



Implementation of R-Mart Online as a Marketing Strategy to Increase Business Revenue at R-Mart Minimarket Sungai Sahang

Dewi Irmawati Siregar¹, Nur Jumriatunnisah², Nurul Ilma Hasana Kunio^{3,*}, Friska Sagita Sinaga⁴, Nanda Putri Septiani⁵, Erlinda Hosiana⁶

^{1,2,3,4,5,6} State Polytechnic of Sriwijaya
nurulilmahk@polsri.ac.id

Abstract. The rapid advancement of information technology has significantly transformed business marketing strategies. One such strategy is the use of online platforms to enhance marketing reach and increase revenue. This research focuses on the implementation of R-Mart Online, an e-commerce platform aimed at boosting the income of the R-Mart minimarket in Sungai Sahang, Palembang. Before the implementation of R-Mart Online, the minimarket faced several business challenges, including a limited customer base confined to physical store visitors, slow operational scalability, and increasing competition from retailers adopting online platforms. By leveraging online marketing strategies, the goal is to improve the sales performance of the store, which currently operates only as a physical establishment. The study follows the Web Development Life Cycle (WDLC) methodology, including stages such as planning, design, development, testing, and maintenance, all tailored to meet R-Mart's specific needs. This research examines the impact of digital marketing strategies on the store's profitability and explores how the system improves customer engagement and market expansion. The results indicate a significant increase in sales and customer retention, thanks to the online platform. Additionally, this study highlights the challenges encountered during the transition from a traditional to an online business model and provides recommendations for further improvements.

Keywords: *E-Commerce, Online platform, Online business model, WDLC.*

1. INTRODUCTION

In recent years, the rapid development of technology has revolutionized the retail sector, compelling businesses to adopt new marketing approaches. For small and medium enterprises (SMEs) like the R-Mart minimarket, implementing an online platform offers both opportunities and challenges. While traditional marketing methods remain relevant, they are no longer sufficient to remain competitive in today's digital landscape. The rise of e-commerce platforms enables businesses to expand their customer base beyond geographical boundaries and enhance revenue streams. However, SMEs often face difficulties in transitioning from conventional practices to digital solutions due to limitations in technical expertise, resources, and strategic planning[1]. The digital transformation of SMEs has become increasingly critical, particularly in light of the COVID-19 pandemic, which accelerated the shift toward online shopping. Studies have shown that SMEs adopting e-commerce platforms see significant gains in market reach and customer retention. Effective digital platforms facilitate more efficient resource allocation, improve decision-making processes, and enhance customer interactions[2].

This research seeks to address these challenges by implementing R-Mart Online, a customized e-commerce platform, as a strategic marketing tool to increase the store's revenue. According to Sulistiyanto et al. (2023), the adoption of online platforms, such as e-commerce

websites, is essential for enhancing business competitiveness by improving operational efficiency and expanding customer reach[3].

The R-Mart minimarket in Sungai Sahang, Palembang, currently operates solely as a physical store, which limits its potential for market expansion. As competition from other retailers rapidly adopting online platforms intensifies, R-Mart must utilize e-commerce strategies to stay competitive. Implementing R-Mart Online as a marketing strategy can help the business overcome geographic constraints, increase sales, and enhance customer retention by providing an online shopping experience that aligns with the evolving demands of modern consumers.

The significance of digital marketing in modern retail cannot be overstated. Numerous studies, including those by Grewal et al. (2017) and Kannan & Hongshuang (2017), have highlighted the transformative impact of e-commerce in enhancing operational efficiency, improving customer experience, and increasing sales[4], [5]. Similarly, Sudirwo et al. (2021) observed that many SMEs continue to rely on conventional sales methods, missing out on the advantages of online marketing platforms[6]. Monica et al. (2024) emphasized that digital platforms not only enhance customer satisfaction by offering greater convenience but also provide businesses with real-time data to support decision-making[7]. Additionally, Rahmi et al. (2023) underscored the importance of employing the Web Development Life Cycle (WDLC) methodology to ensure a systematic and user-centered approach to digital transformation in SMEs[8]. In light of these insights, the R-Mart minimarket aims to leverage digital marketing strategies to improve its competitiveness, particularly in an increasingly digital consumer environment.

The objective of this research is twofold: first, to design and implement a functional e-commerce platform for R-Mart; and second, to evaluate its effectiveness in increasing sales and customer engagement. By utilizing the Web Development Life Cycle (WDLC) methodology, this study adopts a structured and systematic approach to web development, ensuring that the platform addresses the specific needs of both the business and its customers.

