SALES INFORMATION SYSTEM USING APP FOR SMALL SHOPS

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ABSTRACT

The massive use of technology and digitalization, along with the development of app-based businesses that currently use a lot of information technology. Business efficiency is one of the reasons why many small businesses implement information technology because of the demands of increasingly fierce competition. This plays a central role in the development of small businesses in the current era of development, so small businesses must have the ability to quickly adapt to changes that occur. The purpose of this study is to create a clear and easily accessible sales media for consumers and easy to manage by small business actors. For this reason, an app-based sales information system was designed. This study will describe the activities and products produced at each stage of app design. The design of this information system is only limited to the sales information system and sales transaction database.

Keywords: Information technology, digitalization, small shops, apps

1. INTRODUCTION

The influence of technology on everyday human life today has a very big impact. One of the information technologies that is currently being talked about a lot is the internet. In fact, the internet connects various computers all over the world and is connected through the internet.

Currently, information technology is experiencing very rapid development in terms of technology, communication and information along with the growing needs of business. Technology plays a very important role. Therefore, those who cannot follow technological developments will certainly be left behind.

The development of technology in small and medium enterprises is considered to be very influential with the application of information technology in running business activities. The application of information technology such as apps is currently very much needed, especially in a company, both large and small companies. Apps are needed to support the business activities of a company, both small and large companies. Business transactions can be done anytime and anywhere. This is useful for increasing sales to the wider community and is required to be able to compete with other companies in the information system.

Sales information system is a computerized system that helps the data processing process, especially sales in a company or agency by using a database so that it can provide the information needed quickly and accurately and also helps in searching for data and making the reports needed. The sales information system also has a function to save work time in the company and help the company in getting reports according to its needs and on time.

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Based on the description of the background and identification of the problem, the problem that will be studied in this study is to design an app-based sales information system at Warung Madura. Thus, the shop can use and implement an app-based sales information system.

Benefits of Application-Based Sales Information Systems:

- Increased Efficiency: Automation of sales processes, such as transaction recording, inventory management, and report generation, reduces human error and saves time.
- Real-time Data Access: Sales, inventory, and customer information can be accessed in real-time from anywhere, enabling faster and more informed decision-making.
- Improved Customer Service: CRM applications and sales information systems allow for personalization of customer service, such as tracking customer purchase history and preferences.
- Cost Reduction: Automation and digitization of the sales process can reduce operational costs, such as paper, storage, and labor costs.
- Increased Data Accuracy: Data recorded digitally is more accurate than data recorded manually, reducing the risk of errors and inconsistencies.
- Better Data Analysis: Collected sales data can be analyzed to identify sales trends, customer behavior, and new business opportunities.

Example of Application-Based Sales Information System Implementation:

Retail Stores are stores that sell goods or services to consumers in single or retail quantities. Consumers buy retail products or services for personal use, not for resale. Retail stores play an important role in promoting products directly and making it easier for consumers to obtain the products they need. Retail stores should use a mobile POS application to record sales, manage inventory, and accept payments.

A restaurant is a place of business that provides and serves food and drinks to customers for a fee. A restaurant is a building or room that is commercially organized to serve consumers well. A restaurant is a general term for a catering business, which serves dishes to the public and provides a place to enjoy the dishes and sets certain rates for food and service. Restaurants should use online ordering applications and table management applications to improve service efficiency.

Manufacturing companies are companies that process raw materials into finished or semi-finished goods, and sell them to customers. Manufacturing companies have an important role in improving the Indonesian economy. The manufacturing industry also absorbs a lot of labor, thus offering quite broad career prospects. Manufacturing companies should use CRM systems and sales management applications to manage customer relationships and track orders.

Small and Medium Enterprises (SMEs) are businesses that are carried out on a small to medium scale. SMEs have an important role in the Indonesian economy, including creating jobs, absorbing labor, and influencing Gross Domestic Product (GDP). Micro Enterprises Have a maximum net worth of IDR 50 million and a maximum turnover of IDR 300 million per year. For example, grocery stores, barbers, small food stalls, sewing and clothing alteration businesses, and handicraft businesses. Small Enterprises Have a net worth of between IDR 50 million and IDR 500 million and a turnover of between IDR 300 million and IDR 2.5 billion per year. Medium Enterprises Have a net worth of between IDR 500 million and IDR 10 billion and a turnover of between IDR 2.5 billion and IDR 50 billion per year. For example, home-based bakery companies, large restaurants, and hardware stores. Small and Medium Enterprises (SMEs): For SMEs, it is better to use a simple application to manage inventory, record sales, and create invoices.

