

Digital financial literacy: Leveraging QR code technology for effective cash flow management in MSMEs

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ABSTRACT

Effective management of cash flow is an essential element in sustaining and expanding Micro, Small, and Medium Enterprises (MSMEs). Inadequate financial recording and minimal digital financial literacy contribute to the challenges faced by many MSMEs in Indonesia in managing their cash flow. This program explores the capacity of QR Code technology, specifically the Quick Response Code Indonesian Standard (QRIS), to improve the management of cash flow in MSMEs. The objective of the study was to adopt QRIS as a digital payment system in order to enhance cash flow efficiency. A training and mentorship program was carried out for 30 MSMEs associated with the East Java IKM Forum. The program followed a five-stage approach, which included planning, execution, evaluation, feedback, and sustainability program. The findings demonstrate a notable enhancement in the digital financial literacy of the participants after the session. The integration of QRIS into the daily operations of MSMEs facilitated more efficient cash flow management and expanded consumer outreach. The implementation of QRIS technology shown its efficacy in enabling financial monitoring and broadening commercial prospects for MSMEs.

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1. INTRODUCTION

Strategic cash flow management is essential for the long-term viability and expansion of Micro, Small, and Medium Enterprises (MSMEs), since it directly impacts a company's capacity to fulfill its financial commitments, allocate resources to development, and maintain competitiveness (Briones et al., 2024; Chadha et al., 2023; Saxena & Sahoo, 2023). Nevertheless, a significant number of MSMEs in Indonesia have challenges related to cash flow (Suwono & Hasibuan, 2023). These challenges mostly arise from insufficient planning, inadequate financial record-keeping, absence of organized financial reporting, and restricted availability of digital technologies that may optimize their operations (Susan, 2020). The acquisition of digital financial literacy is crucial for addressing these obstacles, allowing MSMEs to implement more effective strategies in handling cash inflows and outflows, therefore enhancing overall financial stability (Rosyidiana & Narsa, 2024).

Advancements in digital payment systems in recent years have opened up new possibilities for MSMEs to improve their financial management (Yunita, 2023). Bank Indonesia introduced the Quick

Response Code Indonesian Standard (QRIS) as a unified payment system that enables businesses to accept digital payments through a single QR code, regardless of the payment platform used by the customer (Rafiani et al., 2024). QRIS streamlines the transaction process by consolidating a variety of digital payment methods, such as mobile banking and e-wallets, into a single, standardized system. QRIS has been extensively adopted by MSMEs throughout Indonesia since its introduction in 2019, as part of the government's initiative to promote financial inclusion and digital transformation (Rahadi et al., 2023). QRIS not only enhances transparency and financial tracking for MSMEs, but also improves transaction efficiency by facilitating cashless payments (Hutagalung et al., 2021), thereby assisting business owners in more effectively monitoring their cash flow.

The implementation of QRIS among MSMEs in Indonesia has yielded promising results. QRIS has been effectively incorporated into the daily operations of numerous businesses, particularly those located in urban and semi-urban areas, enabling them to provide customers with a more secure and convenient payment option (Rahadi et al., 2023). This has resulted in a reduction in the reliance on cash, which is susceptible to errors and mismanagement, and a quicker processing of transactions. Moreover, QRIS has expanded the market opportunities for MSMEs by enabling them to reach consumers who prefer digital payments, including those from younger demographics and tech-savvy individuals (Nurhaliza et al., 2023). QRIS has become a valuable tool for MSMEs that are attempting to enhance their financial management and expand their reach due to the increasing trend of cashless transactions in Indonesia and the ease of use (Hutagalung et al., 2021).

In rural areas, where digital literacy is still relatively low and access to digital infrastructure can be limited, challenges persist, despite the positive outcomes. Nevertheless, the adoption of QRIS is anticipated to continue to accelerate, establishing it as a critical factor in the digitalization of Indonesia's MSME sector, with the ongoing support of government initiatives and training (Rahadi et al., 2023). In the post-pandemic era, the utilization of QRIS is consistent with broader economic objectives, including the promotion of financial inclusion, the improvement of business competitiveness, and the facilitation of economic recovery.

