Design AI in Digital Marketing (Cross Selling Method)

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ABSTRACT
The purpose of this research is to produce an Online Store application that can be used to meet market demands and seek new market opportunities. The form of research uses case studies with research and development methods and data collection techniques used are observation, interviews, and documentation studies. The research instrument includes website features needed by Temayang Market, namely product management (categories, product details, prices, images, promotions, discount management, stock management), order management, including order search, order status updates. Generating the features of this Online Store application provides a lot of convenience.

Keywords: Online Store Website Application; Research and Development; Incremental Development Approach.

INTRODUCTION

Temayang Market as a business venture that is engaged in online buying and selling based on Android and has a very significant level of competition. So far, the parties or the public in marketing their goods are still waiting and offering them directly to visitors who are in that location. Lack of supporting facilities to introduce information about the company, makes it difficult for companies to get consumers who are outside their reach and expand their marketing area (Hariono & Rohmah, 2013). Based on the rapid development of the digital world, the company has the initiative to create an application that makes it easier for the public to make buying and selling transactions that also benefits users to expand their company promotions (Hariono & Widya, 2019).

The use of increasingly sophisticated technology is intended because many people use smartphones and are supported by increasing public knowledge about the use of smartphones, which greatly benefits the company and supports one of the factors in making applications by the makers. because it can change the paradigm of society in thinking, where to meet their needs there are other easier ways and can save costs and time (Widya & Airlangga, 2020).

Temayang Market is a breakthrough application to make it easier in all things about buying and selling and one of the alternative sales media to increase sales turnover. So that the sales and marketing processes that are carried out are not only in a limited scope, but can be known by the wider community so that market share is no longer centered on certain locations. For that we need a new information dissemination media that can convey information directly communicate with elements of society who need these items.

Theoretical basis :
- **Artificial Intelligence :** to identify and model human thought processes and to design machines to imitate human behavior (John McCarthy; 1956)
- **Digital Marketing:** marketing activities, including branding using several web-based media, email, and blogs. (Ridwan Sanjaya and Joshua Taringan; 2004)
- **Android** : a collection of software for mobile devices that includes an operating system, middleware, and main mobile applications (Safaat; 2011)
- **Website** : is a collection of pages that are used to display text information, animated images, sound and or a combination of all of them, both static and dynamic which form a series of interrelated

buildings (Bekti; 2015)

METHOD

This study uses the development research method and for the application design method using the development method. This model combines the elements of the waterfall node with an interactive philosophy. For data collection techniques by way of interviews, covering consumer needs and the effectiveness of this application to be applied to the community. And for the application model itself, it uses artificial intelligence that focuses on finding items to buy.

- **Waterfall Method**
  The waterfall model is the most widely used model for the development stage. The waterfall model is also known as the traditional model or the classic model. The waterfall model is often also called a linear sequential model or a classic cycle, this waterfall model provides a sequential, sequential software lifeflow approach starting from the analysis, design, coding, testing and stages. supporters.
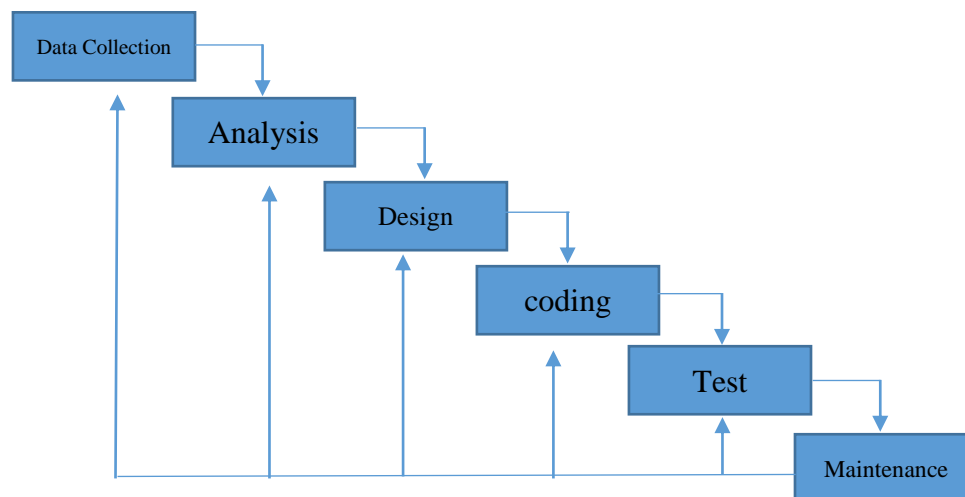

