

Marketing and Business Management Improvement through Utilization of Digital Technology at Pujon's MSMEs Malang

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Abstract

Madiredo Village, Pujon District's micro, small, and medium-sized enterprises (MSMEs) are the target of this research-based community service project, which uses digital technology to enhance marketing and business management in the digital age. By incorporating digital tools such as social media, e-commerce systems, and financial management software into their operations, the program aims to help rural MSMEs address the challenges they face. Through mentorship and instruction, the project is meant to raise operational efficiency, business management openness, and market reach. The data shows that businesses have been able to broaden their clientele and simplify operations utilizing digital technology, therefore positively impacting them. Among the obstacles found were inadequate internet access, poor digital literacy, and a lack of technical training among company operators. The study stresses the necessity of working together, village governments, schools, and companies, to improve the digital capacity of the community to solve these difficulties. Madiredo Village can fully realize the promise of digital technology to promote sustainable local economic development and empower its MSMEs in the digital economy by encouraging such synergies.

Keywords: Business management; Digital marketing; Digital technology; MSMEs.

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Introduction

Information technology is advancing rapidly in today's world and influencing several industries, including commerce and marketing. Companies within all settings are using technology more and more in the digital age to improve function, increase clientele, and increase engagement. This evolution is beneficial for Micro, Small, and Medium Enterprises (MSMEs) that reside within rural areas since they tend to face difficulties in accessing wider markets, as well as contending with ever-increasing competitors. Using digital technologies, social media, e-commerce systems, and financial management tools, one approach to solve these issues is inclusively. Still, notwithstanding possible advantages, the acceptance of digital technologies in rural areas like Madiredo Village is low because of obstacles, including insufficient technical training, limited internet access, and poor digital literacy.

Empirical research discusses how digital marketing and technology may change businesses' development. For example, a 2014 Suryani study stresses how social media helps businesses become more visible through a strong marketing tool that enables communication. [Yasmin et al. \(2015\)](#) similarly emphasize how crucial digital marketing is for using electronic media to efficiently and quickly contact consumers. More recent research has confirmed these results even further by showing that in business management, digital technology not only increases operational efficiency but also promotes openness and accountability ([Hinings et al., 2018](#); [Malik et al., 2024](#)). However, these studies also show considerable variations in the use of digital technologies among rural MSMEs, especially in underdeveloped areas where infrastructure and capacity building continue to be key limitations.

Conceptually, this research is based on the ideas of digital transformation and community involvement. Digital transformation is the application of digital technology throughout every aspect of a company, therefore altering its operations and value delivery to clients. Conversely, community engagement stresses the cooperative participation of interested parties, including local authorities, educational institutions, and companies, to meet community needs and promote sustainable development. This study aims to connect technological potential with practical application in rural settings by integrating several frameworks (Xu et al., 2024).

The originality of this study is in its concentration on Madiredo Village, a small town where digital technology usage is still under development. Unlike urban areas, where digital literacy and infrastructure are more developed, rural areas present particular difficulties demanding customized solutions. By creating a community-based strategy for digital marketing and business management, this study seeks to solve these issues and guarantee that the solutions are relevant and long-lasting (Rogers, 1964; Hornor, 2022)..

The threefold goal of the study is as follows: first, to evaluate the extent of MSME use of digital technology in Madiredo Village; second, to pinpoint the obstacles preventing the use of digital tools; third, to develop and carry out a community engagement program that increases digital literacy and encourages the appropriate application of digital marketing approaches. Accomplishing these goals will help local companies to compete in larger markets, generate fresh economic possibilities, and support the community's sustainable development.

Factual and actual challenges in Madiredo Village include low digital literacy, limited market access, and a dearth of technical training that impede the community's ability to utilize digital technology for business development. These difficulties call for a participatory strategy whereby the community is actively engaged in the planning and execution of the program. Proposed community involvement events would comprise workshops, training sessions, and the creation of a support network, including educational institutions and local governments. To guarantee that the community not just embraces digital technologies but also maintains their long-term usage, to fulfill the main aim of the research in promoting sustainable local economic growth, this cooperative effort is vital.

