

## Designing a Web-Based Digital Marketing and Payment System for Mobile Coffee Business Using WordPress and Midtrans

**Andreas Jevon L.**

Soegijapranata Catholic University  
[jevonandreas.ja@gmail.com](mailto:jevonandreas.ja@gmail.com)

Ridwan Sanjaya

Soegijapranata Catholic University  
[ridwan@unika.ac.id](mailto:ridwan@unika.ac.id)

Erdhi Widyarto Nugroho

Soegijapranata Catholic University  
[erdhi@unika.ac.id](mailto:erdhi@unika.ac.id)

### Abstract

The rapid growth of digital technology has significantly changed consumer behavior, especially in the food and beverage sector. Mobile coffee businesses require efficient digital systems to support ordering, payments, and marketing. This study developed a WordPress-based website integrated with the Midtrans payment gateway to improve transaction efficiency for KopiMubeng, a mobile coffee business. A qualitative descriptive method was used through observation and interviews with owners and customers. The findings show that the website simplifies product ordering, improves record accuracy, and expands digital promotion reach. Integration with Midtrans enables faster, safer, and more reliable transactions. Overall, the system effectively enhances operational efficiency and customer convenience, demonstrating its feasibility as a sustainable digital solution for mobile coffee businesses.

**Keywords:** WordPress, Midtrans, digital marketing, payment gateway, mobile coffee business.

### INTRODUCTION

The rapid development of digital technology has brought significant impacts across various industrial sectors, particularly the food and beverage industry. In the modern era, consumer shopping behavior has shifted toward more efficient and faster processes through the use of internet-based technologies. Generation Z prefers content that is personal, fast, and interactive, encouraging MSMEs to adjust their marketing approaches by utilizing

storytelling techniques, collaborating with influencers, and creating community-centered content (Aprilianti, Agustian, & Narimawati, 2025). The coffee industry is one sector that has experienced this shift, where sales are no longer limited to physical stores but also extend to mobile coffee services.

However, mobile coffee businesses still face several challenges in adopting digitalization for their operations and marketing activities. The absence of a payment gateway limits their ability to serve customers who expect fast and convenient digital payments, leading to lower conversion rates. In addition, manual sales recording is prone to errors and makes data analysis more difficult, thus hindering strategic decision-making. The use of technology and accounting information systems in MSMEs can enhance operational performance by speeding up transactions, reducing recording errors, and providing more accurate information for strategic decision-making (Herman, Nirwana, Fahdal, & Hasan, 2023). Furthermore, the limited utilization of digital channels for promotion results in restricted market reach and underdeveloped brand awareness.

A payment gateway is a system that authorizes transaction processes in e-commerce. It facilitates payment authorization - whether through credit cards or direct payment methods - allowing greater convenience and accuracy in online business transactions (Hidajat & Salini, 2024). In online transactions, users naturally expect a payment process that is both secure and easy to complete. Payment gateway technology supports various types of transactions, such as credit cards, debit cards, bank transfers, e-wallets, and direct debit systems.

To implement the Midtrans payment gateway, a website and hosting are required. The suitable platform for developing a mobile coffee business website is WordPress.

WordPress is a popular and simple website-building platform. As one of the world's largest CMS platforms - powering around 30% of all websites globally - WordPress is free software yet capable of producing high-quality websites (Martinez-Caro, Aledo-Hernandez, Guillen-Perez, Sanchez-Iborra, & Cano, 2018). It provides convenience for anyone, including users without technical backgrounds, to build and manage professional websites. With its intuitive interface, accessible features, and wide selection of themes and plugins, WordPress is highly beginner-friendly and supports website creation without requiring deep programming expertise (Arafath, 2021). This makes WordPress an ideal choice for users who want simplicity and effectiveness in website development.