QRIS is a very promising technology that seamlessly incorporates digital payments into business operations (Rafiani et al., 2024), enabling instantaneous transaction monitoring and efficient cash flow management. Prior research has demonstrated that using digital payment systems, such as QRIS, not only enhances operational effectiveness but also broadens market penetration by enabling access to more diverse consumer cohorts. Notwithstanding these advantages, the uptake rate among MSMEs is still low because of insufficient knowledge in digital financial matters, implementation cost and transaction safety (Pinandita et al., 2023).

To bridge this gap, community service initiatives targeting the enhancement of digital financial literacy and the encouragement of digital payment system use among MSMEs have grown in significance. Prior endeavors in this domain have shown that focused training and mentorship initiatives can greatly enhance the financial management strengths of MSMEs. These efforts have demonstrated that by providing MSMEs with the essential tools and knowledge, they can incorporate digital technology into their operating processes, leading to improved management of cash flow and increased business expansion (Fridayani et al., 2024; Rosyidiana et al., 2023). The program expands on these results by specifically examining the use of QRIS as a digital payment application to enhance the cash flow management of MSMEs in Bojonegoro Regency, East Java, Indonesia.

Bojonegoro Regency has demonstrated substantial development in the context of economic recovery post-COVID-19, with an increase in economic growth from 3.55 percent in 2021 to 6.04 percent in 2022 (Pemerintah Kabupaten Bojonegoro, 2023). The MSME sector, which is instrumental in the region's economic development, has significantly contributed to this recovery. In 2022, Bojonegoro had 86,820 registered MSMEs that made a substantial contribution to the local economy. The East Java IKM Forum

is a forum of MSMEs across East Java, with numerous branches in each regency, including Bojonegoro. MSMEs that are affiliated with the East Java IKM Forum Bojonegoro Branch have effectively addressed the obstacles posed by the pandemic by implementing digitalization strategies.

An important challenge encountered is the effective controls of working capital and business profits. Although the forum members have effectively transitioned to a digital ecosystem, the absence of structured management of MSMEs cash flows and inadequate financial recording pose challenges. The adoption of technologies like the QRCode application is anticipated to facilitate the development of a streamlined recording method. Furthermore, this application enhances comprehension of cash flow, thereby leading to a higher level of business profitability.

The second obstacle pertains to the matter of financing for operations and increasing production. MSMEs in this sector require improved access to funding providers, including both government and banking organizations. The capacity of MSMEs to access and effectively use this capital is a crucial determinant in facilitating the expansion and advancement of their enterprises. Hence, it is crucial to enhance financial literacy, particularly in relation to financing and capital management, in order to enable MSMEs to maximize the available funding prospects (Rosyidiana & Narsa, 2024).

Furthermore, a matter of equal significance is enhancing the competencies of human resources (HR) in the field of company management. The continuously expanding sector necessitates that business owners and their employees engage in ongoing education, particularly in the realm of digital financial literacy. Enhancing this talent involves acquiring a more profound comprehension of financial technology, proficiency in digital applications, and general competence in business administration. Focused training on enhancing digital financial literacy would be crucial in enabling human resources in MSMEs to effectively address changing market needs and enhance business competitiveness both locally and globally (Rosyidiana et al., 2023).

Timely resolution of the challenges encountered by MSMEs under FIJ Bojonegoro is vital to facilitate their development towards greater advancement. Engaging in community service through training and mentorship is anticipated to enhance participants' understanding and expertise in the area of working capital management, specifically in terms of digital financial literacy and cash flow governance.