Method

This research employs a descriptive qualitative (Denzin, 2008) approach with a mentoring method to address the challenges faced by business actors (Hollstein, 2011; Hasty & Hay, 2012) in Madiredo Village, Pujon District, in adopting digital technology for marketing and business management. The mentoring process was conducted over 40 days since November 13, 2024, and included four stages: needs identification, material delivery, hands-on practice, and evaluation. Data collection techniques involved interviews and surveys to assess the digital literacy levels, business types, and specific challenges of selected MSMEs. The sample was chosen purposively to ensure representation across various business sectors. The validity and reliability of data collection tools were ensured through pilot testing and triangulation.

In the first stage, needs identification, researchers mapped the conditions of business actors through interviews and surveys. This data informed the development of tailored mentoring materials. The second stage, material delivery, involved group mentoring sessions using lectures, discussions, and demonstrations. Topics included digital marketing strategies, social media utilization, e-commerce optimization, and financial management applications. The third stage, hands-on practice, provided technical guidance to participants in creating social media accounts, setting up e-commerce platforms, and using business management tools. Mentors addressed technical issues in real time to ensure practical skill acquisition.

The final stage, evaluation, assessed the program's effectiveness through follow-up interviews and observations. Data was analyzed thematically to identify patterns and challenges. Activities were documented through notes, photos, and videos for comprehensive analysis. Before the program, businesses in Madiredo Village faced limited market access, low digital literacy, and inefficient management practices. Expected results include better digital competence, more market reach, better operational efficiency, and sustainable business growth, therefore boosting local economic development.

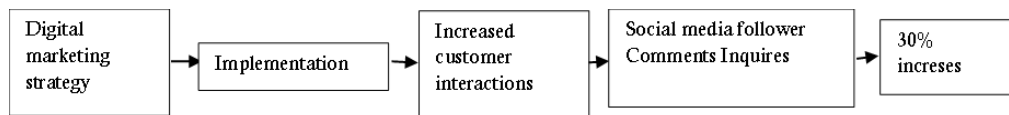
Result and Discussion

Madiredo Village's mentoring program sought to enable local company owners by giving them digital tools to improve marketing and business administration. The program emphasized practical training and hands-on support over three months, which led to notable gains in participants' knowledge and use of digital tools. The following is a brief overview of the program's activities, results, and photographic evidence.

Activities and results: First, pre-mentoring circumstances, most companies before the program used traditional techniques such as direct sales and word-of-mouth promotion. Manual maintenance of financial records resulted in errors and inefficiency. Digital literacy was limited, and just a handful of companies had an e-commerce or social media presence. Second, the Mentoring Process, the program had four phases: 1. Interviews and questionnaires showed disparities in digital literacy and particular difficulties experienced by companies. 2. Digital marketing, social media optimization, e-commerce configuration, and financial management applications were among the topics group sessions addressed. 3. Participants built social media profiles, marked items on e-commerce sites, and managed finances using apps with real-time assistance. 4. Follow-up interviews and observations evaluated the program's effect. Training data up to October 2024.

Participants in Digital Marketing noted a 30% rise in social media customer interactions, such as queries, comments, and followers.

Digital Marketing Impact on Customer Interactions

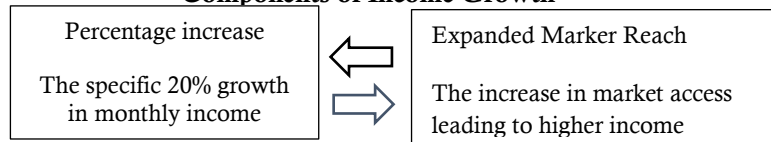


The claimed 30% rise in customer contacts on social media highlights the need for good digital marketing techniques. By emphasizing content creation, directed marketing, and responsive communication, companies can increase customer engagement and develop long-term relationships with their audience. Staying in touch with consumer interactions will be essential for ongoing success as digital marketing develops.

Financial Management improved openness and accuracy as companies switched from manual record-keeping to digital systems. A turning point in financial control is the shift from manual record-keeping to digital applications. Embracing these technical developments helps companies to increase financial operations accuracy, openness, and efficiency. Organizations that respond to the changes will be better placed to survive in an ever-more competitive environment as the digital terrain develops continuously.