Figure 1. Waterfall Diagram Drawing

- Data collection
  The data collection process is the first stage for making applications, which in this collection includes goods data, seller data, buyer data.
- Analysis
  The analysis here aims to filter information from the advantages and disadvantages of the application which also examines the needs of the community.
- Design
  This design aims to determine and also minimize the ease with which the public can access it by considering human resources to make it easier to access.
- Coding
  Coding is one of the important steps after the implementation of data collection, analysis and design. At this stage the implementation is carried out to match the previous stages.
- Test
  This stage is the core stage of all the stages that we have carried out where as the application owner knows the location of the shortcomings of the coding process.
- Maintenance
  In connection with the magnitude of the possibility of this application being useful, maintenance is needed so that users get facilities that support the application.

- **System Analysis And Design**
  Logic Design is used to display the system design that explains the system flow. In designing the logic using a Data Flow Diagram (DAD) which consists of a tiered diagram which includes some of the data and features as follows.
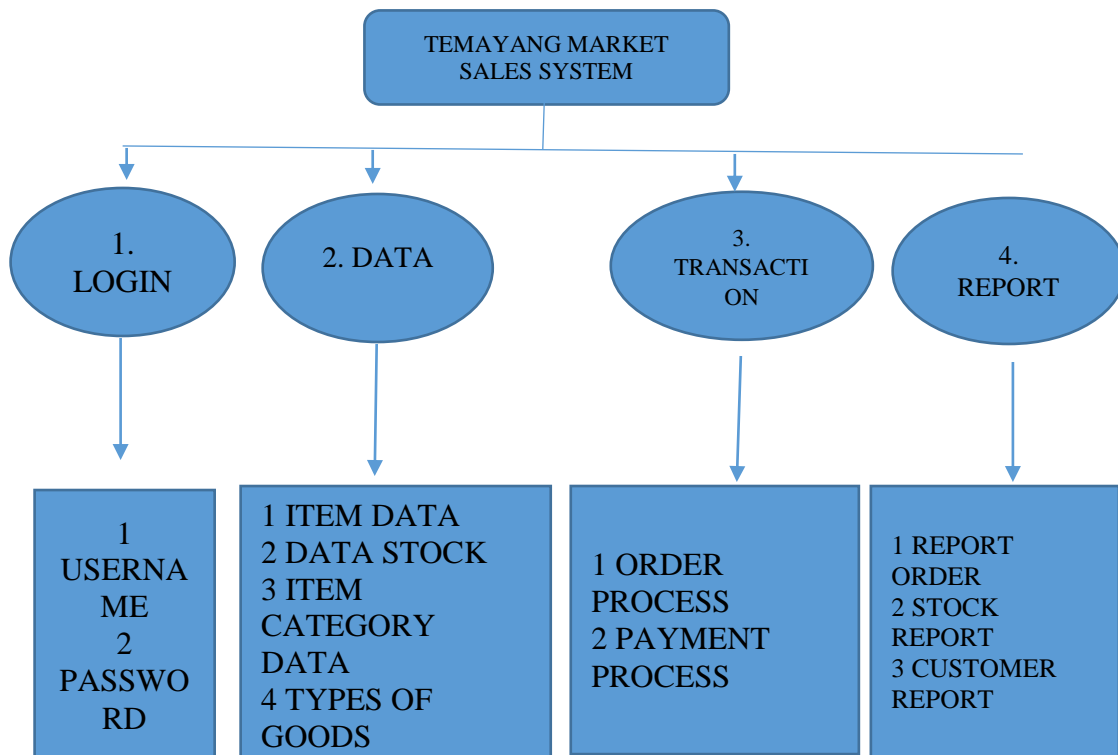
Figure 2. Data Flow Chart

RESULTS AND DISCUSSION
Result

The results of this study produce web and android-based applications that are used to display products that are sold and also buyers can choose the items to be purchased without having to meet in person.

