



Implementation of Web-Based Marketing System Technology for Bakat Jaya MSMEs, Magelang

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ARTICLE INFO

Article history

Received : 21-4-2025

Revised : 24-5-2025

Accepted : 26-5-2025

Keywords

Digital transformation;
SME digitalization; Web-based marketing

ABSTRACT

This study explores a digital transformation initiative implemented for UMKM Bakat Jaya, a micro-enterprise based in Magelang specializing in animal feed production. Initially hindered by limited market reach, low digital literacy, and a lack of integrated technological tools, the enterprise relied primarily on traditional social media platforms for promotion. To address these challenges, a comprehensive and user-friendly website was developed using WordPress, featuring a professional company profile, product gallery, contact information, and seamless integration with existing social media accounts. The project was executed in four key phases: needs identification, website design and development, training and mentoring, and implementation followed by evaluation. Remote interviews and surveys were conducted to assess the partner's needs, while capacity-building activities empowered stakeholders to manage the digital platform independently. Preliminary outcomes indicate a substantial improvement in market visibility, customer engagement, and operational efficiency. The results highlight the potential of structured digital interventions to transform the promotional strategies of rural micro and small enterprises, offering a scalable and sustainable model for enhancing competitiveness in similar contexts.

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A. INTRODUCTION

In the current digital era, the ability to adapt to technological developments is essential for the growth and sustainability of small and medium enterprises (SMEs) (Saerang et al., 2024). However, many SMEs, especially those in rural areas, still face significant challenges in effectively utilizing digital platforms due to limited digital literacy, inadequate technological infrastructure, and insufficient integration of digital tools (Enny Diah Astuti & Rahmi Rosita, 2024). UMKM Bakat Jaya, a micro-enterprise in Magelang specializing in animal feed production, exemplifies these challenges as it currently relies on social media platforms such as Facebook and WhatsApp for promotion. Although these platforms offer basic



communication channels, they often limit market visibility and restrict interactive engagement with customers (Rachmadani et al., 2024).

The primary issue lies in the lack of technological integration needed to professionally promote products and manage business operations. This challenge hampers the potential of UMKM Bakat Jaya to expand its market reach and engage competitively in the increasingly digitalized business environment (Enny Diah Astuti & Rahmi Rosita, 2024; Saerang et al., 2024). To address these issues, a comprehensive digital transformation intervention has been designed through the development of a company profile website. Unlike conventional social media, this dedicated website is equipped with complete features such as a detailed business profile, a product and service gallery, contact information, and seamless integration with various social media platforms—making it a more effective tool for digital promotion (Rachmadani et al., 2024).

Moreover, the initiative is reinforced by a systematically designed community empowerment program. This begins with an initial analysis to determine the specific needs of its beneficiaries. The outcomes of this assessment inform the development of a tailored website utilizing the WordPress platform. Subsequently, a structured training session is delivered to equip participants with the competencies needed to independently operate and update the digital platform. To maximize the impact of this technology, ongoing technical support is made available throughout the implementation period (Enny Diah Astuti & Rahmi Rosita, 2024). The effectiveness of this approach is well-documented in the literature. Studies have indicated that targeted technological interventions—such as incorporating environmental education with digital platforms—and corresponding capacity-building efforts can significantly improve the performance of small and medium enterprises (Aji et al., 2024). Likewise, the implementation of structured training in embedded systems within academic environments has demonstrated measurable improvements in institutional capabilities (Aji et al., 2023). These insights reinforce the importance of integrating well-planned digital solutions and comprehensive training to support technology adoption, improve operational efficiency, and enhance the competitiveness of SMEs.

By implementing this comprehensive program, UMKM Bakat Jaya is positioned to adopt digital technologies more effectively, refine its promotional strategies, expand market outreach, and improve its standing within the digital economy. The successful realization of this effort is expected to serve as a catalyst for broader digital transformation among SMEs, fostering sustainable business development in an increasingly technology-centric landscape (Rachmadani et al., 2024; Saerang et al., 2024).

B. METHODS

The implementation of the community service program was executed through a systematic, multi-phase approach to ensure that the objectives were effectively met according to the partner's needs. This method was designed with a strong emphasis on aligning technological solutions with the specific challenges faced by UMKM Bakat Jaya. The process can be delineated into four distinct phases: identification of needs, system design and development, training and mentoring, and finally, implementation with subsequent evaluation.

