

Designing a Café Marketing Information System Using a Prototype Café Website for Banua Coffee Café in Makassar

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Abstract

Makassar, located in South Sulawesi, is home to numerous Micro, Small, and Medium-sized Enterprises (UMKM) spanning various industries, including fashion, culinary, retail, cafes, and more. This diversity contributes significantly to the local economy, especially in South Sulawesi. According to data provided by the Ministry of Micro, Small, and Medium-sized Enterprises of South Sulawesi, there are 206 café operators, 515 coffee shops, and 37 local eateries registered in the city of Makassar. One such establishment is Café Banua Coffee, situated at Jl. Biring Romang Lorong 6 No.12, Tamalanrea, Makassar. This research aims to design a promotional medium in the form of a café website that caters to consumer preferences. This study involves the development of a design strategy and the implementation of an information system through the creation of a Prototype Café Website. The goal is to introduce the café's profile engagingly, providing users with insights into the café's ambiance, facilities, menu offerings, and other relevant information about Café Banua. Data collection is conducted quantitatively using a questionnaire. Respondents' information is categorized by name, age, occupation, and prior knowledge of the café before visiting. Based on the questionnaire data collected, it is evident that the majority of respondents place high importance on the desired features and user comfort in the Prototype Information System Design for Café Banua Coffee's Website.

Keywords: *Website Café, Banua Coffee Café, Prototype, UMKM.*

1. Introduction

Makassar, located in South Sulawesi, is home to numerous Micro, Small, and Medium-sized Enterprises (UMKM) spanning various industries, including fashion, culinary, retail, and cafes. UMKM plays a crucial role in the regional economy, with 206 cafes, 515 coffee shops, and 37 local eateries registered in the area. The utilization of information technology as a promotional medium intensifies competition among entrepreneurs. The current development of internet technology is leaning towards being more user-friendly. With the internet's presence, all activities and transactions can be conducted without the limitations of space and time. The internet serves as a global marketing medium with 24/7 accessibility, making it a valuable promotional tool. (Madre et al., 2021).

Susanto and Asmira (2017) designed a website as a promotional medium using the stages of Communication, Planning, Modeling, Construction, and Deployment. This resulted in an effective website for promotion and information dissemination at a lower cost. In this research, the researchers created a prototype café website through the stages of Strategic/Project Planning SIM, Conceptual System Design,

Detailed Design, Information System Design, along with the addition of User Interface (UI) and User Experience (UX). The process involved gathering user requirements and refining through questionnaires.

Café Banua Coffee in Makassar (Jl. Biring Romang Lorong 6 No.12) offers a relaxed, entertaining, and comfortable atmosphere with cozy seating. Its "Hidden Gem" concept has kept it relatively unknown to the public. Unfortunately, as of now, the café does not have a website to share information. This research aims to develop a strategy for designing and implementing an information system through a Prototype Café Website to promote and introduce Café Banua Coffee's profile in Makassar. The goal is to enhance consumer attraction by showcasing the café's ambiance, facilities, menu, and related information. This study also seeks to boost sales through an appealing website design. The title of this research is "Designing a Café Marketing Information System Using a Prototype Website for Café Banua Coffee in Makassar."

2. Literature Review

2.1 Information System

The system is a set of interconnected components designed to facilitate objectives through information, materials, or energy. Procedures are sequences of instructions that explain what, who, when, and how a task is to be performed. Subsystems interact to form a unity to achieve the goals of the system (Siregar et al., 2021). The design of an information system is the combination of software and hardware that creates an application or software by assembling solutions to the problems at hand.

2.2 Website

A website is a page containing images, videos, and text that users around the world access through an internet browser. It serves as the primary medium for searching for information and communication, including company profiles and online news (Zen et al., 2022). A Web Information System is the integration of information technology and human activities to support operations and management. According to John F. Nash, a system information system is defined as a combination of humans, technology, media, procedures, and controls that regulate communication, routine processes, and transactions. It aids management and internal and external users and supports decision-making. This system has rapidly evolved and become a solution for managing shared documents.

