

## **DIGITIZATION OF BALINESE FOOD AND BEVERAGE PRODUCTS THROUGH E-AJENGAN BALI TO SUPPORT SMEs IN BALI**

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### **ABSTRACT**

*Bali has a very interesting natural wealth so that it is used as one of the tourism places with a lot of enthusiasts ranging from arts, customs, tourism, and especially in terms of culinary, but the COVID-19 pandemic that has not ended has an impact on economic instability, including on Micro, Small and Medium Enterprises in Bali. The solution to overcome this problem is to build an online marketing and trading system known as e-commerce as a means of digitizing Balinese food and beverage products. The system development method used is the waterfall method. The results of this study created and available digitization of Balinese food and beverage products through website-based e-commerce, namely under the name, "E-Ajengan Bali". In this study, testing was carried out using the black-box testing method. Based on the results of the assessment of 75 respondents from the public showing a figure of 100% with the digitization of Balinese food and beverage products on e-commerce "E-Ajengan Bali" provides clear information about Balinese culinary, this is also supported by 30 respondents who own SME who show a figure of 96% agree with using e-commerce "E-Ajengan Bali" the opportunity to get promotion and marketing to SME will increase.*

Keywords: Digitization, E-commerce, Culinary, Bali

### **INTRODUCTION**

The development of Micro, Small and Medium Enterprises or abbreviated as SMEs has the potential to develop from various regions in Indonesia. Bali as one of the tourism places with a lot of fans ranging from arts, customs, tourism, and especially in terms of culinary. Where the culinary existence in Bali is very diverse and spread throughout the regencies in Bali, using raw materials that are available locally and have flavors that are liked by local people and tourists in Bali, there are several foods and drinks that indicate that these foods are one of the characteristics of regencies in Bali including, Ayam Betutu, Lawar, Babi Guling, Pepes Klengis/Tlengis, Jaje Lak-lak, Jaje Uli, Sumping Waluh, Es Kuwud, Es Daluman, Loh Cemcem, etc.

However, seeing the situation in Bali with the COVID-19 pandemic that has not ended has an impact on economic instability, including on Micro, Small and Medium Enterprises (SMEs). Based on the results of research conducted by researchers to several food and beverage Micro, Small and Medium Enterprises (SMEs) in Bali, with 32 respondents showing that 81.3% of SME actors run their businesses by offline and 18.8% of them doing it online. This has an impact on 87.5% of respondents stating that in the implementation of sales and marketing experienced obstacles in the existence of a sales and marketing medium to better reach customers to make sales in the product export market, so that 93.8% of

respondents were interested in the digitalization of marketing in each of their businesses. This is also supported by the community around Bali and communities outside Bali who were given a sample in the form of one type of Balinese specialties, namely "Sambal Embe" with 55 respondents showing that 46.7% stated that they did not know, so 96.3% were interested in the export process of Balinese food products, and 97.5% stated the need for digitization of Balinese food and beverage products through online marketing media. The solution to overcome this problem is to build an online marketing and trading system known as e-commerce. According to (Tirtana,2022) e-commerce is a buying and selling activity carried out online by utilizing support from information technology accessed through websites and mobile devices with telecommunications media in the form of internet networks. So that with the construction of a special e-commerce to support SME in Bali under the name, "E-Ajengan Bali" can help the owners of each SME in marketing and selling their products and record the stock of each of their products, namely in processing SME data, processing category data and SME product data, and being able to manage transaction reports, as well as making it easier for customers to manage shopping carts and the availability of online transactions through e-wallets.

## **RESEARCH METODOLOGY**

The system development method used to build the digitization of Balinese food and beverage products through E-Ajengan Bali to support micro, small and medium enterprises (SMEs) in Bali, is a waterfall method as explained in the literature review. The description of the application of each stage of the waterfall method, starting with analysis, is carried out by reading and understanding the literature, both books, sites, and scientific works related to research. At the planning stage, researchers conduct observations and interviews to collect information about micro, small and medium enterprises (SMEs) spread across several regencies/cities in the Bali area engaged in Balinese culinary, which will then be analyzed about what is needed in digitizing. Design, the design carried out includes designing system functionality, designing databases, and designing system interfaces. From the results of the design, the implementation stage was carried out. The implementation is carried out in two stages, namely system coding. After the information system is implemented, the last stage is testing, where the researcher uses black-box testing, whether the system is working properly.