1. Phase 1: Identification of Needs

In the initial stage, the team conducted comprehensive surveys and direct interviews with the UMKM owner to gain an in-depth understanding of the business operations and their digital marketing challenges. The results underscored a clear requirement for a dedicated



digital platform—a website that could present a professional company profile—beyond the limited promotional capabilities of social media channels such as Facebook and WhatsApp (Hoque et al., 2016). In this phase, the team also assessed the basic digital literacy of the UMKM personnel to tailor subsequent training sessions accordingly (Hoque et al., 2016).

2. Phase 2: Design and Development of the Website

Based on the insights obtained, the team proceeded to design and develop a responsive website using the WordPress platform. The decision to use WordPress was underpinned by its ease of use and flexible content management system, which is particularly beneficial for users with limited technical expertise (Anita Wulansari et al., 2022). The website was structured to include critical features such as a company profile page, an extensive product and service gallery, dedicated contact information, and integration with social media channels. A specialized technical team focused on creating a user-friendly interface (UI/UX) and optimizing the website's performance across various devices. This structured development phase is consistent with agile methodologies often adopted in similar e-commerce website development projects (Anita Wulansari et al., 2022).

3. Phase 3: Training and Mentoring

Once the website development was completed, a comprehensive training program was implemented to empower the UMKM stakeholders with the skills needed to manage the website independently. The training sessions covered fundamental aspects such as updating content, uploading product images, and managing the integrated contact features. This phase was not limited to one-off training; continuous technical mentoring was provided to reinforce the learning process and address any emerging issues, thereby ensuring sustainable, independent website management (Hoque et al., 2016).. This approach to capacity building has been shown to increase digital literacy and operational efficiency in SMEs (Neirotti et al., 2018).

4. Phase 4: Implementation and Evaluation

In the final phase, the fully developed website was deployed for active use by the UMKM partner. The team conducted rigorous monitoring and evaluation activities during a predetermined period to assess key performance indicators such as website traffic, user engagement, and overall ease of use. Feedback was systematically collected from the UMKM owner to guide iterative improvements and ensure that the platform effectively met the business needs. The positive evaluation results, which indicated an increase in market reach and professional digital presence, affirm the success of this methodical and user-centered approach (Neirotti et al., 2018).

This phased methodology not only ensured that each stage was aligned with the specific challenges and requirements of UMKM Bakat Jaya, but it also established a replicable model for digital transformation initiatives in similar rural SMEs. By integrating robust needs assessment, agile development practices, and continuous support, the program effectively bridged the digital divide, enhancing both market competitiveness and business sustainability (Anita Wulansari et al., 2022; Hoque et al., 2016; Neirotti et al., 2018).

C. RESULTS AND DISCUSSION

The results and discussion of this project are presented in four main sections: identification of needs, planning and development, technology implementation, and evaluation of the program's sustainability. Each phase was strategically designed to address



and mitigate the specific challenges faced by UMKM Bakat Jaya in leveraging digital tools for business growth.

1. Identification

In the initial phase, the identification of needs was conducted through remote interviews and location surveys via telephone and WhatsApp, considering the partner's limited availability. The findings revealed that despite the rapid advancement of information technology, the adoption of digital tools among micro, small, and medium enterprises (UMKM) remains significantly limited (Susanto et al., 2020). Many UMKM operators lack understanding of effective digital marketing strategies and are unfamiliar with the use of e-commerce platforms, social media tools, or supporting business applications. This knowledge gap results in restricted market reach, reduced competitiveness, and suboptimal profit potential. Additionally, insufficient skills in managing digital business operations—such as using accounting software or inventory management systems—further hinder business growth. These issues are compounded by the limited availability of ongoing training and technical mentoring, along with inadequate infrastructure such as stable internet connectivity (Abdurrahman et al., 2020; Susanto et al., 2020).

2. Planning and Development

During the planning phase, the development team designed a website tailored to the specific needs of UMKM Bakat Jaya. The website was developed using user-friendly platforms (WordPress and/or HTML/CSS), ensuring that content management would be accessible and manageable for the partner. It features a professional company profile page, a comprehensive listing of products and services, detailed contact information, a photo gallery, and seamless integration with social media platforms. These components support both promotional and communication goals, and the design adhered to contemporary User Interface (UI) and User Experience (UX) principles to ensure responsiveness across multiple devices (Saputra et al., 2024). The design process also took into account the visual identity and operational style of the business, ensuring consistency with its brand image. The web view is shown in Figure 1.

3. Implementation

In the implementation phase, the website was launched as an active platform for digital promotion and customer engagement. The project team provided hands-on training and technical mentoring to the UMKM stakeholders, including instructions on how to update product listings, upload images, and manage inquiries through the contact features. Additional emphasis was placed on linking the website with existing social media accounts to increase reach and facilitate interactive engagement with potential customers. This practical, user-centered approach was essential in enabling UMKM Bakat Jaya to operate the website independently and efficiently, thereby strengthening their digital presence (Abdurrahman et al., 2020). The implementation and training documentation is shown in Figure 2.