Figure 1. Several items offered by the members of East Java IKM forum Bojonegoro branch

Figure 1 illustrated several items offered by the members of East Java IKM Forum Bojonegoro Branch. This forum has actively expanded its sales channels and incorporated online marketing to maintain cash flow sustainability, with approximately 100 MSME members. Previous training and mentorship sessions, which were notably concentrated on the utilization of platforms such as Shopee and WhatsApp Business, have been effective in supporting the economic recovery of MSMEs following the pandemic (Redaktur Lensa Nusantara, 2023; Afifah, 2022; Afifah, 2021).

The East Java IKM Forum Bojonegoro Branch is dedicated to enhance business management practices, with a particular emphasis on boosting cash flow management, in order to build on these efforts. In this context, the utilization of QRIS has been designated as a potential digital solution to optimize transaction processes (Rafiani et al., 2024). QRIS facilitates real-time, trackable transactions, thereby enabling MSMEs to more effectively manage their cash flow because it provides an integrated, efficient payment system.

The objective of the community service initiative delineated in this study is to provide MSMEs with tangible solutions for managing their cash flow in the aftermath of the pandemic. This initiative also presents a strategic opportunity to enhance and support the positive impact on the growth of Bojonegoro's MSMEs, not only at the local market but also in the context of international market. MSMEs have effectively promoted their products on a global scale through prior digital marketing strategies, particularly those implemented through Shopee and WhatsApp Business. Nevertheless, it is imperative that business operations are consistently digitalized, and financial literacy must be continuously enhanced to enable business proprietors to more effectively manage their enterprises. The primary objective of this initiative is to guarantee that business liquidity remains stable and can be readily monitored through digital business management, particularly in the area of cash flow management.

The primary goal of this program is to equip 30 MSMEs in Bojonegoro with practical skills and comprehensive knowledge to enhance their financial performance. The initiative employs a variety of techniques, including training, focus group discussions, and hands-on mentoring. Interactive Q&A sessions and digital questionnaires are also integrated into the comprehensive evaluation process. In order to facilitate the incorporation of QRIS into their everyday business operations, the objective was to improve the participants' digital financial literacy. Through the use of a systematic five-phase methodology encompassing planning, implementation, assessment, feedback, and sustainability, the study sought to offer a holistic resolution to the cash flow difficulties encountered by MSMEs. The results obtained from this project will enhance our comprehension of the successful implementation of digital financial mechanisms in the MSME sector, providing important perspectives for future community involvement initiatives. At the Public Information Center (PIP) Building of the Bojonegoro Regency Communication and Information Office, the training was held on July, 2024 (Delfian, 2024; Miranda, 2024).

2. METHODS

Bojonegoro, situated in East Java Province, Indonesia, was selected for this community service program owing to its vibrant MSME ecosystem. This city exhibits a distinctive economic landscape that has exhibited resilience, evidenced by its growing economy post-COVID-19 pandemic (Rosyidiana & Narsa, 2024). Nonetheless, several firm proprietors remain unaware of the critical significance of digital financial literacy in managing their liquidity. The East Java IKM Forum Bojonegoro Branch carefully selected 30 participants for the community service program, with 80 percent yet to adopt QRIS (either dynamic or static), while the remaining 20 percent have already implemented one variant. This program assists the participants in improving their digital financial literacy through the implementation of QRIS. It also examines the challenges and opportunities related to QRIS adoption in the local MSME sector.

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This community service follows a structured approach to ensure effective knowledge transfer and practical application for the participants. The methodology is divided into five main stages: Planning, Implementation, Assessment, Feedback, and Sustainability Program. Figure 2 illustrated the five stages of community service implementation. Each stage is carefully designed to support MSMEs in adopting digital financial literacy and integrating QR Code technology into their cash flow management processes.

