



Web-based e-shop design (case study of cv. Maju jaya group)

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ABSTRACT

Web-based sales programs are software applications designed to assist users in managing their online sales business. This program has features that include product management, customer management, sales management, stock management, sales reports, payment integration, and security. Through product management, users can add, edit and remove products from the program. Customer management allows users to manage customer information, such as name, address and purchase history. Sales management allows users to create, edit and delete sales, while stock management allows users to track product stock and receive alerts when a product is low on stock. Sales reports provide users with an overview of their business performance in the form of graphs or tables. Integration with payment services such as PayPal or Stripe allows customers to easily make payments online. Finally, program security is very important to ensure that customer data and transactions are safe from security threats such as hacking or data theft. In order to create an effective web-based sales program, it is important to consider an intuitive and easy-to-use user interface and ensure that the program is easily accessible and usable via the internet. By using a web-based sales program, users can increase their business efficiency and improve their customer's experience in shopping online.

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1. INTRODUCTION

In today's digital era, technology has changed the way we shop. Online shopping or e-commerce has become the choice of many people, because it is easy and convenient to use. E-commerce allows us to buy goods and services from anywhere, anytime, and without having to leave the house. One type of e-commerce that is growing rapidly is an online store or e-shop. E-shops have many advantages, such as convenience and comfort in transactions, the ability to compare prices and products easily, and accessibility from anywhere and anytime.

According to Kim and Lee, "Online shopping refers to buying products or services over the internet using devices such as computers, smartphones, or tablets" [1]. In a general sense, an online shop is a shop where all transaction processes are carried out digitally through intermediary devices used by buyers and sellers. Of course to get an agreement in buying and selling activities. Meanwhile, in its broadest sense, an online shop is a place where sellers and buyers do not meet physically. Here the buyer is offered goods in the form of a display provided by the seller as an illustration of the product to be purchased by the consumer. The process by which consumers directly purchase goods, services, etc. From sellers without intermediary services via the internet. According

to Ndou, "Online shopping is a form of electronic commerce where shoppers can search for the products they need, review product descriptions, and make payments via the internet"

Online shopping or online shopping via the internet, is a process of buying goods or services from those who sell via the internet. Or buying and selling services online without having to meet face to face with the seller or the buyer directly. According to Piotrowicz and Cuthbertson, "Online shopping is a form of interaction between consumers and sellers via an internet platform that enables electronic business transactions, such as purchasing products and services". For example, through a bank account, m-banking and so on. After this process has been passed, the seller will respond by handing over the items displayed in the display earlier to be sent to the buyer's destination address. Stores that sell electronic products can help increase the use of technology in society. This can strengthen information technology infrastructure in an area and help improve people's ability to face the digital era (Nugroho, 2019)