Income expansion for some participants came from a 20% increase in monthly income resulting from increased market reach.

Components of Income Growth



The 20% rise in monthly income among participants from broader market access provides a strong argument for the success of planned market activities. Participants who embrace creative solutions and stay attuned to market trends should be able to see considerable income development going forward.

Mindset change helped company owners become more receptive to ideas, some looking into internet markets and delivery services. A major change in the competitive environment today is the attitude change among company owners toward welcoming innovation. By investigating delivery services and internet marketplaces, business owners are not only responding to evolving customer tastes but also setting themselves up for long-term success. It will be fascinating to observe how companies further invent and reframe their strategies to satisfy the demands of the current market as this trend develops. Limited internet access, advanced training needs in content creation and e-commerce optimization, and recommendations are seen as continuing challenges. These sectors should be the main focus of future initiatives if sustainable development is to be guaranteed.



Image 1. Hands-On Training Session

Madiredo Village business owners taking a practical training course learn how to establish social media profiles and list goods on e-commerce websites. The workshop focused on practical skills to guarantee instant use in their companies.



Image 2. Financial Management Workshop

A workshop instructor on utilizing digital financial management tools. Participants became accustomed to digitally logging profits, costs, and income, therefore substituting for fallible manual processes.

The mentoring initiative helped companies in Madiredo Village become more innovative by improving their digital competencies. Although obstacles still exist, the initiative established a solid basis for long-term development using digital technology. These successes will serve as a foundation for upcoming projects meant to further increase the economic resiliency of society.

The results of this research show that mentoring as a strategy for fostering digital skills substantially benefits Madiredo Village company owners. This is in line with previous studies, such as [Iqbal \(2023\)](#), who underlined how well hands-on instruction improved digital literacy among microsmall and medium businesses (MSMEs). In a computerized world, digital marketing and social media greatly affect consumer buying decisions, changing how companies promote goods and services.

The intense mentoring offered in this study helped participants to overcome technical obstacles and include digital technologies in their business operations, therefore supporting the idea that individualized direction is essential for digital adoption in underprivileged areas. This research, however, offers a fresh view by emphasizing how maintaining these benefits depends on community involvement. Unlike earlier studies, which sometimes concentrated on specific results, this one highlights the entire influence of mentoring on the larger community, therefore promoting a society of digital creativity and cooperation.

The successful use of social media as a marketing tool was one of the main accomplishments of the mentoring program. This result is in line with [Khansa \(2022\)](#), who discovered that small companies' customer involvement and marketing reach are much improved by social media channels. Training in digital marketing helps MSMEs significantly broaden their market reach and improve knowledge and skills in using digital tools ([Samsinar, 2024](#)).

This research, though, offers a more complex view by underlining how important content quality is to achieving these results. Although participants effectively used social media, their capacity to produce interesting and innovative content was rather constrained. [Chatterjee \(2021\)](#) emphasized that imaginative digital marketing is a key engine of corporate expansion in the digital age; therefore, future interventions should give content production top priority. For MSMEs in developing countries, using social media marketing techniques greatly boosts sustainable business development; therefore, leadership support is very important in speeding this growth. Companies in Madiredo Village can further increase their internet visibility and client interactions by closing this gap.

The use of digital financial management tools, which enhanced business operations' openness and efficiency, was another important discovery. This matches [Dwivedi \(2020\)](#), who stressed the need for digital technologies in facilitating data-driven decision-making for MSMEs and investigated the future of digital and social media marketing, underscoring challenges and opportunities, while resolving research gaps and developing questions to advance understanding in the field. The study showed, however, that candidates battled with interpreting financial information for long-term planning, therefore underscoring the need for further training in financial literacy. This discovery adds a new dimension to already published studies by emphasizing the crossroads of digital adoption and monetary empowerment in rural areas. Improvements in these areas will enable companies to create resiliency and sustainability in addition to increasing their operational efficiency.