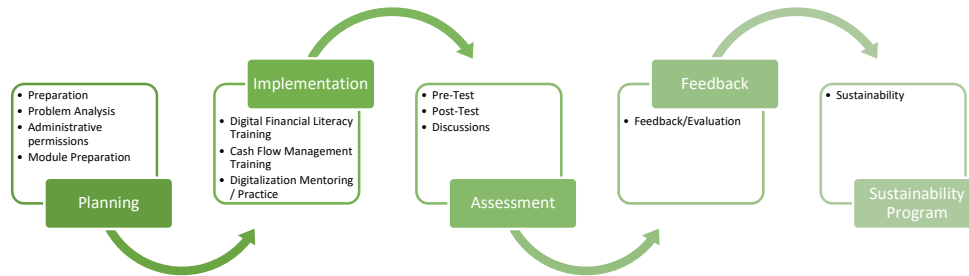


Figure 2. Community service implementation stages

The community service program is executed through a structured approach consisting of five key stages: Planning, Implementation, Assessment, Feedback, and Sustainability Program. In the Planning stage, the team conducts a Preparation during which the project team identifies important stakeholders, participants, and requisite resources, including trainers and materials. Following this, a Problem Analysis is conducted, which involves assessing the current challenges faced by MSMEs in terms of financial literacy, cash flow management, and digitalization. This stage helps to tailor the program to address specific gaps in knowledge and practice. In addition to analyzing the needs, Administrative Permissions are obtained from relevant local authorities, including the local government and MSMEs forum, to ensure compliance with regulations and facilitate collaboration. Finally, the Module Preparation step involves developing training modules, which include materials on digital financial literacy, QR code technology, and cash flow management. These modules are customized to the local context, ensuring that they are accessible and practical for MSME participants. and needs analysis to understand the challenges MSMEs face, including financial literacy, cash flow management, and digitalization, followed by the administrative requisition and the development of customized training modules.

The Implementation stage involves delivering hands-on training on digital financial literacy and cash flow management, focusing on the application of QR code technology and digital tools, reinforced by one-on-one mentoring sessions. In the Assessment stage, the program's effectiveness is measured through pre-tests, post-tests, and interactive discussions to ensure participants have fully grasped the concepts. Feedback is then collected from participants and the project team to improve future programs. Lastly, the Sustainability stage emphasizes long-term impact through continuous support, follow-up training, and peer-to-peer learning, fostering a network of MSMEs equipped with digital financial skills to sustain their business growth.

3. RESULTS AND DISCUSSION

Results

Planning

The planning stage is the foundation of the program. It involves preparation, addressing key concerns faced by MSMEs in Bojonegoro, ensuring all necessary administrative procedures are fulfilled,

and developing training modules tailored to the specific needs of the participants. The planning stage starts with preparation. The project team identifies key stakeholders, selects participants, and ensures that all necessary resources—such as trainers and materials—are in place for the program’s successful execution. One of the key stakeholders in this program is the Bank, Bank Rakyat Indonesia (BRI), which plays a pivotal role in the preparation of static QRIS for the participants. BRI is responsible for setting up savings accounts linked to the printed QRIS, allowing MSMEs to adopt digital payment solutions seamlessly. This collaboration is essential in enabling the participants to integrate QRIS technology into their business operations and improve their financial management practices.

The East Java IKM Forum Bojonegoro Branch is another key stakeholder and a vital partner in the MSME ecosystem in Bojonegoro. This forum is responsible for selecting participants from the local MSME community, ensuring that those who stand to benefit most from the training are included. Beside the forum, Bojonegoro District Government through the Information and Communication Service provide the training location, PIP Building. The instructors for this program are faculty members from the Accounting Diploma Study Program at the Faculty of Vocational Studies, Universitas Airlangga, who bring extensive expertise in accounting and business management. The training materials are meticulously prepared by expert speakers, ensuring that the content is relevant, practical, and tailored to the specific needs of the MSMEs in Bojonegoro.