## **METHOD**

### **Data source**

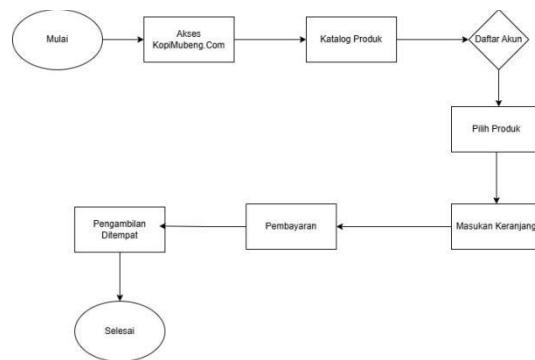
Data sources in this study consist of primary and secondary data. Primary data were obtained through direct interviews and observations involving the owner and customers of KopiMubeng. These data include user experiences, ease of accessing the website, ordering flow, and perceptions toward the Midtrans digital payment system. Secondary data were derived from relevant literature, online references, WordPress documentation, WooCommerce technical guidelines, and the official Midtrans integration guide, which support the development and analysis of the website system.

### **Population and sampling**

The population in this research includes individuals directly involved in the KopiMubeng business process. Purposive sampling was used by choosing participants who had actively interacted with the website system. The selected respondents consisted of:

- A business owner, aged 22, with more than one year of experience running a mobile coffee business.
- A consumer, aged 21, representing the digital-savvy customer segment who values fast and secure online transactions.

These participants were selected based on their ability to provide clear feedback and relevant experiences regarding online ordering and digital payments.



**Figure 30.1 Flowchart**

### Data acquisition

Data acquisition was carried out using a qualitative approach supported by semi-structured interviews and direct observations. Interviews were conducted after respondents used the KopiMubeng website, focusing on usability, transaction efficiency, convenience, and perceptions of Midtrans payment security.

Observations were performed by monitoring the entire ordering flow—from login, browsing the product catalog, adding items to the cart, selecting payment methods, completing checkout, to receiving order status notifications. These observations provide insights into user interaction behavior and system performance.

Additionally, black-box testing was conducted to verify system functions. This testing evaluates system inputs and outputs without examining the internal program code. Each feature - account registration, login, catalog viewing, product selection, Midtrans payment, checkout, and status notification - was tested using predefined scenarios and recorded with “Pass” or “Fail” status.

## **RESULTS AND DISCUSSION**

### **System flow, use case, and activity model**

The system flow of KopiMubeng.com begins when the customer accesses the homepage and is directed to the product catalog. Before placing an order, the customer is required to register and log in, allowing the system to store personal information and transaction history in an organized way. After logging in, the customer selects the desired products, adds them to the shopping cart, reviews the order, and then proceeds to the checkout page. At this stage, payment is carried out using one of the online methods available through the Midtrans payment gateway. Once Midtrans confirms that the payment has been successfully completed, the system updates the order status, and the customer can then pick up the product at the chosen outlet.

The Use Case model provides a structured overview of the main processes that can be performed by both the Customer and the Admin on the KopiMubeng website. It shows how each actor interacts with system features and clarifies the operational mechanisms and transaction paths supported by the application. The actors involved are:

- Customer (User): the primary actor who interacts directly with KopiMubeng.com to purchase coffee products, access the catalog, perform payments, and receive the ordered products.
- Administrator: responsible for managing the system, including adding, updating, or removing products in the catalog and monitoring incoming orders from the back-end interface.

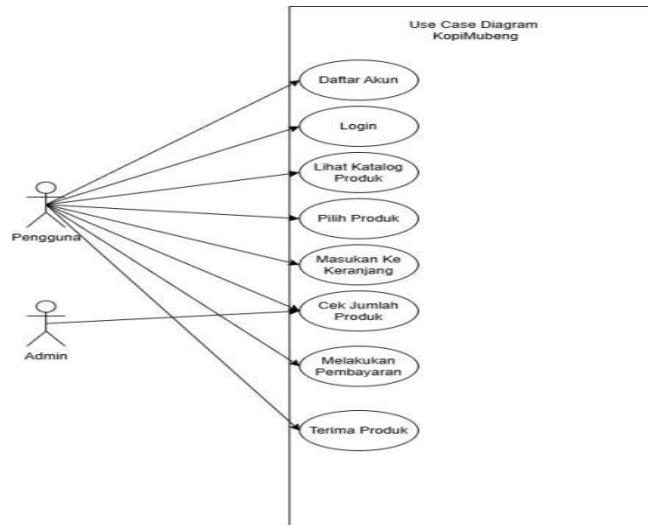
The main use cases for the customer include:

- Register Account – the customer creates an account to be able to perform transactions and store personal and transaction data.
- Login – the customer logs in to access personal features such as viewing order status or using reward points.
- View Product Catalog – the customer views the list of available coffee products.
- Select Product – the customer chooses the desired product(s) from the catalog.
- Add to Cart – selected products are added to the shopping cart for further processing.
- Check Product Quantity – the system checks the quantity of items in the cart before proceeding.
- Make Payment – the customer completes the payment through various methods provided by Midtrans to ensure secure and fast transactions.
- Receive Product – the customer receives the ordered product by picking it up at the outlet.