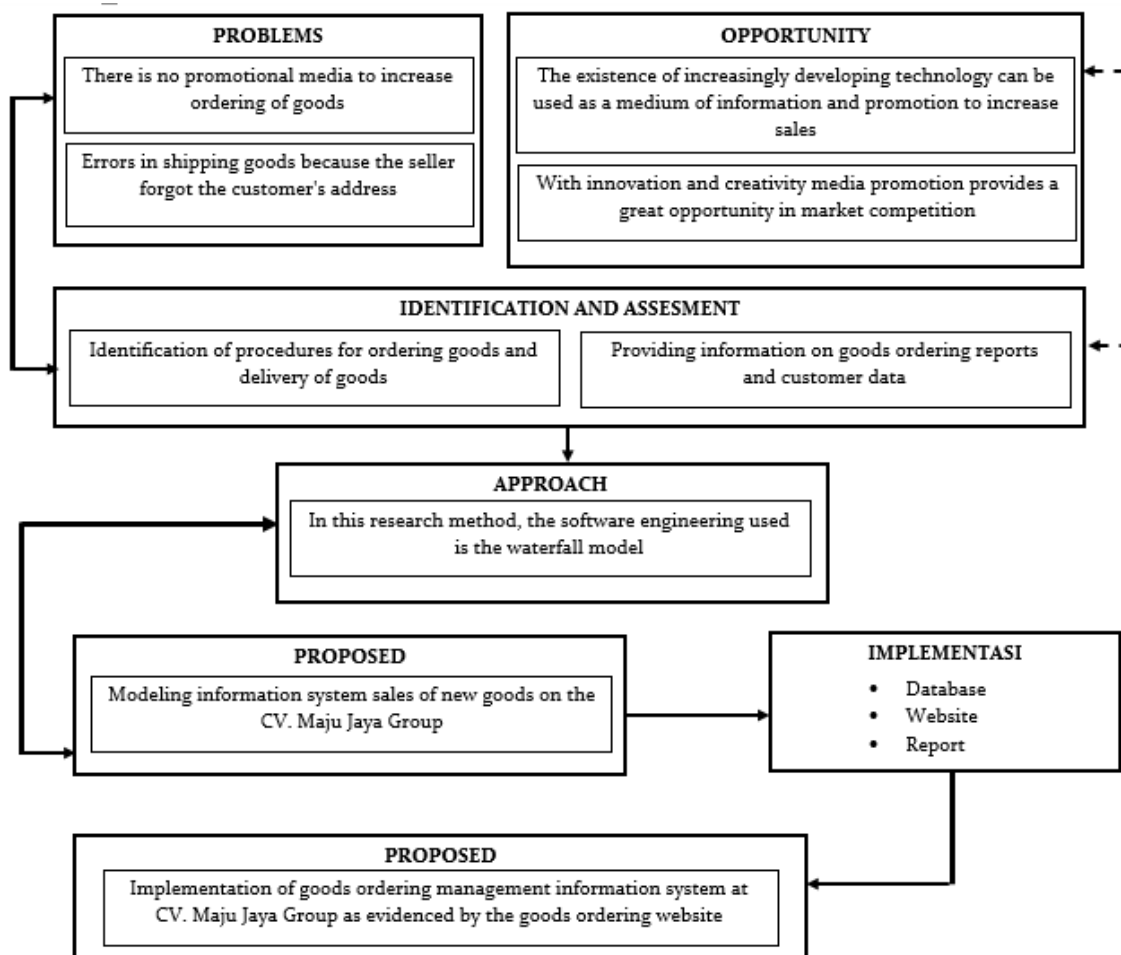
The development of the digital world has changed the method of buying and selling transactions to be more efficient and save time. As a buyer, you can easily select the items you want with just the touch of a finger, search for the items you want by simply filling in the search field with the name of the product you want to buy, and you can even buy many items at once without having to put out much effort thanks to the available shopping cart options. Payment transactions have also become efficient thanks to the availability of m-banking and digital wallets such as ovo, buyers benefit because they don't have to bother counting money in their wallets and only need to fill in the nominal amount of the funds to be transferred.

On the other hand, sellers can get payments in a much shorter time and the amount of money received is much clearer without having to recalculate it. With the availability of online shops, consumers have a wider choice of goods and go further abroad, where the quality and quality of their products is guaranteed. Sellers also benefit more from the availability of wider business space throughout the world without having to think about limited business areas. In the context of this research, the authors will focus on developing e-shop programs for electronic products. The e-shop program is expected to make it easier for users to purchase electronic products online, with features that suit user needs.

2. RESEARCH METHOD

According to Shin and Lee (2020), "Online shopping refers to the activity of buying products or services electronically via the internet or mobile applications, which involve several stages such as searching for products, selecting products, and making transactions" [5]. The electronics shop can be accessed online or offline, In modern, digital life, electronics shops play an important role in meeting people's technological needs. Elektronikshop enables consumers to obtain electronic products easily and quickly, both online and offline. In addition, the electronics shop is also a place to get information and consultation regarding the desired electronic product MySQL is a management system relational databases. That is, data managed in the database that will be placed on several separate tables so that data manipulation will be much faster. MySQL can be used to manage database start from small to very large (Novendri, 2019).

The method used in this research is the waterfall method. The waterfall method is the most commonly used method in making a system, because there are several sequential stages in its manufacture so that if there are steps that have not been completed, you cannot proceed to the next step. The research framework is basically a framework for the relationship between the concepts that you want to observe or measure through the research that will be carried out. This research is based on the problems that exist in CV. Maju Jaya Group regarding the process of ordering goods. This problem is certainly a concern in all entities contained in it. The sequence of the waterfall method consists of requirements analysis, design, implementation, testing, and maintenance.



Picture 1.

3. RESULTS AND DISCUSSIONS

The result of this research is to implement the system so that the system can be operated. After analyzing, designing and coding using VSCode tools, web-based and supported by the MySQL database, the finished system will be used by the Admin and Customers, but before being used by admins and Customers the system must be tested first, this is intended is the system running well so that the purpose of making the system useful in disseminating this information can be achieved (Septilia et al., 2020; Wajiran et al., 2020).

