpose

The objectives in making a Web-Based Tempeh Sales application for Ms. Indri's MSMEs include:
1. Can make it easier for customers to buy tempeh remotely
2. Expand tempeh sales so that sales turnover increases

The Benefits of Real College Work

The benefits of making a Web-Based Tempeh Sales application for MSMEs include:
1. Expand Tempe sales and increase profits
2. Make it easy for customers to shop remotely

LITERATURE REVIEW

E-Commerce

E-commerce is an online channel that can be reached by a person through a computer, which is used by business people in carrying out their business activities and used by consumers to get information using the help of computers which in the process begins by providing information services to consumers in determining choices. Kotler & Armstrong (2012)

Internet

The Internet is a set of computer networks that are physically connected to each other and also have the ability to read and decipher certain communication protocols that we often know as Internet Protocol (IP) and Transmission Control Protocol (TCP). The protocol itself, further defined by Alan as a simple specification of how two or more computers can exchange information. Allan (2005)

Web Server

Web Server is a server software that functions to receive HTTP or HTTPS requests from clients known as web browsers and send the results back in web pages that are generally in the form of HTML documents. The web server referred to here is a simulation of a physical web server. Web servers are usually also called HTTP servers because they use the HTTP protocol as their base. (Kurniawan 2008)

My SQL

According to Adi Nugroho (2011) MySQL (My Structured Query Language) is: "A relational database system or Relational Database management System (RDBMS) that is able to work quickly and easily use MySQL is also a database access program that is networked, so it is suitable for multi-user applications (many users). MySQL is distributed for free under the GPL (General Public License). Where every program is free to use MySQL but cannot be used as a derivative product that is used as closed source or commercial".

HTML

According to Winarno and Utomo (2010:66) "HTML stands for Hypertext Markup Language and is useful for displaying web pages".

Web Browser

The definition of a web browser according to Winarno and Utomo (2010:31) "a web browser is a tool used to view web pages".

Desain User Interface

User Interface Design (hereinafter referred to as UI design) is a branch of design that focuses on creating interface designs on applications and web pages, both for computer and mobile use. UI itself is one part of Human and Computer Interaction (IMK). The goal of the UI is to provide the simplest and most efficient interface design possible and to produce the best possible UI design to meet the needs of the user. (Galitz, 2007)

PHP

PHP is a script for web server-side programming, which creates HTML documents. This means that HTML documents are generated from an application, not HTML documents created using a text editor or HTML editor. By using PHP

IMPLEMENTATION METHODS

This method is a method that is often used by system analysts in general. The essence of the waterfall method is that the work of a system is carried out sequentially or lilaterally. So each stage must be completed in full first before being forwarded to the next stage to avoid repeating the stages. Broadly speaking, the waterfall method has the following steps: System Survey, System Analysis, System Design, System Creation, System Implementation, System Maintenance
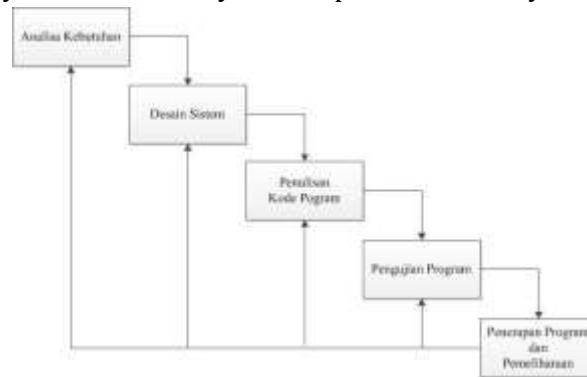
a. Survey System

The benefit of the investigation phase or survey of this system is to determine the problems or needs that arise. It requires a comprehensive development of the system or are there other efforts that can be made to solve it. One alternative answer may be a decision not to make any changes to the current system. In other words, the existing system continues to run without the need for changes or the construction of a new system. This can happen because the need cannot be implemented or its implementation is suspended for a certain period of time. Other alternatives may only require repairs to the system without having to replace them.

b. System Analysis

The analysis stage focuses on activities and tasks where the system is studied more deeply, conceptions and proposals are made to become the basis for the new system to be built. At the end of this stage, half of the activities of the information system development effort have been completed. One of the most important goals at this stage is to define the running system. Procedures are documented through the lens of the system user so that the system user will participate and understand all the problems faced and provide suggestions for improvement. System users and system analysts work together to describe the needs and capabilities of the new system to be proposed.

c. System Design

At this stage most computer-oriented activities are carried out. The hardware and software specifications (HW/SW) that had been compiled at the previous stage were reviewed again and also about the program. Training for system users begins. In the end, with the participation of the author from the system user, a thorough system test was carried out. If the system user is satisfied with the results of the testing carried out, the steering committee will begin its approval for the next stage.

d. System Implementation

This stage is a procedure that is performed to complete the existing system design in the approved system design document and to test, install and begin use of the new system or system that has been repaired. The purpose of this implementation phase is to complete the approved system design, test and document the necessary system programs and procedures, ensure that the

personnel involved can operate the new system and ensure that the conversion of the old system to the new system can proceed properly and correctly.

e. System Maintenance

It is suggested that there are two stages of review that must be carried out. The first time not too long after the implementation of the system, where the project team still exists and each member still has a fresh memory of the system they created. The next review can be carried out approximately after six months of running. The goal is to ensure that the system is working according to its original purpose and whether there are still improvements or improvements that need to be made. In addition, this stage is also a form of evaluation to monitor so that the information system operated can run optimally and in accordance with the expectations of users and organizations that use the system. Furthermore, each year, the organization uses 10% – 25% of the initial system cost to maintain the system. The purpose of this system maintenance process is to evaluate the system quickly and efficiently, improve the system maintenance process by always analyzing the information needs generated by the system and minimize control disturbances and operational interruptions caused by the system maintenance process.