- **System Implementation**

In this chapter the researcher explains the results of the application that has been built:
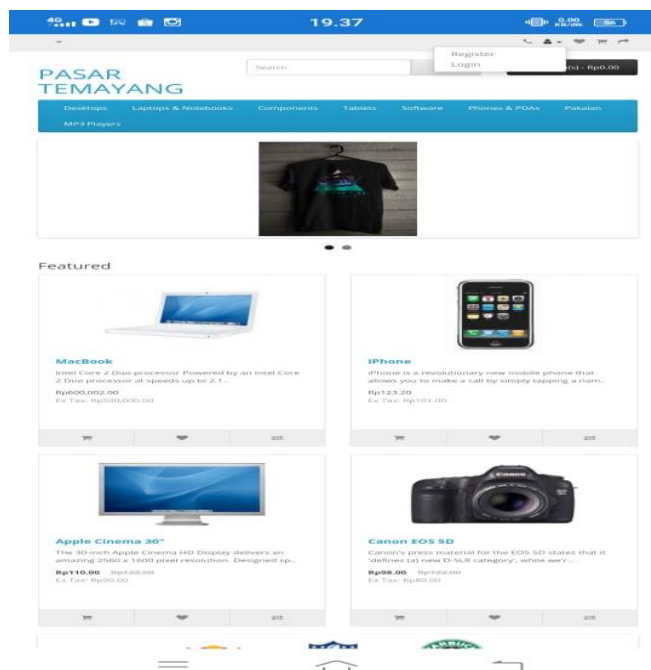
- User Menu Display

Figure 3. User Menu Display

The user menu display is an application display that also consists of several billboards that also display products that are frequently visited or purchased. The login is used by users to be able to register their selling goods.
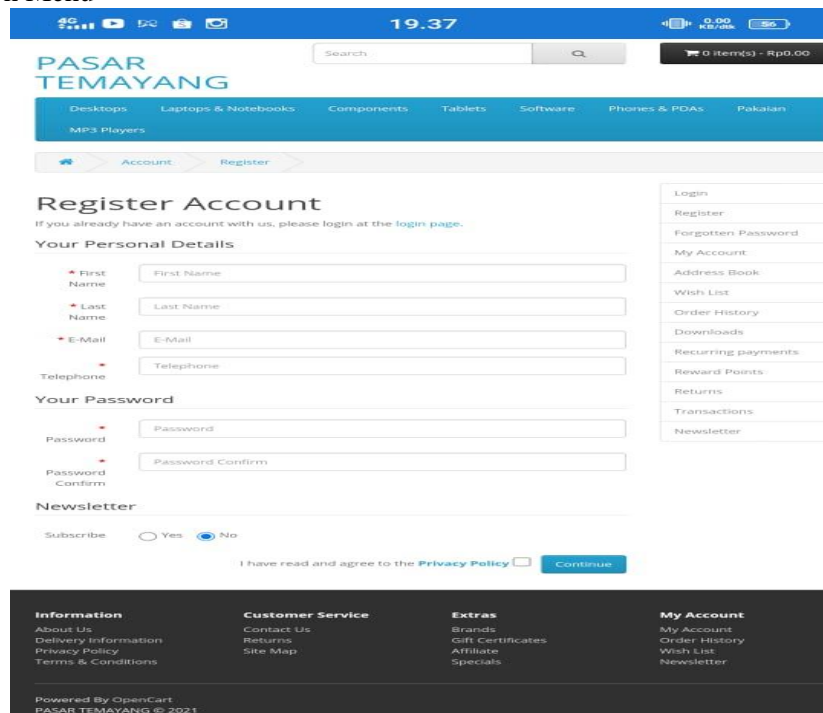
- Registration Menu