### **Data Collection Techniques**

During the research on Micro, Small and Medium Enterprises (SMEs) located and spread across several regencies/cities in the Bali area, it was carried out in order to meet the data collection needed in the preparation of this report. Some of the data collection techniques carried out are as follows:

#### **1) Primary Data**

Primary data is data obtained directly in the field by researchers as objects for writing reports. In a study conducted to build the digitization of Balinese food and beverage products through E-Ajengan Bali to support SMEs in Bali, researchers used primary data collection with observation methods and interview methods.

#### **2) Secondary Data**

Secondary data are obtained using documentation techniques and literature studies from scientific journals, as well as data obtained from the Internet.



Figure 1. Sambal Embe  
Source: Ganti Menu, 2022

In this documentation, data collection is carried out by documenting several Balinese food or beverage products on SMEs spread across regencies/cities in Bali.

## SYSTEM DESIGN

### System Overview

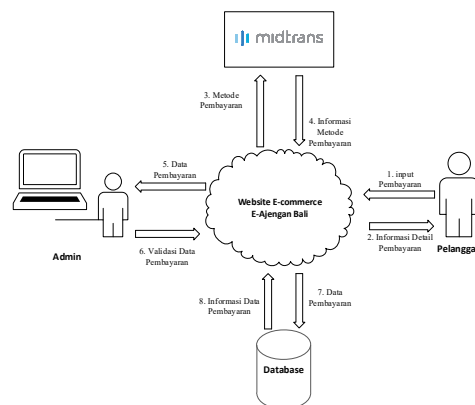


Figure 2. System Overview  
Source: Personal, 2022

The following is an explanation of the overview of the online transaction system that exists in e-commerce digitalization of Balinese food and beverage products (E-Ajengan Bali):



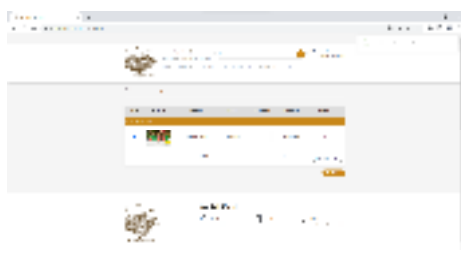

- 1) Customers input transaction data into the system in the form of detailed purchase data and payment data.
- 2) Customers get feedback from the system in the form of detailed information on purchases and payments that must be paid by customers.
- 3) After the customer makes a payment, the system will send transaction data on the Midtrans API in the form of the payment method chosen by the customer.
- 4) Midtrans API gets feedback from the system and then sends a successful payment notification
- 5) Payment data is stored and sent to admins to be further validated as proof of payment.




- 6) The admin sends the payment data validation information, so the customer knows the payment has been successful.
- 7) Payment data that has been inputted will be stored in the database.
- 8) Next will send the desired information on the website, and it will be displayed on the website page

## RESULTS AND DISCUSSION

The results of this study created the digitization of Balinese food and beverage products through E-Ajengan Bali to support SMEs in Bali, this at the table 1.

Table 1. The Results Of E-Ajengan Bali

| No. | User Interface  | Description   |
|-----|---|---|
| 1.  |   | a picture of the display of the main page (home) of E-Ajengan Bali. Where there are several menus including, product category menus, SMEs menus, Balinese culinary menus, and login menus.  |
| 2.  |  | The following is a detailed page of SME products, which contains a description of the product name, product price, product stock, 'add basket' button and contains digitization of food and beverage or culinary products themselves including, description or culinary philosophy, composition, year of market, and culinary center. |
| 3.  |  | Here is a cart page where it displays the purchase details when the customer adds the desired product to the cart.  |
| 4.  |  | The following is a checkout page that displays the details of the order along with the customer's personal data which will then be processed by pressing the 'payment' button.  |

| No. | User Interface   | Description   |
|-----|--|---|
| 5.  |   | Payment page where a pop-up menu will appear that displays the details of the fees that must be paid, then by pressing the 'continue' button the payment will be continued by selecting the available payment method. |
| 6.  |   | Payment method page customers able to choose various payment methods that have been provided by the system.   |
| 7.  |  | Page of a successful payment where the payment made by the customer has been successful and is automatically saved into the system which will later be checked by the admin.  |