The research also found that subpar infrastructure and restricted internet access were some of the structural obstacles limiting the best application of digital technology. Though consistent with results from comparable environments, this research provides a different viewpoint by urging multi-stakeholder

cooperation to solve these problems. Improving technology accessibility, thereby establishing an enabling environment for digital innovation could be greatly aided by collaborations among the village government, internet service providers, and educational institutions. Mentoring proved to be a very successful intervention because of its capacity to promote personal relationships and enable knowledge transfer. Still, the resource-intensive character of this technique raises questions about its scalability. The study suggests creating digital-based self-training modules as a supplementary approach to tackle this. This advancement might help mentoring initiatives spread their scope, therefore ensuring more firms gain from digital skills training. The program can maintain its efficacy and become more scalable using direct mentoring mixed with self-paced learning.

Ultimately, this research not only reaffirms the need for mentoring in digital skills development but also brings fresh perspectives on the impact of community involvement, content quality, and multi-stakeholder cooperation in promoting digital adoption. Future programs that tackle these issues will enable rural areas like Madiredo Village to flourish in the digital economy by maximizing their impact. The Madiredo Village intervention operates within multiple interconnected theoretical frameworks that explain digital adoption in rural contexts. [Hanelt et al. \(2020\)](#) emphasize that digital transformation leads to malleable organizational designs that enable continuous adaptation, are driven by digital business ecosystems, and are partially covered by conventional organizational change frameworks. Digital transformation theory establishes that technology adoption requires simultaneous organizational, behavioral, and cultural changes, not merely technical implementation. The 30% increase in social media interactions and the 20% increase in income demonstrate measurable outcomes when such comprehensive change is facilitated. This finding aligns with [Deep \(2023\)](#) that digital transformation significantly impacts organizational culture, fostering adaptability, resilience, and continuous improvement through leadership, employee engagement, and communication. [Zhang et al. \(2021\)](#) asserted that digital transformation improves organizational resilience by promoting both exploitative and exploratory innovation in enterprises. While big data capability and organizational agility mediate digital transformation's impact on innovation performance ([Xu et al., 2024](#)).

Theoretically, digital innovation and transformation are treated as an institutional change that alters rules, structures, and fields ([Hinings et al., 2018](#); [Malik et al., 2024](#)). [Ramadan et al. \(2023\)](#) view that digital leaders act as institutional entrepreneurs, shaping norms, culture, and business model innovation. Digital innovation and transformation involve novel institutional arrangements, which gain social approval and influence existing rules of the game within organizations and fields ([Hinings et al., 2018](#)). Diffusion of innovation theory views any improvement (new practice, technology, or process) as an innovation that spreads via communication over time within a social system ([Rogers, 1964](#); [Hornor, 2022](#)). The diffusion of innovations theory explains the spread of innovations within a social system through communication processes and individual or organizational adoption ([Khan et al. 2020](#)). This diffusion of innovation theory helps explain how the documented improvements, particularly visible gains in customer interactions and income, accelerate technology adoption through social networks. However, rural contexts present distinctive diffusion patterns due to different infrastructure, trust networks, and information channels. Structural inequalities in internet access and technical training capacity reflect broader rural development challenges requiring policy-level intervention alongside individual mentoring.

The mentoring approach successfully generated measurable improvements in digital capability, market reach, and business performance. However, sustainability remains uncertain beyond the program period, and scaling resource-intensive direct mentoring presents challenges. The proposed digital self-training modules address scalability but may not effectively serve participants with lower baseline digital literacy. Future research should examine long-term sustainability, heterogeneity in program effects across business types, and mechanisms linking technological innovation, social capital formation, and institutional development.

Conclusion

Community engagement initiatives in Madiredo Village, especially through mentoring, effectively improved the digital marketing and financial management abilities of local companies, therefore addressing their particular demands and problems. By showing how hands-on mentoring may help to overcome technical obstacles and promote innovation, the program added fresh perspectives on digital adoption in underdeveloped settings. Sustainability, however, calls for cooperation amongst local governments, service providers, and educational institutions to solve structural issues such as restricted internet access and poor infrastructure. Better corporate competitiveness and community-wide economic development show the program's effects. Long-term advantages depend on additional training in advanced digital skills, including creative content development and financial analysis. Furthermore, creating digital-based self-training

modules could help one scale. To empower more communities and promote sustainable economic growth in the digital age, future projects should take a holistic approach, incorporating skill development, infrastructure improvement, and stakeholder collaboration.

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