Things to Consider in Choosing a Sales Information System Application:

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- Required Features: Make sure the app has features that fit your business needs, such as inventory management, customer management, reporting, and integration with other systems.
- Ease of Use: Choose an application that is easy for your staff to use and understand.
- Cost: Consider the costs of purchasing, subscribing, and maintaining the app.
- Technical Support: Make sure the application vendor provides adequate technical support.
- Data Security: Ensure the app has adequate security features to protect sensitive data.

2. THEORETICAL BASIS
2.1 INFORMATION SYSTEM
Information System Is a system that provides information for management in making decisions and also for running company operations, where the system is a combination of people, information technology and organized procedures. Information System is a regular combination of people, hardware, software, communication networks and data resources that collect, change and distribute information[5]

Information System is a system in an organization that is a combination of people, facilities, technology, media, procedures and Business needs to make adjustments to keep up with technological changes. The importance of technology for business can affect the quality of service to customers. To create better service quality for small businesses, the use of apps needs to be supported.

Controls to obtain important communication channels, process certain types of routine transactions, provide signals to management and others regarding important internal and external events and provide an information basis for decision making [6].

Based on these opinions, it can be concluded that an information system is a system within an organization that provides a basis for information for decision making.

The Information System consists of several components [7], including:
1. Hardware: CPU, Disk, Terminal, Printer
2. Personnel: System operators, Input providers, Output users
3. Data: Data stored for a certain period of time
4. Procedures: Instructions and policies for operating a system.

2.2 SALES INFORMATION SYSTEM
Sales Information System is one of the most important information systems in companies in general. Sales Information System is an information system that organizes a series of procedures and methods designed to produce, analyze, distribute and obtain information to support decision making in the sales field [8].

The Sales Information System is a system consisting of a group of people, equipment and procedures that combine the work of machines (computers) and humans to provide accurate information for users in making decisions to solve problems within the company [9].

Based on the definition above, it can be concluded that the Sales Information System is an information system designed to produce, decision making in the field of sales. Several studies also state that the app supports various small business activities [5] [6]. That the app factor supports various small business activities [7]. The app can facilitate the introduction of small business products that were previously done conventionally [8]. In addition, the app also increases sales transactions for small companies [9].

App is a system for accessing information on the internet that uses a protocol called HTTP (HyperText Transfer Protocol) that runs on TCP/IP [10]. By using HyperText, users can move from one document to another easily, simply by clicking on special text that is initially marked with an underline. The use of

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HyperText in apps has also been further developed into HyperMedia. By using the HyperMedia approach, not only text can be connected, but also images, sound, and even video.

3. RESEARCH METHODS

The object of the research studied is Warung Madura in Telang Kamal Bangkalan as a small shop located in Bangkalan. The author uses the object of research Warung Madura in Telang because its marketing is still conventional, therefore the author proposes an app-based sales information system.

In designing a new information system, it must first be known how the system works in the process of designing a sales information system based on the Warung Madura app in Telang. In the current system, the sales process still uses conventional methods, namely sales transactions. Recording sales transactions is still done manually and has not been computerized, so sales transactions are only recorded in a manual notebook. There are problems faced, based on the analysis of the information system process currently running in the sales information system process, several weaknesses can be found as follows:

- In the Warung Madura sales system in Telang Kamal, the information is not known to the general public.
- Recording of sales transactions still uses manual recording in the transaction log book so that there is no storage in the form of soft copies or backups of transaction data so that if a search for sales data occurs, it takes a long time to search for it.
- There is no documentation so that the data information being searched for is often wrong and data backup is needed.

Problem Solving Proposal

From the problems above, the author proposes several alternative solutions to the problems above, namely:

- Proposing the implementation of an app-based sales information system at Warung Madura in Telang Kamal, so that the general public can find out and access the sales information system at Warung Madura in Telang Kamal easily.
- Create a database for storing sales transactions at Warung Madura in Telang, making it easier for users to view sales transactions easily and not difficult to search.
- Create a program design to replace the old system with an app-based sales information system.