Figure 4. Registration Menu

The registration menu is a registration column to be able to carry out several transactions and can also be useful for users of this application to create a shop or sell items they want to sell.**.**
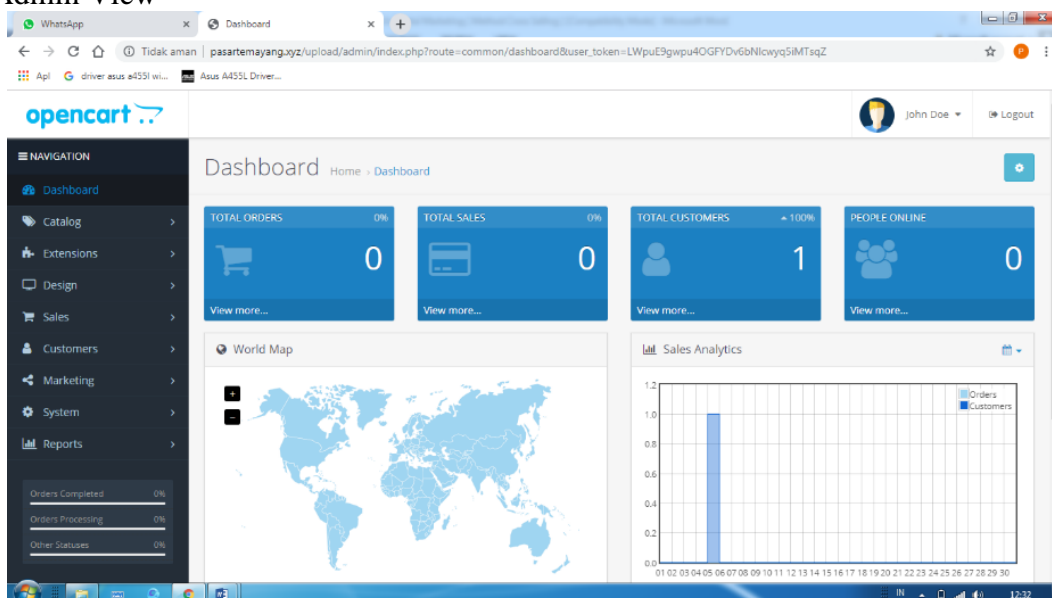
- Admin View

Figure 5. Admin View

This admin view is used to manage all incoming and outgoing data in this display application that can only be accessed by the owner**.** In this menu there are several menus that are selected to adjust the appearance and everything that can be changed in the application. This allows the owner to carry out maintenance.
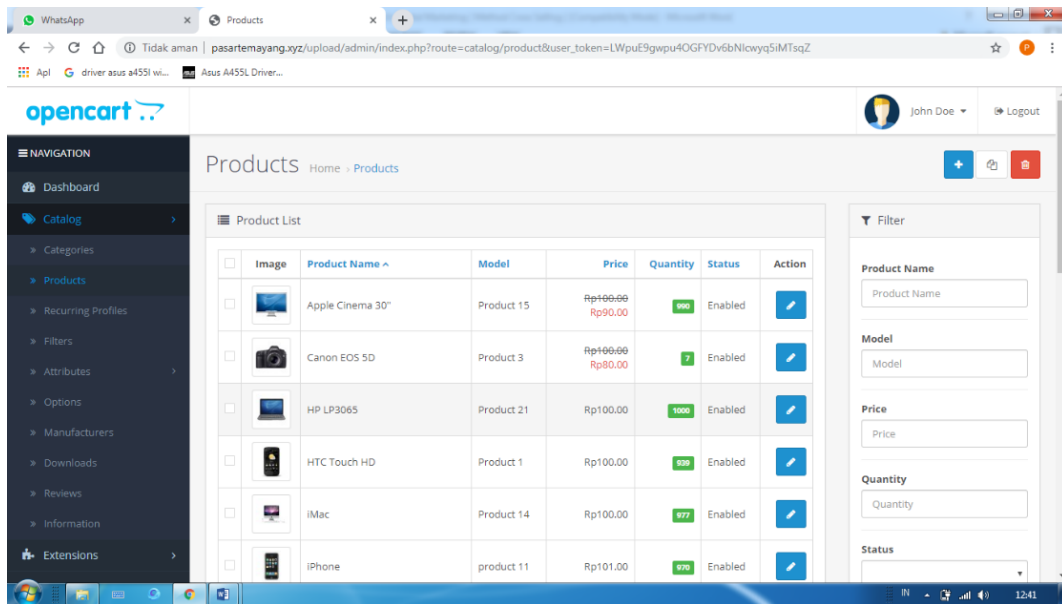
- Product Data Display