Meanwhile, the main use cases for the administrator are:

- Manage Products – adding, deleting, or updating products in the catalog according to business needs.

- Monitor Orders – overseeing order status and taking appropriate actions based on the current status of each order.



**Figure 30.2 Use Case**

The Activity Diagram further details the dynamic behavior of the system by describing the end-to-end steps of an online transaction on KopiMubeng.com. All transactions are carried out digitally, starting from account registration or login, browsing and selecting products from the catalog, proceeding through checkout, choosing a payment method, completing payment via Midtrans, and then moving to order processing by the merchant. The diagram involves three main lanes: Customer, System (WordPress + WooCommerce and Midtrans integration), and Merchant/Outlet (M).

From the customer side, the flow begins with account registration or login. New users must first create an account, while existing users can log in using their registered email and password. The system verifies the account and redirects the customer to the dashboard upon successful authentication. The customer then explores the product catalog, selects the desired coffee items, adjusts the quantity if needed, and adds them to the cart.

Once ready, the customer proceeds to checkout, where the system displays a summary of the items and total payment.

In the payment stage, the customer selects one of the available online payment methods, such as e-wallet, bank transfer, or card, which are all managed through Midtrans. The system generates a payment code or QR code, and the customer completes the payment using the chosen method. Midtrans processes the payment and sends a notification back to the system. If the payment is successful, the order status is updated to “paid”; if it fails or expires, the status is set accordingly, and the customer may be prompted to retry.

Once the payment has been verified, the Merchant (M) processes the order by preparing the products according to the details received from the system. The order is then prepared for pickup (or delivery, if applied), and the merchant updates the order status to indicate that it has been successfully processed. Finally, the customer receives the product and obtains confirmation that the order has been completed. This activity flow ensures that each stage of the transaction—starting from login, product selection, payment, and order fulfillment—runs in a structured, secure, and traceable manner, providing an optimal user experience.

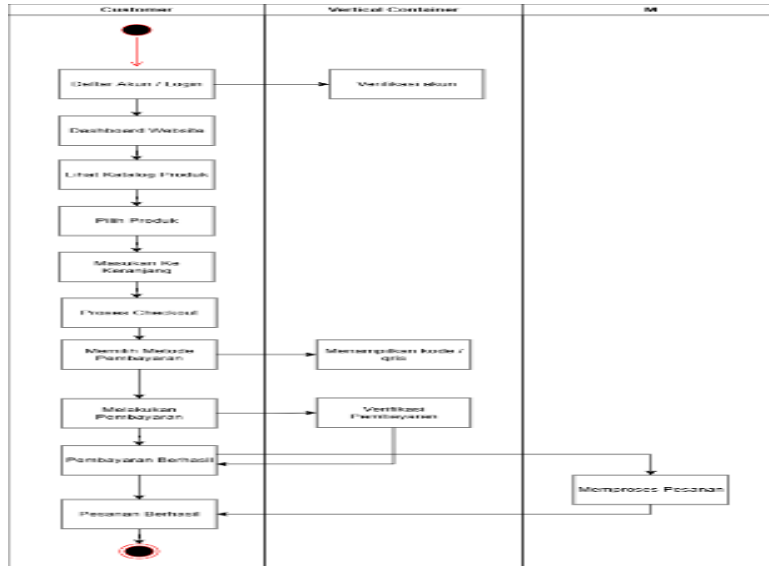
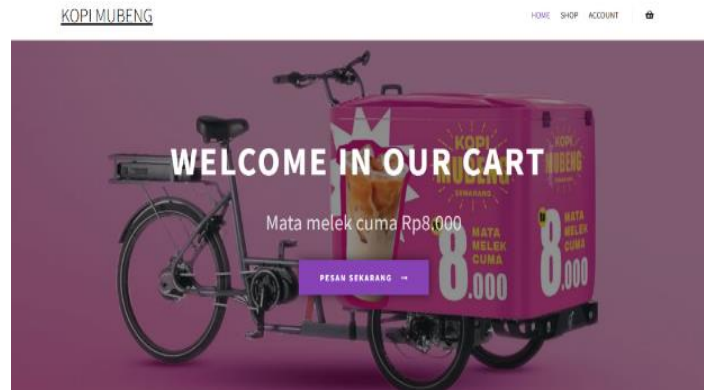