Data collection

Using data collection methods include:

a. Interview Collect the data needed by means of direct interviews and obtain data and needs that are very desired for customers.

b. Observation

It is a data collection technique by observing it directly to the research site, the researcher can find out very clearly how the services provided to Tempe Ibu Indri MSMEs work.

c. Document Analysis

Collect data based on document files related to the research object, which will be analyzed later.

System Planning

This technique uses the following proposed system design method:

a. Model Data

In modeling the write data, use Microsoft Visio 2016 and draw.io to create a Class Diagram.

b. System Model

Modeling of proposed systems with Use Case Diagrams with draw.io software

c. Identifying System Needs Identifying system needs after finding problems that exist in MSMEs Tempeh mother Dear Sir, Then the problem is made a solution and identifies what functional needs are needed as well as non-functional needs that exist in Tempe Ms. Indri.

Steps in Research

The steps in the research in providing solutions include:

a. Problem Formulation

The formulation of this problem is a result of the activities of researchers who conduct observations and direct interviews with business owners.

b. System Analysis Proposed Model The researcher uses the method of analyzing the business process of the running system and applying it through Activity Diagram.

RESULTS AND DISCUSSION

  a. Registration Process

In figure 1, customers who want to place an order, first visit the website of Indri's mother store and register on the website page. After that, the customer enters the registration data and the system will store the data.
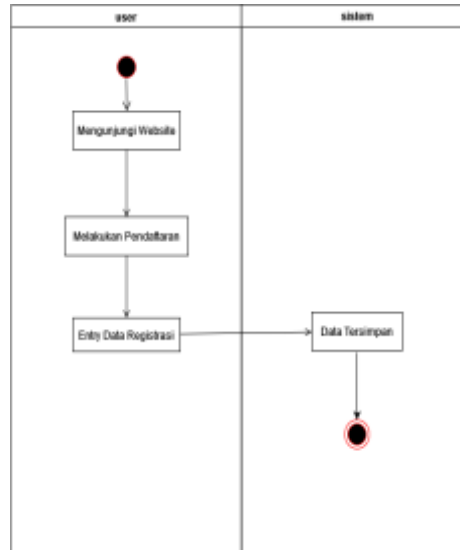

  b. Ordering Process

In picture 2, when the customer wants to place an order. Then customers must first log in. After that, customers can buy the products they want by putting them in the shopping cart. Then the customer can input the quantity of the product, then choose the address for the delivery and the courier service for the delivery of the product, Then the system will save the order data
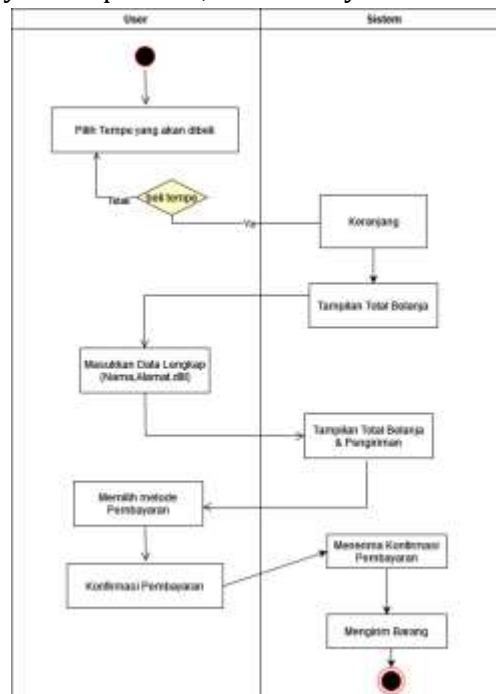
c. Usecase Diagram

The use case diagram has two actors, namely customers and admins, customers can login, select products, and transactions, while admins can login, update, manage, transactions and product sales reports
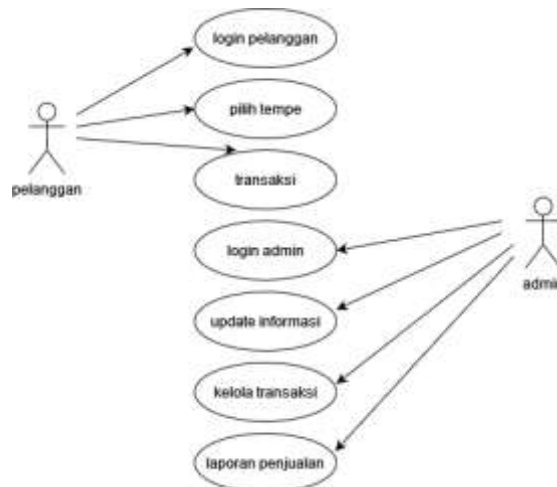
d. Tempe Online Sales Prototype Design Design

The following is the prototype design for Mrs. Indri's MSMEs:

1. Home View

   The following is the home page on the online tempeh sales website, which has a reseller home menu, about us and contact us

2. Account List View

   This display requires filling in the buyer's personal data completely for security and system needs

3. Cart View

   This display contains a view of products that have been put in the cart

4. Check Out View

   This display displays the products and the total price that has been entered into the cart and the buyer is required to fill in the delivery address and after that the visitor only needs to send the data and order

5. About Us

   This display shows the process of making tempeh and packaging tempeh

CONCLUSIONS

The creation of this website is still very simple, especially in terms of appearance and security, it is good for the development stage of the new system to be made as attractive as possible and further developed with additional more complete information which can certainly be more useful for the manager and users of the website.

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