# DESIGN OF A WEB-BASED SALES SYSTEM (E-COMMERCE) FOR MSMES TEMPE MRS. INDRI

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## **Abstract**

Tempeh MSME, Ibu Indri, is an MSME that processes or makes soybeans into tempeh which can later be sold or marketed. The sales system used still uses a conventional system, that is, buyers 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 that it is difficult if you have to come directly to the market, not to mention if you buy many products. To provide a solution, e-commerce is made where buyers can make purchases easily without having to come to the market, by conducting this research is expected to be able to create marketing tools that are more effective than the previous system on sales tempeh ibu indri thus increasing tempeh's sales turnover.

**Keywords**: E-Commerce, Sales, Website

# **INTRODUCTION**

#### **Background**

Electronic commerce or ecommerce is all buying and selling activities carried out through electronic media. Although the means include television and telephone, now ecommerce is more common over the internet. Because of this understanding of e-commerce, sometimes there are misunderstandings about ecommerce and marketplaces. The term ecommerce is used to describe all transactions that use electronic media. 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 purchases. All other activities such as website management are taken care of by the platform.

Tempe MSMEs Mrs. Indri is one of the MSMEs that produces tempeh in fairly large quantities located at road Ciherang. Along with the development of tempeh sales, 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 that can make it easier for MSMEs to expand marketing areas. Consumers must come personally to the location and payment is made in cash. This certainly makes it difficult for potential customers from inside and outside the city, because they have to spend money to visit the Market. So that potential customers need online

purchase and payment services and transfers through the account. Based on the previous explanation, Tempe MSMEs Mrs. Indri need a website-based sales facility or service (E-commerce) that can meet the needs and can facilitate MSMEs in carrying out business activities such as sales, purchases, promotion of new goods, payments and remote transactions, so that MSMEs can expand their marketing areas.

#### **Problem Statement**

Based on the existing problems, it can formulate several problem formulations, namely:

- 1. How to create a simple web-based application, which is easy to use for the sale of Tempe MSMEs so that sales are wider in reach
- 2. How to test and implement Web-Based Tempeh Sales (E-Commerce) for MSMEs, Mrs. Indri

## **Purpose**

The objectives in making the Web-Based Tempeh Sales application for MSMEs, Mrs. Indri, include:

- 1. Can make it easier for customers to buy tempeh remotely
- 2. Expanding tempeh sales so that sales turnover increases

# **Benefits of Real College Work**

The benefits in making a Web-Based Tempeh Sales application for MSMEs, Mrs. Indri, include:

- 1. Expanding Tempeh sales and increasing profits
- 2. Make it easy for customers to shop remotely

#### LITERATURE REVIEW

#### 1.5.1. E-Commerce

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

# 1.5.2. Internet

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

#### 1.5.3. Web Server

Web Server is a server software that functions to receive HTTP or HTTPS requests from clients known as web browsers and send back the results 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).

## 1.5.4. My SQL

According to Adi Nugroho (2011) MySQL (My Structured Query Language) is: "A relational Database managemnt System (RDBMS) that is able to work quickly and easily used MySQL is also a database access program that is networked, so it can be used for multi-user applications (many user). MySQL distributed free of charge 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".

#### 1.5.5. HTML

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

#### 1.5.6 Web Browser

Understanding Web Browser according to Winarno and Utomo (2010: 31) "a web browser is a tool used to view web pages".

# 1.5.7 User Interface Design

User Interface Design (hereinafter referred to as UI design) is one branch of design that focuses on creating interface designs on applications and web pages, both for computer and mobile use. UI that alone be One part from Interaction Human and Computer (IMK). The purpose of the UI is to provide design interface that as simple and efficient as possible and results in the best possible UI design to meet user needs. (Galitz, 2007)

# 1.5.8. PHP

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

#### **IMPLEMENTATION METHODS**

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

#### a. System Survey

The benefit of this phase of inquiry or survey system is to determine the problems or needs that arise. It requires a thorough system development or whether there are other efforts that can be made to solve it. One alternative answer may be a decision not to make any changes to the 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. Alternatively, it may simply require repairs to the system without having to replace them.