3.1 Design Result

The system runs smoothly. When the user starts making a transaction, starting from selecting items, putting them in the basket, then making a payment, then a shipping receipt and order status will appear. Admins or application managers can also add goods, create income reports, change or edit goods and transaction status up to user account settings.

3.2 Analisis And Result

Analisis	On Going System	Result
<i>Performance</i>	Delay in managing stock data of goods that enter the CV. Maju Jaya Group.	By being computerized with this application, it is fast to manage data on incoming goods, stock of goods and ordering goods.
<i>Information</i>	Submission of information to the owner of the company regarding the goods in the CV. Maju Jaya Group was late so that between customer officers, warehouse officers were late to provide information.	Be able to speed up the delivery of information to the owner of the CV. Maju Jaya Group.
<i>Economy</i>	The operational costs incurred are not as large as the new system, due to the large use of recording paper.	Cheaper initial costs incurred to store data on stock items, goods orders and month-end reports.
<i>Control</i>	On CV. It is difficult for Maju Jaya Group to control goods buying and selling transactions because they are still manual using notes and bookkeeping. So sometimes data loss occurs.	By using this application, item data and all orders made at CV. Maju Jaya Group. Controlled because it is already stored in the database.
<i>Efeciency</i>	To manage order data and inventory at the company is less efficient and it is difficult for customer officers to make difficult reports and store data or order notes because there are many files and so they are not objective.	Make it easier for admins to manage stock data ordering goods and easily provide information to customers and reports to leaders.
<i>Service</i>	Services provided to customers are still slow because they are still manual, such as looking for items to be purchased and old customer officers to serve transaction problems between buyers.	It will make it easier for officers to serve sellers because they already use computerization.

Performance here refers to how well and effectively this application performs its functions, namely, quickly managing incoming goods data, stock of goods, and ordering goods. Several factors that can affect the performance of this application are as follows, Speed: Slow stock of goods can make customers impatient and eventually leave the online store. Therefore, the speed of stock of goods must be considered and maintained so that visitors can easily open product pages, make transactions, and complete payments, Responsiveness: A responsive or adaptive e-shop will provide a better user experience across various devices, both desktop and mobile. Therefore, the e-shop design should consider a responsive design to provide an optimal display on various devices.

This application provides information related to conveying information about products at CV. Maju Jaya Group to its owners. Some information that can be found in this application includes, Product description: The product description provides information about the material, size, color, and other features of the fabric being sold.

This information helps customers understand the product in more detail and choose products that meet their needs, Price The prices of the fabrics being sold will also be available on the e-shop application. Prices can be presented in various forms, such as price per meter or per roll, and may vary depending on the type of fabric selected, Stock: Information about the available stock of fabrics should also be provided in the e-shop application. This helps customers know the availability of the fabric they want to purchase and decide whether to buy immediately or wait for the stock to be available again, Economy One important aspect in the development of this application is to minimize operational costs, as Economy here refers to cost-effectiveness. The expenses incurred in this application are not expensive and are useful for storing data on stock of goods, ordering goods, and end-of-month reports, Control in this application refers to the ability to control and manage various aspects related to data at CV. Maju Jaya Group, such as products, transactions, and users. Generally, there are several aspects related to control in an application.

Control over products allows the data owner to add, delete, or update product data in the application. This involves managing product inventory, prices, descriptions, and product images, Control over transactions allows the owner to manage customer purchase transactions. This involves

managing order lists, payments, shipping, and returns. Control over users allows the application owner to manage registered users, such as customers and staff members. This involves managing user information, access rights, and user activities. management, efficiency refers to the ability to effectively manage data using available resources efficiently. Efficiency in managing data in this application is crucial as it can impact the overall performance of the application. Here are some efficiencies in data management in the application.

The concept related to providing services electronically or through the internet, allowing personnel to manage data, serve customers, and conduct transactions accurately and quickly. Here are the services available in this application, Online data access: E-service can be used to provide secure and encrypted data access, allowing users to access data/products online without the need for manual record keeping, Integration with other applications: E-service can be used to integrate data and services with other applications, such as mobile or desktop devices and social media platforms.

4. CONCLUSION

Based on the description, it can be concluded that the process of ordering goods is more effective and efficient because it is done computerized, customers do not need to come far to the store to order goods because it can be done anywhere and anytime. With the management application for ordering goods on CV. Maju Jaya Group using the PHP programming language, the application is designed with the UML (Unified Modeling Language) system development tool and uses the waterfall system development method. Using a MySQL database so that it can make it easier to convey information and control stock of goods.

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