4. PROPOSED SYSTEM

After seeing the data flow in the old system flow, and making a proposal to improve the old system flow with the new system flow, the researcher tried to build a new computerized system flow, namely by designing an app-based sales information system so that customers can easily access the product sales information system and the information provided regarding the products sold can be received by customers and create a sales transaction database in the sales information system so that the accounting and finance departments can easily search for transaction codes easily and there is no more data on each sales transaction code in the sales information system based on the proposal.

In the development or design of a new app-based sales information system management system, changes are made to the flow of the information system to be designed. The changes made according to the proposals in the new system analysis are as follows:

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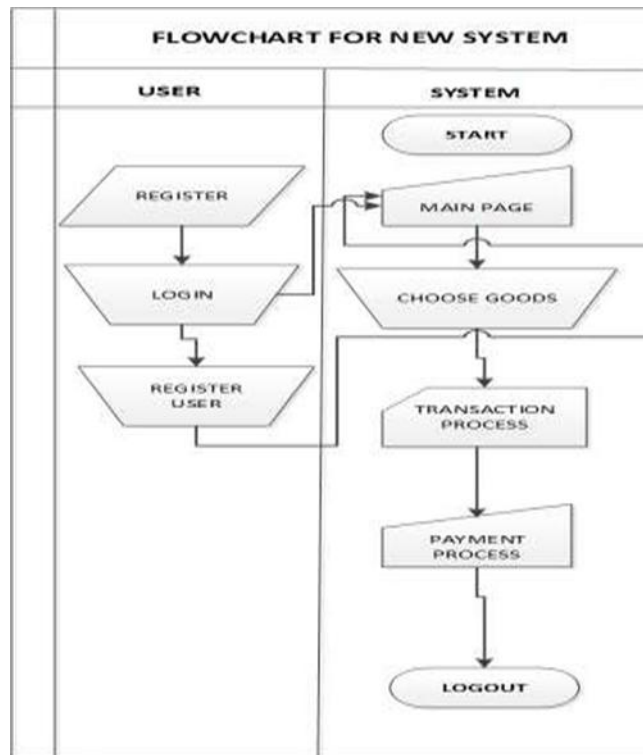**Volume 12, Issue 1, January – 2025**

Figure 1. Flowchart for the Proposed New Information System

The advantages of the system built are in terms of efficiency, including (1) being able to reduce operational costs used for the cost of making brochures, advertisements and other advertising services; (2) Admin can process every sales information system anywhere; and (3) being able to easily access sales transactions without the need to record and backup data on sales transactions according to date, month and year.

Then, the system's advantages are built in terms of effectiveness, including the following:

- In the sales system process, customers can easily access and reach the app-based sales information system at the Madura Telang shop.
- Facilitate the process of recording sales transactions at Madura Telang stalls.

The advantages of the system built in terms of efficiency include the following:

- Can reduce operational costs used for brochure production costs, advertisements and other advertising services.
- Admin can process sales information system anywhere.
- Can easily access sales transactions without data collection and data backup in sales transactions according to date, month and year.

    Then, for the advantages of the system built in terms of effectiveness, including the following:

- In the sales system process, customers can easily access and reach the app-based sales information system at the Madura Telang shop.
- Facilitate the process of recording sales transactions at Madura Telang stalls.

5. CONCLUSION

After explaining the previous chapters, the conclusions that can be drawn are:

- app-based sales information system for marketing sales at Madura stalls.

- The sales transaction process at the Madura stall already has a database and there is no longer any duplicate sales transaction number data.
- Sales report documentation is well organized and makes it easy for the accounting and finance departments to search for sales transaction numbers in the app-based sales information system.
- By designing an app-based sales information system, it makes it easier for customers to access sales item information.

So the suggestions given here are as follows:

- The app-based sales information system at Madura stalls is designed only for transactions via bank transfer, it would be good to add features via payments using credit cards and others.
- It is necessary to develop the system and add sales and transaction features to the app-based sales information system at Madura stalls.
- The app-based sales information system at the Madura stall can still be developed into a special application for customers that is used to access the sales information system at the Madura stall, which can later be downloaded by all old customers spread throughout Indonesia.
- The app-based sales information system in Madura stalls needs to add features such as a goods delivery tracking trading service feature.

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