Source: Personal, 2022

## Analysis of Test Results

The test results here are in the form of an assessment of the system, in the form of filling out the google form that has been made. The following are the results of the assessment related to the construction of digitalization of Balinese food and beverage products to support SMEs in Bali.

Table 2. Assessments By The Community

| No. | Question   | Present % |        |
|-----|--|-----------|--------|
|     |  | Already   | Do not |
| 1.  | <i>E-commerce</i> 'E-Ajengan Bali' has an attractive appearance, and is easy to understand.  | 100%      | 00,0%  |
| 2.  | The digitization of Balinese food and beverage products in the 'E-Ajengan Bali' E-commerce provides clear information about Balinese cuisine.                                | 100%      | 00,0%  |
| 3.  | The existence of <i>E-commerce</i> 'E-Ajengan Bali' makes it easier to transact <i>online</i> , both for the people of the Bali region and for people outside the Bali area. | 100%      | 00,0%  |

|   |   |      |       |
|---|---|------|-------|
| 4.  | The features available in <i>E-commerce</i> 'E-Ajengan Bali' are easy to understand and use.          | 100% | 00,0% |
| 5.  | With the choice of payment methods using <i>e-payment</i> , it is easier to make online transactions. | 96%  | 4%    |
| <b>Total Sample 75 Balinese and Outside Balinese People</b> |   |      |       |

Source: Personal, 2022

Table 3. Assessment Tables by SME Owners

| No.                                    | Question   | Present % |        |
|--|--|-----------|--------|
|  |  | Already   | Do not |
| 1.                                     | <i>E-commerce</i> 'E-Ajengan Bali' is easy to operate by SME owners of food and beverage products in Bali.           | 100%      | 00,0%  |
| 2.                                     | By using <i>E-commerce</i> 'E-Ajengan Bali', my SME will be well organized.  | 96,7%     | 3,3%   |
| 3.                                     | By using <i>E-commerce</i> 'E-Ajengan Bali' the opportunity to get promotions and marketing on SMEs I will increase. | 96,7%     | 3,3%   |
| 4.                                     | By using <i>E-commerce</i> 'E-Ajengan Bali' the time used in the work of SME I am more flexible.                     | 93,3%     | 6,7%   |
| <b>Sample Number of 30 SMEs Owners</b> |  |           |        |

Source: Personal, 2022

## CONCLUSION

Based on research, it can be concluded that digitization of Balinese food and beverage products through E-Ajengan Bali to support SMEs in Bali, the creation and availability of digitalization of Balinese food and beverage products through e-commerce to support SMEs in Bali based on a website, under the name "E-Ajengan Bali" in the midst of the COVID-19 pandemic transition period. The digitization of Balinese food and beverage products through E-Ajengan Bali to support SMEs in Bali begins with the stage of data collection using interview methods, questionnaires, documentation, observation, and literature. The design of e-commerce "E-Ajengan Bali" in this study uses a structured method, namely event lists, data flow diagrams, conceptual data models, physical data models, table structures, and user interfaces as a display of the system to be built. Implemented into a system using PHP and MYSQL programming languages as databases. Based on the Black-Box testing carried out, it can be concluded that digitalization of Balinese food and beverage products has been successfully built through e-commerce to support SMEs in Bali, based on the results of an assessment of 75 respondents from the public showing a 100% figure with the digitization of Balinese food and beverage products on the e-commerce "E-Ajengan Bali" providing clear information about Balinese culinary, this is also supported by 30 respondents who own SMEs who show that 96% agree with using e-commerce "E-Ajengan Bali" the opportunity to get promotion and marketing to SME will increase. The feature of the "E-Ajengan Bali" e-commerce is that customers can make transactions online using a digital wallet (e-wallet).

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