2. RESEARCH METHODOLOGY

This research employs a descriptive analysis methodology, focusing on the design and implementation of the R-Mart Online platform. The Web Development Life Cycle (WDLC) serves as the methodological framework, offering a structured approach to web development through several key stages: planning, analysis, design, development, testing, and maintenance. Each stage plays a crucial role in ensuring the successful implementation of the e-commerce platform and is tailored to meet the specific needs of the R-Mart minimarket. Figure 1 illustrate the stage of WDLC.

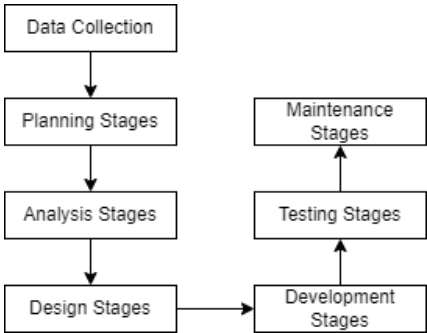


Fig 1. WDLC model.

2.1. *Data collection*

Primary data is collected through observations and interviews with R-Mart management to identify the key requirements for the online platform. Secondary data, including relevant literature on e-commerce strategies, is used to support the development process.

2.2. *Planning stage*

This stage involves mapping out the website's objectives, which include enhancing product visibility, enabling online transactions, and facilitating order tracking. The planning phase also encompasses the selection of appropriate programming languages and software tools for the platform. Figure 2 illustrates the flowchart of the system.

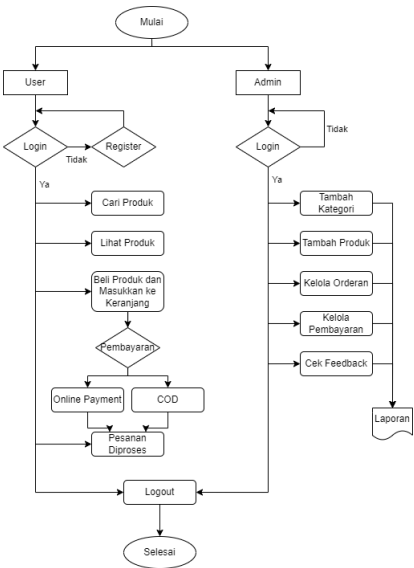


Fig 2. Flowchart.

2.3. *Design stage*

The design stage focuses on creating the layout and user interface of the platform, ensuring that it is user-friendly and intuitive. Mock-ups and wireframes are developed to visualize the website's structure. Figure 3 illustrates the entity-relationship diagram of the R-Mart Online platform.

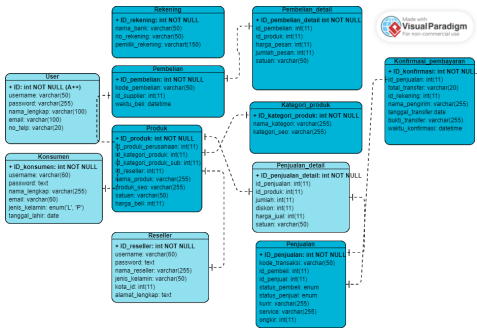


Fig 3 .Entity relationship diagram.

2.4. *Development stage*

During this stage, the coding of the platform is conducted, encompassing both front-end and back-end development. The website is integrated with secure payment gateways and a database for managing product inventory and customer information. Integrating the payment gateway posed challenges, particularly in ensuring compatibility with multiple payment methods, securing transactions, and educating customers on using the new system. Addressing these issues was crucial to maintaining user trust and ensuring seamless transactions. The database structure utilized in this research comprises 11 detailed tables, each serving a specific function for managing user data, product sales, purchases, and financial transactions.

2.5. *Testing stage*

A series of tests are conducted to ensure the website's functionality, including usability testing, security testing, and performance testing. During the testing phase, usability, security, and performance tests were conducted to ensure the platform's robustness. The maintenance phase includes regular updates and improvements based on customer feedback, ensuring that the system remains secure and aligned with user needs. Additionally, user feedback is collected to identify potential areas for improvement.

2.6. *Maintenance stage*

After the website is launched, ongoing maintenance is conducted to ensure it remains functional and up to date. Regular updates are implemented to enhance features and address any bugs.

3. DISCUSSION

The implementation of R-Mart Online marks a significant step forward in the digitalization of small-scale retail businesses. One of the primary advantages of the platform is its ability to reach a wider audience beyond the physical confines of the R-Mart minimarket. This shift to an online platform aligns with the growing trend of digital consumerism, where convenience and accessibility are key factors driving purchasing decisions.