Problem Analysis is also carried out at this stage as shown at Figure 3, where several critical challenges are identified in collaboration with MSME owners and forum. One of the primary issues is the management of working capital and business profits. Although previous training has encouraged business owners to maintain simple financial records, many still struggle with cash flow management. The absence of structured systems and accurate records has led to inefficiencies, limiting profitability. To address this, the program seeks to introduce QR code technology, which offers an accessible digital solution for tracking cash inflows and outflows. This tool is expected to provide business owners with a clearer understanding of their cash flow, thereby enhancing their ability to optimize working capital and ultimately improve profitability.



Figure 3. Site visits to perform problem analysis and administrative tasks

Another significant challenge identified during analysis is the need for better funding access to support operations and production scale-up. Many MSMEs in Bojonegoro find it difficult to tap into available funding sources, whether from the government or financial institutions. This limitation restricts their growth potential. Therefore, improving financial literacy—particularly around funding opportunities and capital management—becomes essential. The program will address this gap by offering training that helps MSMEs navigate the complex landscape of funding and better leverage these opportunities to grow their businesses.

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Additionally, the development of human resources is a major area of focus. The upskilling of MSME owners and staff is essential in ensuring they can adapt to the evolving business environment. Digital financial literacy, especially related to the use of technology for business management, is becoming increasingly important. The program will provide training on advanced financial literacy concepts and digital tools to enhance the overall management of these businesses. This includes equipping participants with knowledge about financial technologies and how to integrate digital solutions into their operations, thereby improving competitiveness both locally and internationally.

The next activity in the preparation stage involves Administrative Permissions. This includes securing the necessary permits for the venue and completing various administrative tasks. These documents ensure compliance with local regulations and foster collaboration with local stakeholders, such as the East Java IKM Forum Bojonegoro Branch.

Lastly, the Module Preparation phase focuses on creating training materials that are both relevant and practical for MSMEs. These modules are developed by experienced accounting lecturers who have years of experience working with MSMEs. The modules cover essential topics such as Digital Financial Literacy and Cash Flow Management for MSMEs. The content is designed to be accessible and highly applicable, helping MSMEs address their day-to-day business challenges while equipping them with the knowledge and tools to thrive in a digitalized economy. This well-rounded preparation ensures that the community service program is both comprehensive and effective in addressing the needs of Bojonegoro's MSME ecosystem.

Implementation

The Implementation stage is where the core activities of the program take place, focusing on delivering hands-on training and mentoring to MSMEs. This stage was held at the PIP Building in Bojonegoro on July 20, 2024, where the community service team was introduced, as shown in Figure 4. The team include lecturers and students of Accounting Diploma Study Program, Faculty of Vocational Studies, Universitas Airlangga. This stage took place to address the financial management challenges faced by MSMEs under the East Java IKM Forum Bojonegoro Branch. The activities in this stage are conducted through a combination of lectures, discussions, and intensive mentoring sessions on Digital Financial Literacy and Cash Flow Management. Figure 4 depicts professional speakers, experts in finance, lead the sessions, ensuring participants gain comprehensive insights and practical skills. All participants receive a series of learning modules and certificates of participation.



Figure 4. Introduction and training activity

The primary issues identified by MSME owners include managing working capital and profits, securing operational and production funding, and improving human resource skills in business

management. These challenges were addressed through targeted training on digital financial literacy, cash flow management, and digitalization practices, specifically by introducing and utilizing QR Code technology. QR codes are used as tools to enhance financial literacy by offering immediate access to information about financial products and facilitating better financial decision-making (Anatan, 2023). For example, they can provide real-time insights into the risks and benefits of financial products, supporting MSMEs in making informed decisions (Komala & Firdaus, 2023).



Figure 5. Saving account linked to printed QRIS and certificate of participation handover

This training provided printed QRIS codes to all participants. The team ensured that every participant understood how to use this digital payment system and integrate it into their business operations. Intensive mentoring during the event helped participants overcome any challenges in applying digital payments to their daily operations. For a period of two months following the training, this mentoring is maintained through WhatsApp groups. This is to guarantee that the participant did not encounter any difficulties during the implementation of the QRIS.