Figure 30.3 Activity Diagram

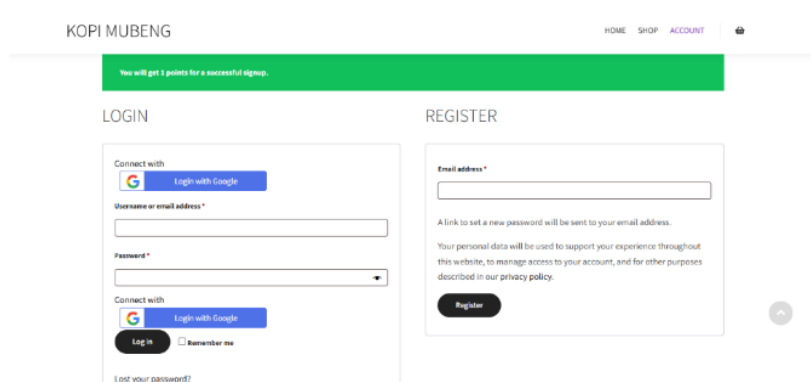
**Website implementation results**

The implementation of the KopiMubeng website using WordPress and WooCommerce successfully produced a functional online ordering system supported by an integrated Midtrans payment gateway. The landing page presents a visual identity that reflects the KopiMubeng mobile coffee concept, featuring a strong visual impression through imagery of the signature coffee bicycle and a clear call-to-action directing users to begin ordering. The layout and typography are designed to attract attention quickly and guide visitors toward the main transaction features.



**Figure 30.4 Landing Page**

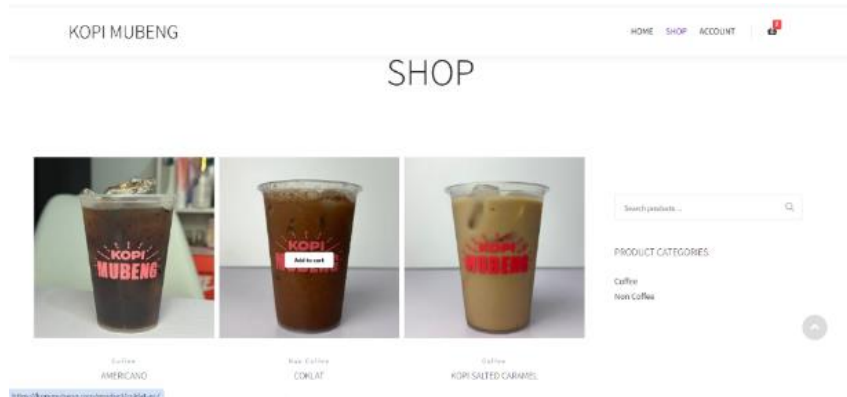
The login page was designed to provide flexible access options, allowing users to sign in using Google accounts or manual email–password input. The system also provides a “Remember me” feature to maintain session convenience, as well as an account registration feature offering reward points to encourage new-user sign-ups. This supports user onboarding and enhances digital transaction readiness.



**Figure 30.5 Login Page**

The Shop page enables users to view product categories (Coffee and Non-Coffee) with clear product images, descriptions, and “Add to Cart” options. A search bar is also

available to help users find specific products quickly. This interface simplifies product browsing and enhances overall user experience.



*Figure 30.6 Shop Page*

### **Black-box test result**

Black-box testing was conducted to evaluate whether all system features worked according to their functional specifications. Testing examined the system purely from the user perspective by providing inputs on the interface and observing the resulting system responses.

### **Testing components**

Each main feature was tested through a structured scenario, including account registration, login, catalog display, product selection, Midtrans payment flow, checkout completion, and notification generation.

