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# Design System e-Culinary Website-Based for Small Medium Enterprises

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#### **ABSTRACT**

Information technology has experienced significant developments in the last few decades. There are many technology options that can increase the convenience and benefits of small and medium-sized businesses. One of the activities that can utilize information technology is in the field of marketing and sales to build a business. In many areas in developing countries there are small and medium enterprises (SMEs) most of which still use traditional methods for marketing and sales. The purpose of this research is to design a Web-based e-culinary system for Small and Medium Enterprises as a Media to Support Marketing and Sales. The results of this study show that the e-culinary system can be designed based on a website with software engineering tools. As a result, an e-culinary system can be built that can help SMEs increase their income. This system is expected to support marketing and sales for SMEs in the region.

Keywords: System Design, E-Culinary, Website, Marketing, Selling

#### INTRODUCTION

One technology that is increasingly being used to obtain any information is the internet. With the internet, convenience can help smooth a business, especially in the business world. The wide reach of the internet can connect all the information presented and make it easier for users to get what

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they need. Website is one of the developments of the internet that can show that a company or agency that uses it has survived in business competition in this technological era.

Warung Makan is a general term used to describe a catering business that serves various menus and provides a place to enjoy the menu, with the activities of a waiter (waiter) previously offering a variety of available menus and set prices for food and services (Damayanti, Warsito, Meilinda, Manurung, & Sembiring, 2019). Pangli Village is located in an area with several small and medium enterprises (SMEs), most of which still use the manual way of doing business through marketing and sales. This causes business development to be less than optimal because prospects from remote areas must go directly to the location of SMEs to see what products/menus are available. Marketing strategy is a form of directed plan in marketing to achieve optimal results (Gumawang & Rakhmadi, 2018).

This strategy is very important considering that no matter how good the segmentation, target market and market position, it will not succeed if you don't follow the right strategy. The growing business, especially SMEs, not all of them can last long. Most of these ventures failed or went bankrupt due to several factors including ease of management, lack of working capital and loss of customers (Batmetan et al., 2022). Related to the problems above, several studies have been conducted related to e-culinary marketing. Research conducted by Khairus Suhada et al, regarding the development of Culinary Promotion Web Applications and Online Restaurants, which aims to increase the number of visitors and sales turnover at restaurants (Suhada, Danuri, & Putra, 2017). Similar research was also conducted by Damayanti et al, E-crm-based Information Systems to increase sales, expand marketing and improve services to consumers (Damayanti et al., 2019). Because the current system is not able to support the need for inventory information for culinary businesses, so that marketing to consumers has not been maximized. By looking at the existing conditions, it is appropriate for MSME actors to make improvements to the existing information system, namely by designing a web-based e-culinary system.

This study aims to design and develop a web-based e-culinary marketing and sales system for SMEs. This website is expected to support the marketing and sales of products for SMEs to boost their business. It is hoped that by supporting this website, SMEs will be more daring to compete in the business world and can improve their services.

# **METHOD**

Type of Research This research is a descriptive study because the data collected is in the form of words and not numbers. According to Bodgan and Taylor Moelong's opinion is in line with Bodgan and Taylor (1975) where they mean that qualitative research includes the methodology used for research procedures that produce descriptive data. Descriptive data is data written using words in detail. The purpose of descriptive research is to produce a systematic, factual, and accurate description of the facts and characteristics of a particular population or region.

In designing this system, the author uses the prototyping method. Prototyping is a process used to assist software development in forming a software model. This prototype is an early version of a software system stage that is used to present a picture of an idea, experiment a design, find as many existing problems as possible and find solutions to solving these problems. The prototype model used by the system will allow users to know what the stages of the system are like so that the system can operate properly. The beginning of

The design of this application will be evaluated by the user. After being evaluated by users, the next stage of this design will be used as reference material for software developers to build applications.

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#### **RESULTS AND DISCUSSION**

# a. Web Design

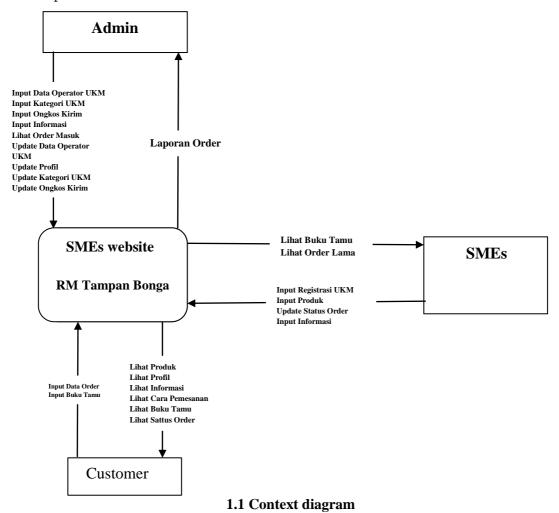
Web design is a general term used to describe how web content is viewed that is delivered to end users via the World Wide Web using a web browser or web-based software.

#### b. Web

According to Abdulloh in Sa'ad (2120:3), a website or web is a collection of pages consisting of several pages containing information in the form of digital data, in the form of text, images, video, audio and other animations provided via an internet connection.

## 1. Context Diagram Design

Context diagram is one of the highest level data flow diagrams that contains a process that contains inputs that are still basic.