As shown in Figure 5, the distribution of QRIS codes and saving account linked to the printed code marked a crucial step toward helping MSMEs transition to digital payment methods. The introduction of QRIS not only simplifies transaction processes but also plays a vital role in improving cash flow management—a critical aspect of business operations for MSMEs. Effective cash flow management enables businesses to maintain a healthy balance between income and expenses, ensuring operational continuity and long-term growth. This program equips MSMEs with the tools and knowledge to optimize their cash flow through digitalization, thereby enhancing their financial resilience and business performance.

Assessment

The Assessment Stage is designed to measure the effectiveness of the training and gauge participants' progress. This stage begins with a Pre-Test, administered before the training to get the baseline knowledge of the participants, particularly in the areas of digital financial literacy and cash flow management. By identifying their initial understanding, the training sessions were tailored to fill the knowledge gaps. Following the completion of the training, a Post-Test was conducted to assess the knowledge gained. As shown in Figure 6, the test results indicated a significant improvement in participants' understanding of financial management and digital marketing, specifically in the area of digital financial literacy.

In addition to the tests, interactive discussions were held throughout the program. The participants were highly enthusiastic and actively engaged, asking numerous questions that enriched the learning process. This transformed the training into a two-way dialogue rather than a one-way lecture, fostering a more dynamic learning environment. The open discussions allowed participants to clarify doubts and apply the concepts to their unique business contexts, ensuring a deeper understanding of the material.

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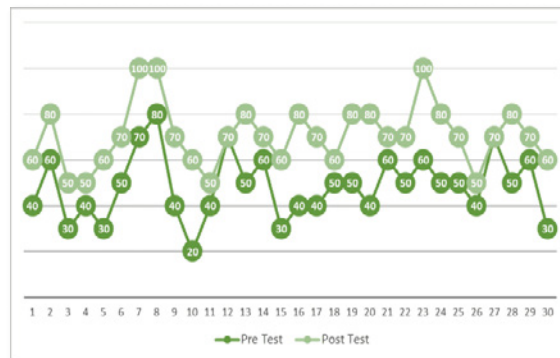


Figure 6. Pre-test and post-test result

To further encourage active participation, the program recognized the most engaged participants as shown in Figure 7. Five of the most active participants, who asked the most insightful questions, and three of the top performers, based on their post-test scores, were awarded merchandise by the organizers as a token of appreciation. This initiative not only motivated participants to stay engaged during the training but also acknowledged their efforts in actively seeking to improve their financial literacy skills.



Figure 7. Best participants

Feedback

The Feedback Stage gathered valuable insights from both participants and the project team. This phase involves collecting feedback on evaluation through various methods, including post-test results, group discussions, and individual reflections from participants. These insights are essential for identifying areas that require improvement, whether in the content of the training modules or the delivery methods used by the facilitators. By incorporating this feedback, the program can be continuously improved to meet the evolving needs of MSMEs, ensuring greater effectiveness in future iterations.

One of the key aspects of this stage is the collection of qualitative feedback from participants regarding the relevance and impact of the training. Continuous observations were made throughout the event, and formal evaluations were conducted at the end to assess how well the program met its objectives. As part of this process, progress reports, journal articles, and a final report were prepared to document the outcomes and ensure accountability. These evaluations demonstrated the effectiveness of the activities in enhancing MSMEs' digital financial literacy and cash flow management skills.

The feedback from participants was overwhelmingly positive, as shown in Figure 8, with many expressing how the program had a tangible impact on the growth and sustainability of their businesses. They highlighted the importance of continuing similar training programs, emphasizing the need for ongoing support. Many participants also suggested additional training sessions on creating digital catalogs, digital marketing, and advanced digital financial management, delivered in a more varied format to enhance their learning experience. These suggestions reflect the participants' desire to expand their knowledge and further integrate digital practices into their businesses.