Through the WDLC methodology, the platform was designed with both business and customer needs in mind. The user-friendly interface enables customers to easily navigate product categories, make purchases, and track their orders, thereby enhancing the overall customer experience. From a business perspective, the platform provides real-time data on sales and inventory, facilitating more efficient stock management and strategic decision-making. Figure 4 below presents screenshots of the R-Mart Online website interface.

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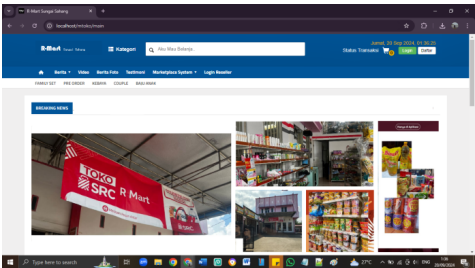


Fig 4. R-Mart online website interface.

The admin side of the platform offers advanced functionality for managing product listings, processing customer orders, and reviewing sales reports. The admin login page ensures secure access to an administrative dashboard, where authorized personnel can control various aspects of the platform. Once logged in, the admin can monitor inventory, update product details, adjust pricing, and oversee ongoing promotions. This section also allows for reviewing order statuses and customer inquiries, which is essential for maintaining smooth operations and ensuring a positive customer experience. Figure 5 illustrates the admin login page, while Figure 6 depicts the admin dashboard and its core functionalities for business management.

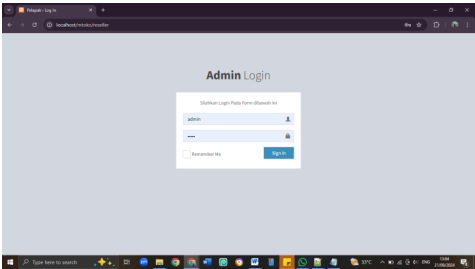


Fig 5. Admin login page.

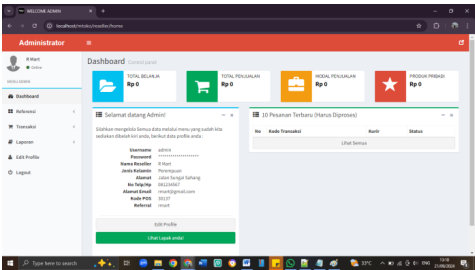


Fig 6. Admin dashboard.

The admin can log into the system, as shown in Figure 5. Figure 6 shows the admin dashboard of R-Mart Online. Within the admin dashboard, there is a reference menu that facilitates the configuration of various essential settings and management of business operations. This includes setting up bank account details, managing product data, configuring cash on delivery (COD) addresses, and viewing customer purchase transactions. Additionally, the dashboard provides access to financial reports detailing revenue generated from reseller sales. The admin can also update and edit their profile through this menu, ensuring that all business-related information remains current and efficiently managed. Figure 7 illustrates the financial reports.

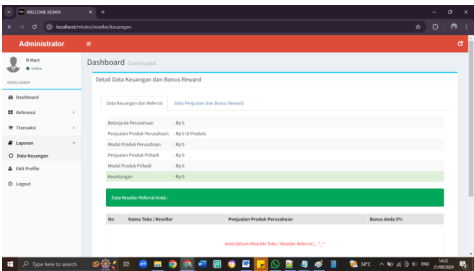


Fig 7. Financial reports.

The research findings indicate that the implementation of R-Mart Online has positively impacted the minimarket’s revenue, with a noticeable increase in sales within the first few months following its launch. Additionally, customer feedback reflects high levels of satisfaction regarding the convenience and functionality of the platform. Customer feedback has been instrumental in optimizing the R-Mart Online platform, leading to improvements in user interface design and checkout processes. Furthermore, the platform seamlessly integrates with R-Mart’s existing inventory and financial systems, allowing for efficient order tracking and stock management. However, the transition to an online business model is not without its challenges. Issues such as website downtime, payment gateway integration, and initial resistance from customers accustomed to the traditional in-store experience were identified during the testing and evaluation phases.

4. CONCLUSION

The R-Mart Online platform has proven to be an effective marketing strategy for increasing the income of the R-Mart minimarket. The platform’s capacity to reach a broader audience and offer customers a convenient shopping experience has contributed to a significant boost in sales. Furthermore, the structured approach provided by the WDLC methodology ensured that the platform was designed and implemented to meet the specific needs of both the business and its customers. While the transition to an online business model presented certain challenges, the overall benefits of the platform, such as increased sales and enhanced customer engagement, far outweigh the drawbacks. Moving forward, additional improvements to the platform—such as integrating mobile payment options and establishing a loyalty program—are recommended to further enhance the user experience and drive customer retention.

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