## b. System Analysis

The analysis phase points to activities and tasks where the current system is studied more deeply, conceptions and proposals are made to become the basis for the new system to be built. By 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 a running system. Procedure – Procedures are documented through the lens of system users so that system users will participate and understand all problems encountered and make proposals improvement. System users and systems analysis work together to describe the needs and capabilities of the proposed new system.

# c. System Design

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

# d. System Implementation

This stage is the procedure performed to complete the system design contained in the approved system design document and test, install and start the use of a new system or improved system. 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 run properly and correctly.

#### e. System Maintenance

It is recommended that there are two stages of review that must be carried out. The first time was not too long after the implementation of the system, where the project team was still there and each member still had fresh memories of the system they created. The next review can be carried out approximately after six months running. Goal be to ascertain whether the system is running according to its original purpose and whether there are still improvements or improvements to be made. In addition, this stage is also a form of evaluation to monitor so that the information system is 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 disruptions and operating interruptions caused by the system maintenance process

#### 2.1 Data collection

Using data collection methods include:

- a. Interview Collect the data needed by interviewing directly and obtaining data data and needs that are highly desired for customers.
- b. Observation (Observation)

It is a data collection technique by taking it directly to the research place, researchers can know very clearly how the services provided to MSMEs tempe Ibu Indri works

c. Document Analysis

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

# 2.2. System Design

This technique uses the proposed system design method as follows:

a. Model Data

In modeling authoring data using Microsoft Visio 2016 and draw.io to create Class Diagrams.

b. System Model

Modeling the proposal system with Use Case Diagrams with draw.io software

c. Identifying System Needs Identifying system needs after getting problems that exist in Tempe MSMEs Ibu Indri, then the problem is made a solution and identifies what functional needs are needed and non-functional needs that exist in MSMEs tempe Ibu Indri.

# 2.3 Steps in research

Steps in research in providing solutions among others:

a. Problem Statement

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

b. System Analysis Model Proposal Researchers use the method of analyzing the business process of the running system and apply it through Activity Diagrams.

## RESULTS AND DISCUSSION

## **Registration Process**

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

# **Order Process**

When customers want to place an order. Then the customer 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 number of products, then choose the address for delivery and product delivery courier services, Then the system will save the order data

# **CONCLUSIONS**

- 1. Web-based Tempe Sales Information System for Tempe MSMEs Mrs. Indri expands marketing
- 2. Web-based Tempe Sales Information System for Tempe MSMEs Mrs. Indrimakes it easier for customers to purchase
- 3. Web-Based Tempe Sales Information System for Tempe MSMEs Mrs. Indri utilizes web-based technology as product marketing

# **Suggestion**

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

#### REFERENCES

- Andoyo, Andreas. "Sistem Informasi Penjualan Makanan Hasil Olahan Kedelai Di Wilayah Gadingrejo Kab Pringsewu Berbasis Web." Jurnal TAM (Technology Acceptance Model) 1 (2017): 51-58.
- Prayitno, Agus. "Pemanfaatan Sistem Informasi Perpustakaan Digital Berbasis Website Untuk Para Penulis." Indonesian Journal on Software Engineering (IJSE) 1.1 (2015): 28-37
- Prabowo, Galih, and Lusi Fajarita. "ANALISA DAN PERANCANGAN E-COMMERCE PADA TOKO AUBA." IDEALIS: Indonesia journal Information System 2.6 (2019): 363-368.
- Parit, Jl, and Tembilahan Hulu. "SISTEM INFORMASI PENJUALAN SEPATU BERBASIS WEB PADA TOKO STEPHEN SPORTS.
- Hastanti, Rulia Puji, and Bambang Eka Purnama. "Sistem penjualan berbasis web (e-commerce) pada tata distro kabupaten pacitan." Bianglala Informatika 3.2 (2015).