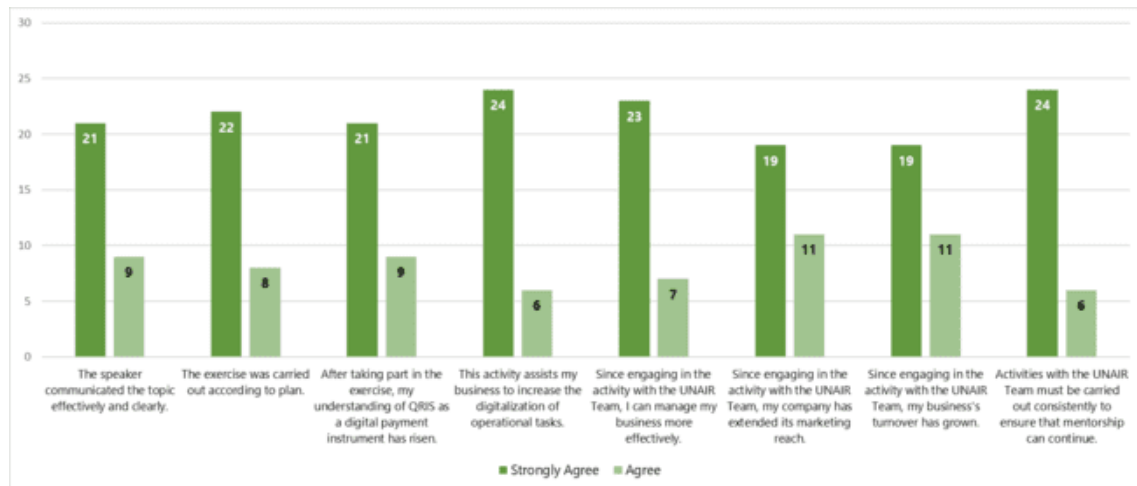


Figure 8. Participants feedback

Furthermore, participants unanimously agreed that the program provided significant benefits, particularly in helping them understand and implement digital financial literacy practices. The comprehensive feedback not only validated the program's success but also underscored the need for continuous community engagement and support. By acting on these insights, the project team can design even more impactful programs, ensuring that the next generation of MSMEs in Bojonegoro is well-equipped to navigate the digital economy. This stage of feedback and evaluation is crucial for shaping a sustainable community service model that responds to the real-world challenges faced by MSMEs, contributing to their long-term growth and competitiveness.

Sustainability

The East Java IKM Forum Bojonegoro Branch and the community service team are commencing a four-year collaboration. To ensure long-term success and impact, the project incorporates a Sustainability Program that goes beyond the initial training. This program involves continuous support for MSMEs, including follow-up training, periodic check-ins, and ongoing mentorship. The aim is to build a network of digitally-literate MSMEs who can sustain their businesses with improved cash flow management practices. The sustainability program also encourages peer-to-peer learning, where MSMEs can share their experiences and best practices, fostering a collaborative environment for growth.

Discussion

The program's preparation stage, which involved problem analysis, was crucial in identifying key issues faced by MSMEs, such as the need for better working capital management, funding for

operational growth, and skills development. Aligns with previous research ([Mangawing et al., 2023](#); [Ratnawati & Soelton, 2022](#)), digital financial literacy and cash flow management identified as significant pain points for MSMEs. The thorough preparation, including cooperation with stakeholders like The East Java IKM Forum Bojonegoro Branch for the active participation, Bojonegoro District Government for training location and BRI for printed QRIS provisioning, provided a solid foundation for addressing these challenges. The involvement of Universitas Airlangga's resources, such as experienced trainers, ensured that the modules were relevant and impactful, further supported by the four-year partnership between the forum, local government, and the university.