### **Summary of test results**

The results of black-box testing indicate that all tested features performed successfully. For example:

- Account registration with valid data successfully created an account and redirected the user to the homepage.
- Login using valid credentials redirected the user to their dashboard.
- Catalog and product viewing displayed all available products accurately.
- Product selection correctly showed product descriptions and price details.
- Payment via Midtrans proceeded smoothly and generated appropriate order status notifications.

All test scenarios resulted in a “Pass” status, confirming that the website functions effectively and is ready for user operation.

### **Interview results**

The interviews were conducted with one KopiMubeng business owner and one customer to understand usability, convenience, reliability, and long-term feasibility of the system.

#### **1. Owner Perspective**

The owner appreciated the efficiency gains resulting from digital ordering and Midtrans integration. Manual errors in recording orders and payments were reduced, while online transactions sped up service time.

#### **2. Customer Perspective**

The customer found the website very easy to use, with a clear interface and intuitive navigation—even for first-time users. The digital payment process was perceived as **faster and more secure** compared to manual payment methods. The customer particularly appreciated:

- The **shopping cart** feature,

- The **payment notification** system,
- The overall convenience of online ordering.

These findings indicate a positive user experience and suggest strong acceptance of the system by both operational stakeholders and end users.

### **Operational impact analysis**

The implementation of a WordPress-based website integrated with Midtrans resulted in improved operational efficiency for the KopiMubeng business. Product management, order handling, and transaction processing became more organized and faster. Additionally, digital payments minimized recording errors and improved transaction accuracy, contributing to smoother business operations.

Overall, system implementation demonstrates strong potential for sustainable use and future feature expansion.

### **CONCLUSION**

This study has successfully designed and implemented a WordPress-based website for KopiMubeng integrated with the Midtrans payment gateway as a digital solution to support mobile coffee business operations. The system provides core functionalities such as user registration, login, product catalog browsing, cart management, online payment, and order status notification, all of which are accessible through a structured and user-friendly interface. Black-box testing results show that every main feature - from account registration and login to product selection, checkout, and payment processing - operated according to the specified functional requirements, with all test scenarios declared “Pass.”

The integration of Midtrans as a digital payment solution contributes to faster and more secure transactions compared to manual methods. This reduces the risk of recording errors and helps streamline the payment process, thereby improving overall operational efficiency. The website also simplifies product management, order handling, and coordination between online ordering and on-site pickup, which is crucial for a mobile business model such as KopiMubeng.

Interview findings from both the business owner and a customer indicate a positive response toward the system. Users perceive the website as easy to use, with clear navigation and helpful features such as the shopping cart and payment notifications. Digital payment via Midtrans is considered more practical and reliable, reinforcing user trust in the transaction process. These qualitative insights confirm that the system is not only functional from a technical perspective but also well received from the user experience standpoint.

## REFERENCES

- Aprilianti, D., Agustian, A., & Narimawati, U. (2025, July). Adoption and Use of Digital Marketing Tools Among Food and Beverage MSMEs in Gen Z. *Jurnal Ilmiah Manajemen Kesatuan*, 13(4), 2899-2908. doi:doi: 10.37641/jimkes.v13i4.3687
- Arafath, Y. (2021, December). Yasir Arafath Content Management Systems: An overview between WordPress and Drupal. *Metrop. Univ. Appl. Sci.*, 35.
- Herman, N. M., Nirwana, N., Fahdal, M. A., & Hasan, H. (2023). The Role of Technology and Accounting Information Systems in Improving the Operational Activities of MSMEs. *Int. J. Humanit. Educ. Soc. Sci.*, 3(3), 1325–1331. doi:10.55227/ijhess.v3i3.683
- Hidajat, K., & Salini, S. S. (2024). Benefits of Using a Payment Gateway. *The 4th International Seminar and Call for Paper* (pp. 276–281). Jakarta: UTA '45. doi:10.5220/0012579500003821

Martinez-Caro, M., Aledo-Hernandez, A.-J., Guillen-Perez, A., Sanchez-Iborra, R., & Cano, M.-D. (2018, January). A Comparative Study of Web Content Management Systems. *Information*, 9(2), 27. doi:10.3390/info9020027