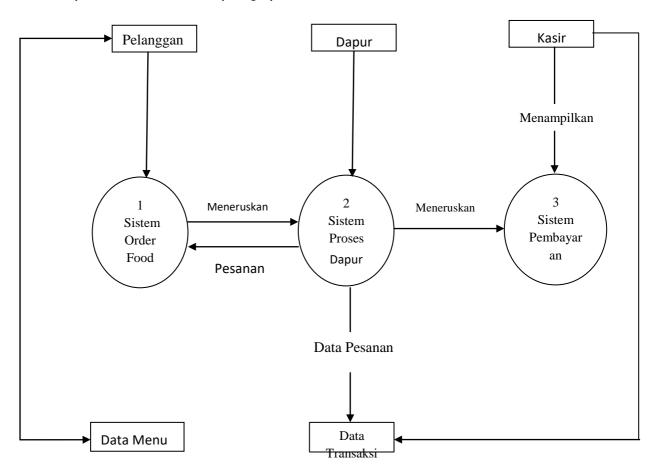


# 1. Transaction Flow (DFD Level 1)

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DFD level 1 is the result of the context diagram section in which there is a large circle in the data storage section of this diagram, which has a representative function for all existing circles.

- a) Customers see a list of available menus at Warung Makan Tampan Bonga
- b) Then the customer selects and orders the menu.
- c) Then the system will automatically display the order list for the kitchen area and checkout and kitchen area.
- d) When finished, the kitchen will send information to the cashier who will print the payment bill.
- e) Then, the customer selects & orders the menu.
- f) Then the system will automatically display a list of orders to the kitchen section and the

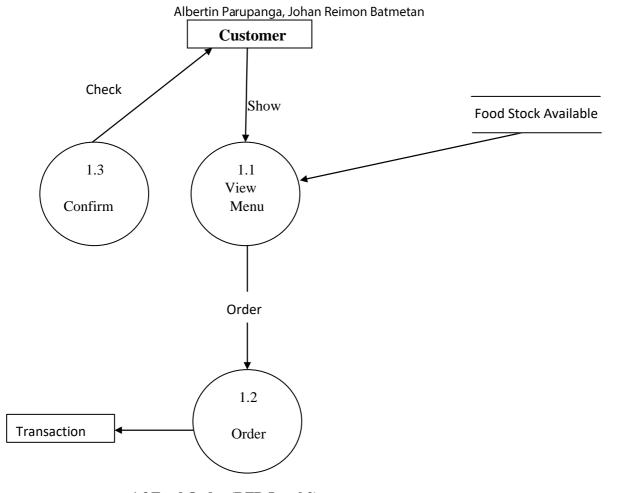


1.2 Transaction Flow DFD Level 1

cashier & kitchen section.

- g). When finished the kitchen will send information to the cashier will print the payment bill.
- 2. Order Food (DFD Level 2)

The Level 2 DFD is a breakdown of the Level 1 DFD, allowing each bubble process to be modeled in detail.

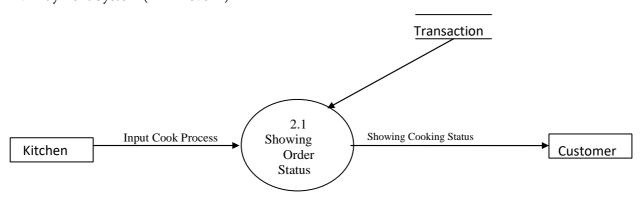


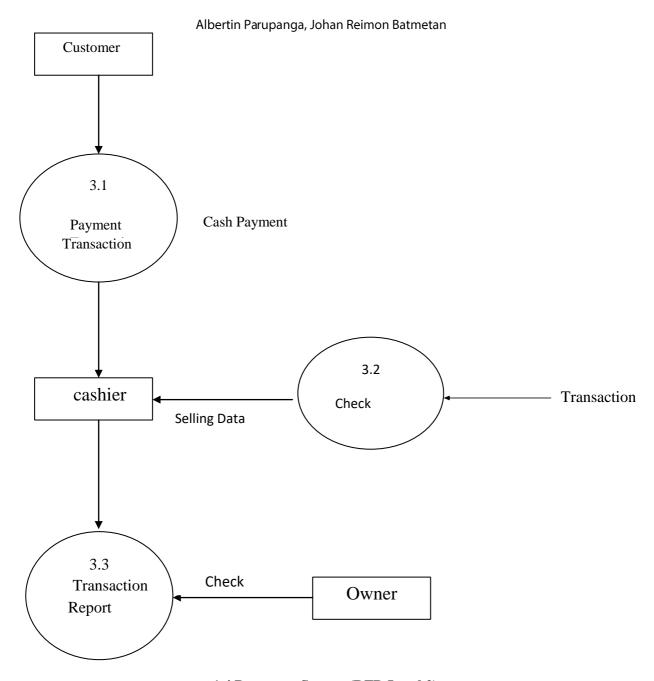
1.3 Food Order (DFD Level 2)

# 3. Kitchen Process (DFD Level 2)

The system displays the status of orders placed by customers: whether the order is medium or already cooked

# 4. Payment System (DFD Level 2)





1.4 Payement System (DFD Level 2)

This research resulted in a Web-based e-culinary sales system design. User account in the application, after the user is registered in the application, the user can build and manage restaurants in the application. Through this application, restaurant owners can promote the restaurants and culinary offerings provided. In addition, the application also provides a place to share tips for users who are willing to share cooking tips. Users, in this case are application visitors who are not registered in the application, can open and view restaurants, culinary and tips contained in the application. Visitors can search for the desired culinary and which restaurant provides the culinary. Users can also view the address and map of the location of a restaurant via a google map that is

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connected to the application. Making this system will then be evaluated by users and this design will be used as reference material for software developers to build applications.

#### CONCLUSION

Based on the results of research and discussion of Web-Based e-culinary system design, it can be concluded that:

- 1. Website design that has been created can provide information about restaurants and culinary offerings to application visitors.
- 2. Through Website Design, restaurants can implement it into applications that can promote restaurants and their menus to be wider and free, so as to increase the number of visitors and sales turnover at MSME restaurants.
- 3. The web-based system design makes it easy for users to access services from this application.

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