During the implementation stage, the training on digital financial literacy and cash flow management delivered significant benefits. Digital literacy plays a critical role in empowering MSMEs to adopt technological innovations, such as QR code systems, which enhance operational efficiency ([Komala & Firdaus, 2023](#)). The use of QRIS as a tool to improve financial management and business transaction recording was highly effective, as seen in the increased understanding and usage of digital payment systems by the participants. Moreover, the hands-on mentoring or coaching allowed participants to engage directly with the tools, echoing the findings from previous research who noted that direct practice helps bridge the gap between theory and application ([Fridayani et al., 2024](#)). The provision of printed QRIS by BRI and the support for linked savings accounts significantly reduced barriers to entry for digital payments, demonstrating the importance of multi-stakeholder collaboration in community service programs.

However, the assessment stage revealed certain challenges. While many participants showed enthusiasm and actively participated in discussions, the pre-test and post-test results indicated that not all participants began with the same level of understanding of digital financial literacy. This lack of uniformity, highlights the need for differentiated instruction and more targeted pre-training interventions ([Abdul, 2015](#)). Despite these variations, the program was successful in raising overall competency, with a majority of participants showing marked improvement. The selection of the top-performing participants and the acknowledgment of their achievements further motivated all attendees to continue learning and applying their new skills.

The feedback stage provided valuable insights for future improvements. Participant feedback highlighted the need for more practical training in areas like digital catalog creation and digital marketing, indicating that these would further enhance the business development prospects of MSMEs. Continuous skill development beyond initial training is key to ensuring the long-term impact of community service initiatives. Moreover, the participants expressed interest in ongoing mentorship, which points to the necessity of building a long-term support system, perhaps through peer-to-peer learning networks or follow-up training sessions.

In terms of impact and sustainability, the program has made a significant contribution to the participants' ability to manage their finances digitally, an important step toward ensuring MSMEs in Bojonegoro are competitive in the digital economy. The support from BRI, the local government, and the long-standing cooperation with the Forum IKM Jawa Timur created a conducive environment for the program's success. These collaborations provided not only the necessary financial tools but also administrative and logistical support.

However, several obstacles were encountered, including the limited time available for direct mentoring and the uneven baseline knowledge of the participants. The reliance on a WhatsApp group for follow-up also posed challenges in terms of providing consistent guidance, as the digital literacy levels of some participants were insufficient for them to fully benefit from remote mentorship. Future programs could benefit from longer in-person mentoring sessions and more personalized support for those with lower digital literacy levels.

This community service initiative has shown that with the right partnerships, resources, and structured implementation, MSMEs can significantly enhance their financial and digital literacy. The program's results contribute to the broader field of community engagement and MSME development by demonstrating how financial education and digital tools can be effectively integrated into MSME operations. This initiative also offers a replicable model that could be adapted for similar communities, with the potential to drive further innovation in digital financial literacy training for MSMEs across Indonesia.

4. CONCLUSION AND RECOMMENDATIONS

The community service program aimed at enhancing the digital financial literacy and cash flow management of MSMEs in Bojonegoro has proven to be an impactful initiative. The participants not only gained a deeper understanding of digital payment systems like QRIS but also improved their financial management practices through hands-on training and mentorship. By addressing key challenges faced by MSMEs, such as managing working capital and accessing funding, the program has laid a solid foundation for sustainable business growth. The use of pre- and post-tests, active discussions, and continuous mentoring helped ensure that participants could directly apply their new skills to their businesses. The program's structured approach, incorporating training modules tailored to the specific needs of the participants, demonstrated significant improvements in their digital financial practices.

Future initiatives should continue to build on the foundations laid by this program. It is suggested that additional training be offered, focusing on digital marketing and advanced financial management tools to further empower MSMEs in expanding their businesses. Participants also expressed a desire for more practical sessions on topics such as creating digital catalogs and using advanced financial software, which can enhance their competitiveness in the digital economy. Sustained follow-up programs and peer-to-peer learning networks could also be implemented to foster continuous development. In doing so, future community service activities will better address the evolving needs of MSMEs and contribute to their long-term success in the digital age.

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