2.3 Digital Marketing

The digital marketing trend presents an opportunity for Small and Medium Enterprises (SMEs) in the era of Industry 4.0. According to the American Marketing Association (AMA), digital marketing involves activities and processes that use digital technology to communicate value to consumers.(Kannan & Li, 2017). Another definition by Kartika refers to digital marketing as encompassing digital channels such as e-commerce, internet marketing, and mobile marketing, which collectively make up the digital footprint in the marketing landscape (Kartika, 2022). Currently, the internet serves as the primary platform for businesses and consumers to search for products, compare options, engage on social media, and make purchases. Content marketing, such as through brand websites or micro-platforms, is used to inform potential customers about products and their use. Digital marketing involves creating websites and content to encourage users to interact, make purchases, or fill out forms. Information is delivered through various channels, with content marketing being a key technique. The development of informative and creative content is crucial in digital marketing. With valuable content, consumers are more engaged and inclined to support marketing messages when they encounter them(Nair et al., 2022).

2.4 Interaction Design

Interaction design refers to the structure and behavior exhibited by users when interacting with a product. Technology is rapidly evolving, prompting conventional businesses to transition to mobile applications for a better user experience. User Experience (UX) that is user-friendly is essential for users to understand and effectively use applications, particularly in the context of mobile app user experiences(Naufal & Persada, 2020).

2.5 UI/UX

UI and UX are crucial in websites, applications, and online platforms. Both of them influence the engagement of visitors when navigating the platform. UI (User Interface) and UX (User Experience) pertain



to the visual appearance of digital marketing tools such as websites or applications, with the goal of enhancing the brand image(Juni Kurniawan et al., 2022).

2.6 Figma

Figma is a commonly used design tool for creating interfaces for mobile apps, desktop applications, and websites. It operates across various operating systems and enables team collaboration from different locations. Figma is popular among UI/UX designers because it facilitates rapid and efficient collaboration in creating website or app prototypes(Al-Faruq et al., 2022).