Figure 6. Product Data Display

In this view, the admin will upload product data that the user sells. And in the menu there are several features in the form of product prices to product descriptions.
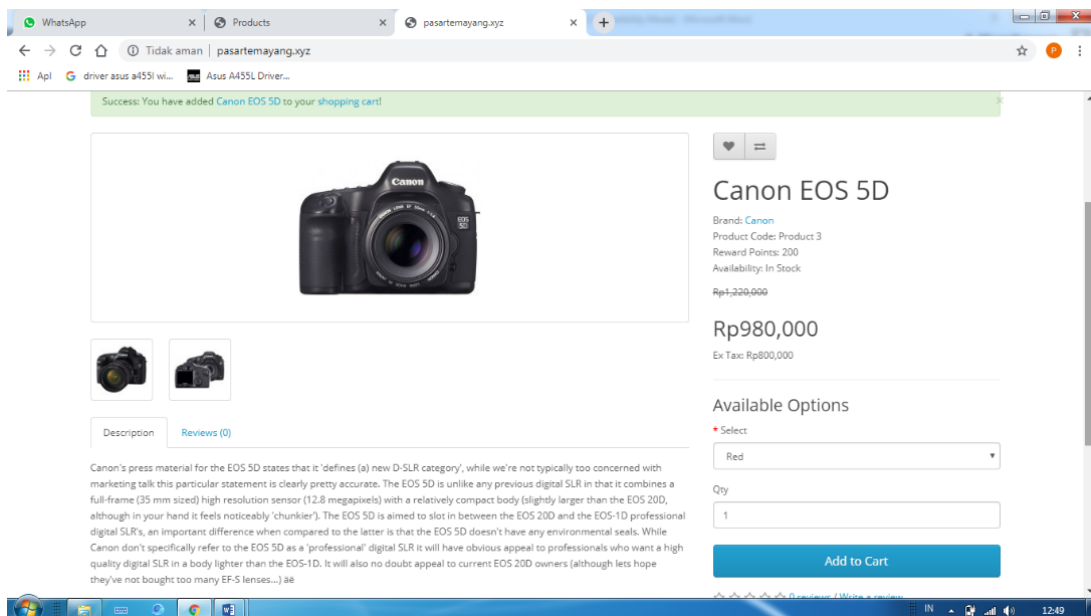
- Transaction Menu Display

Figure 7. Transaction Menu Display

In this menu display, users can buy goods with photos of goods, descriptions of goods, and also the number of goods to be purchased. This menu is used by users to make transactions with the amount that also needs to be paid.

CONCLUSION

The results of the study can be drawn several conclusions, among others:

- The Theme Market application that was built has a strong SOP that makes it easier for application users, especially admins to manage existing transaction processes, and make it easier for admins in the

data input process because the system provides forms and tables that are used, and the report process is managed by the system.
- The ordering process consists of the account registration process, ordering, payment, and confirmation.
- With the new Tema Market application, it is hoped that it can help the community easily make buying and selling transactions without compromising the existing sales system.

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