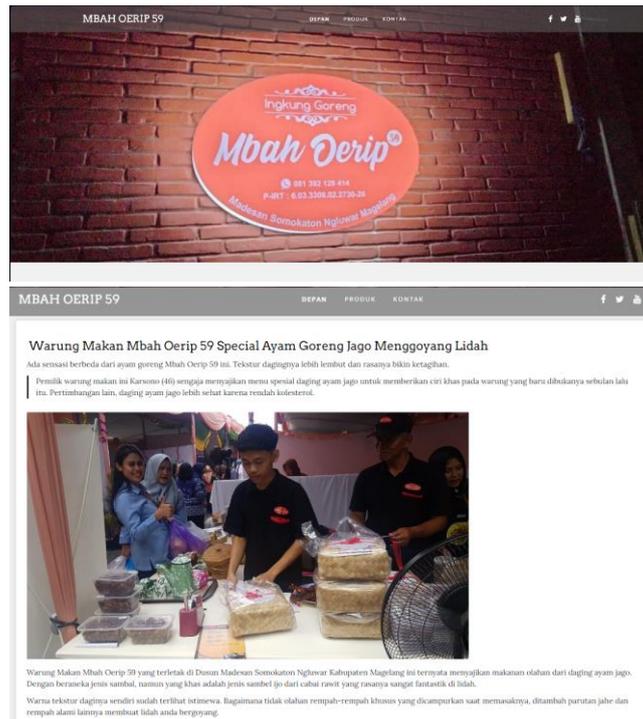


Figure 1. Web Design Interface.



Figure 2. Documentation of Implementation and Training.

4. Evaluation of Program Sustainability

The final phase focused on evaluating the short-term and long-term impacts of the technology implementation. Monitoring activities were conducted over a defined period, using indicators such as website traffic, user engagement, and operational efficiency. Feedback from the partner confirmed increased market visibility and a more professional



image in digital communication and product promotion. The results indicate that transitioning to a dedicated digital platform has significantly enhanced the competitiveness of UMKM Bakat Jaya. Furthermore, the continued technical support and improvements based on evaluation feedback have laid the foundation for a scalable and replicable model of digital transformation for rural SMEs, with the potential to contribute to broader, sustainable local economic development (Saputra et al., 2024).

D. CONCLUSION

In summary, the digital transformation intervention carried out with UMKM Bakat Jaya has effectively demonstrated the impact of tailored technological solutions in addressing the specific challenges faced by rural micro, small, and medium enterprises (MSMEs). The project commenced with a comprehensive needs assessment, which identified substantial gaps in digital literacy and the utilization of digital marketing tools. By shifting from basic reliance on social media to a professionally designed, feature-rich website, the initiative significantly enhanced the enterprise's online visibility and operational management. The adoption of a user-friendly platform enabled stakeholders to independently manage the digital infrastructure, supported by targeted training and continuous technical assistance. This holistic approach has resulted in improved market outreach, increased operational efficiency, and a stronger competitive position within the digital economy. The success of this initiative serves as a replicable model for digitalization efforts in similar contexts, promoting sustainable growth and economic resilience in rural communities.

E. ACKNOWLEDGEMENTS

The authors would like to express their sincere gratitude to UMKM Bakat Jaya, Magelang, for their active participation and collaboration throughout the implementation of this digital transformation initiative. Special thanks go to the owner and staff members who generously shared their time, insights, and feedback, which were invaluable to the success of this project.

We would also like to thank the community service team and technical support staff who contributed to the website development, training, and mentoring activities. Their dedication and expertise played a crucial role in ensuring the sustainability and effectiveness of the digital solution provided.

Lastly, we extend our appreciation to all parties who contributed, directly or indirectly, to the successful completion of this initiative.

F. AUTHOR CONTRIBUTIONS

All team members actively contributed to each stage of the digital transformation program for UMKM Bakat Jaya as described in this article. Nurseno Bayu Aji, as the team leader, guided the strategic planning, needs assessment, and website system development. Dr. Samuel BETA K.K., Tri Raharjo Yudantoro, Mardiyono, and Dr. Kurnianingsih coordinated communication with the partner and supported the initial analysis. Muhammad Irwan Yanwari and Liliek Triyono were responsible for the visual design and multimedia content of the website. Muhammad Anif, Wiktasari, and Prayitno developed and delivered training sessions and technical mentoring for the partner. This collaborative contribution ensured the success of the program from needs identification to impact evaluation, as outlined in the paper.

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