3. Research Methodology

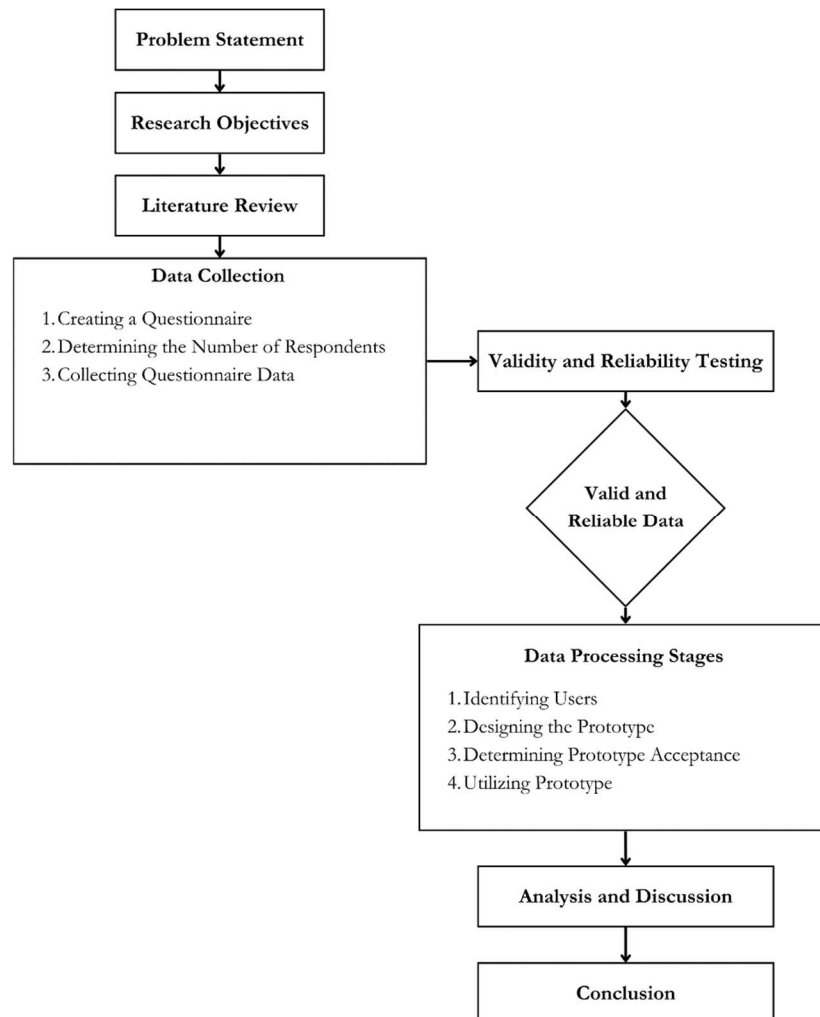


Figure 1. Research Methodology Flowchart

Data processing in this research employs a system design method utilizing a prototype approach, which serves as a mechanism for identifying user needs:

3.1 Identifying Users

In this stage, direct observations are conducted with stakeholders in the business sector, along with interviews with business owners, to gather information about the desired cafe website design.

3.2 Designing the Prototype

Creating a prototype involves crafting a preliminary design that focuses on presentation, including developing input and output in the form of use case diagrams, sequence diagrams, activity diagrams, and interface design..

3.3 Determining Prototype Acceptance

Evaluating the designed system to determine if it aligns with the desired specifications. If it does, the next step is to proceed with system development. If not, revisions are made to the designed system

3.4 Utilizing Prototype

Once the prototype has evolved into a fully functional system and is ready for use, the following are the stages in the prototype design

4. Result And Discussion

In this research, the information obtained from the business design stages and system design stages is then incorporated into the system being developed. The stages in detailed design involve identifying users and illustrating the system flow (use case diagrams, activity diagrams, and the general flow of the system).

4.1. User Identification

After analyzing the data and information involved in the system process, actor models are obtained, which are identified as supporting the operation of the designed system. Below is a table identifying the activities of the actors (users).

Table 1. Actor Identification

Actor	Actor Type	Actor Activities
Admin	PSA (Primary System Actor)	Manage Data
User	PSA (Primary System Actor)	Visit the Café Website

4.2. Use Case Diagram

A Use Case Diagram serves the purpose of illustrating the interaction between users and the system as a whole. It also shows what functions are available and who is entitled to use those functions. Here, we will describe the roles of the actors in the Use Case Diagram.

Table 2. The roles of actors in a User Diagram

Actor	Use Case	Description
Admin	Login Entering Customer Order Data Managing the Café Website	It is the process of accessing the system.
User	Visit the Café Website	Visitors have become acquainted with the café's website before visiting.

4.3. Sitemap

A sitemap is a tool used to map out the menu and features of a website, containing information about pages, images, and more. Here is the sitemap for the prototype website of Café Banua Coffee:

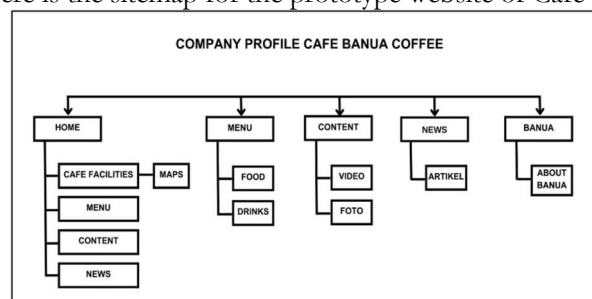


Figure 2. Sitemap

Afterward, interactive page designs for the Admin and User sections were created using the Figma application, and the results are as follows:

4.3.1. Admin

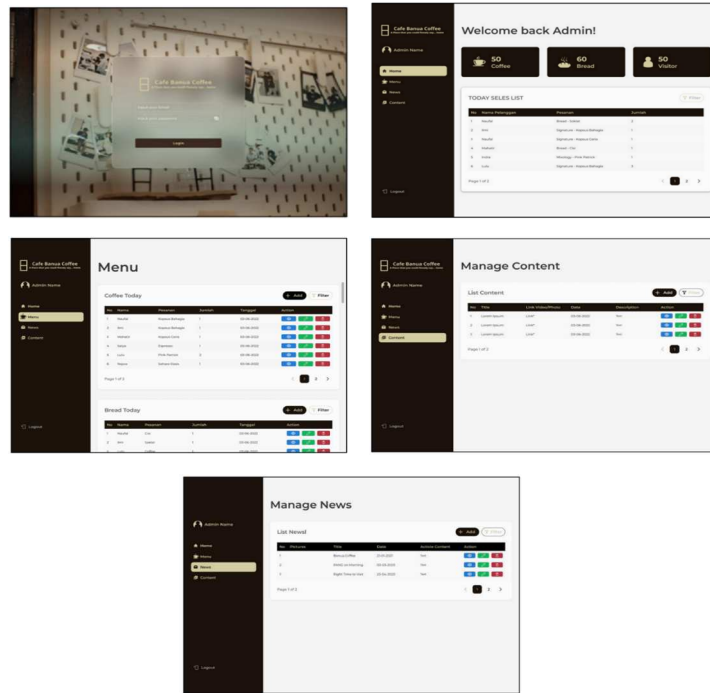


Figure 3. Admin's User Interface Page

4.3.2. User

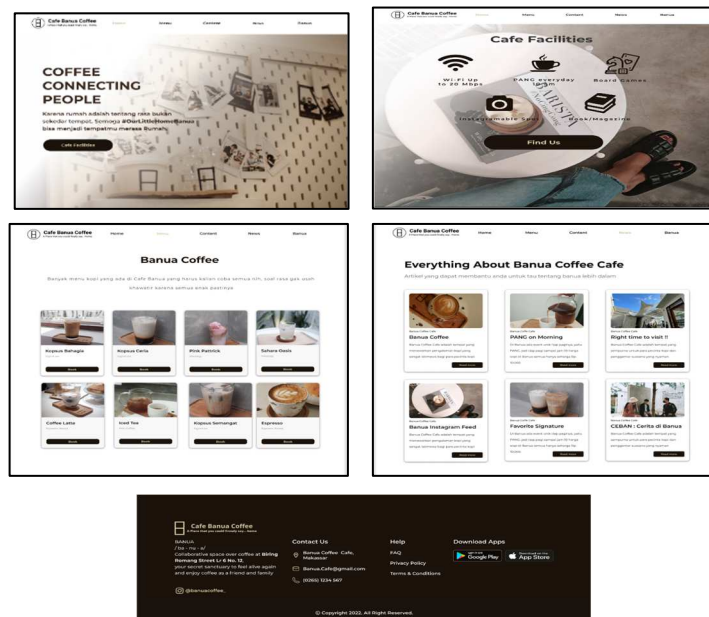


Figure 4. User's User Interface Page

By utilizing the information storage system design and the café website, it provides convenience for the café in managing its operations, including order data storage. Simultaneously, it offers ease for consumers who wish to access café information beforehand. Furthermore, it can enhance sales and expand the marketing reach of Café Banua Coffee. From the processing and design of this information system, two actors are involved to support the system's functionality: administrators and consumers. Administrators are responsible for inputting order data and managing the café's website. On the other hand, consumers can access various information about Café Banua Coffee.

5. Conclusion

From the design of the information system for Café Banua Coffee's website, it can be concluded that the availability of this information system design streamlines the process from data recording to data input. The input data can be processed and stored in a system database, making it more effective and efficient. Additionally, the presence of a prototype assists consumers in accessing information about the company profile, location, food and beverage menus, facilities, café content, and the latest updates. This helps achieve a broader marketing reach.

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