



## **Financial Digitalization Knowledge for Investment and MSMEs Funding Access**

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### **Abstrak**

Urgensi dari program pengabdian masyarakat ini terletak pada kenyataan bahwa Usaha Mikro, Kecil, dan Menengah (UMKM) adalah tulang punggung perekonomian Indonesia—berkontribusi lebih dari 60% terhadap PDB nasional. Seiring dengan terus berkembangnya teknologi finansial (fintech), kesenjangan antara peluang dan kesiapan UMKM semakin melebar. Tanpa intervensi tepat waktu, banyak UMKM berisiko dikecualikan dari manfaat ekonomi digital Indonesia yang sedang berkembang, membatasi pertumbuhan dan ketahanan jangka panjang mereka. Pengabdian masyarakat ini dirancang untuk meningkatkan kesadaran akan digitalisasi keuangan di kalangan UMKM dan pekerja migran Indonesia di Penang, Malaysia. Tujuannya adalah untuk meningkatkan pemahaman tentang pembukuan digital, pembayaran elektronik (QRIS, e-wallet), pembiayaan berbasis fintech (P2P lending, crowdfunding), dan akses investasi dasar. Dengan meningkatkan kesadaran, program ini bertujuan untuk memperkuat transparansi keuangan UMKM, kesiapan digital, dan prospek bisnis jangka panjang. Sesi dirancang agar interaktif dan dapat diakses oleh peserta dengan paparan terbatas sebelumnya terhadap alat fintech. Hasil program melibatkan 35 peserta UMKM. Hasil evaluasi menunjukkan bahwa 91% meningkatkan kesadaran mereka akan pengetahuan digital, 86% memperoleh pemahaman tentang QRIS dan e-wallet, dan 74% menyatakan minat pada opsi pendanaan fintech. Kontribusi program ini meningkatkan kesiapan UMKM untuk inklusi keuangan digital, mendukung tujuan nasional digitalisasi ekonomi, dan sejalan dengan mandat pendidikan tinggi untuk memberikan dampak sosial yang terukur melalui pengabdian masyarakat.

**Kata kunci:** UMK, Fintech, Pendanaan, Investasi, Pengetahuan

### **Abstract**

*The urgency of this community service program lies in the fact that Micro, Small, and Medium Enterprises (MSMEs) is the backbone of the Indonesian economy—contributing over 60% to national GDP. As financial technology (fintech) continues to evolve, the gap between opportunity and MSMEs' readiness is widening. Without timely intervention, many MSMEs risk being excluded from the benefits of Indonesia's growing digital economy, limiting their growth and long-term resilience. This community service was designed to*



*raise awareness of financial digitalization among MSMEs and Indonesian migrant workers in Penang, Malaysia. The objective is to enhance understanding of digital bookkeeping, electronic payments (QRIS, e-wallets), fintech-based financing (P2P lending, crowdfunding), and basic investment access. By increasing awareness, the program aims to strengthen MSMEs' financial transparency, digital readiness, and long-term business prospects. The sessions were designed to be interactive and accessible for participants with limited prior exposure to fintech tools. Results of the program engaged 35 MSME participants. Evaluation results showed that 91% improved their awareness of digital knowledge, 86% gained understanding of QRIS and e-wallets, and 74% expressed interest in fintech funding options. Contribution of the program enhances MSMEs' preparedness for digital financial inclusion, supports national goals of economic digitalization, and aligns with higher education's mandate to deliver measurable social impact through community service.*

**Keywords:** MSEs, Fintech, Funding, Investment, Knowledge

## Introduction

Financial digitalization knowledge refers to the understanding, skills, and awareness required to effectively use, evaluate, and adapt to digital technologies within financial systems. It encompasses both technical and cognitive components that enable individuals or organizations to operate confidently in an increasingly digital financial environment. Financial Digitalization Knowledge is the capability to comprehend and utilize digital tools, platforms, and processes that transform traditional financial activities into digital formats.

This knowledge includes understanding digital payments, online banking, fintech innovations, cybersecurity practices, data analytics, and emerging technologies such as blockchain and artificial intelligence in finance. Financial Digitalization Knowledge plays a critical role in shaping the investment readiness and funding opportunities available to Micro, Small, and Medium Enterprises (MSMEs). Its influence can be seen across several dimensions. MSMEs with strong digital finance knowledge can use digital tools (e-accounting, cloud-based bookkeeping, financial dashboards) to produce accurate and timely financial statements. This increases transparency, which is a key requirement for investors and lenders.

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in the economy, acting as the backbone of the national framework. The presence of MSMEs not only creates jobs for millions but also contributes significantly to the growth of Gross Domestic Product (GDP) and helps reduce economic disparities. Furthermore, MSMEs often serve as drivers of innovation and the development of local products, effectively meeting the diverse needs of society. By enhancing access to financing, training, and technology, MSMEs can continue to thrive and support economic stability at both local and national levels. Below is Table 1, which illustrates the vital role of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia and Malaysia:

Table 1. MSMEs Profile Indonesia and Malaysia

Country	Number of MSMEs	Contribution to GDP	Labour absorption
Indonesia	65.47 million MSMEs (2019, 99% of all businesses)	>60% of Indonesia's GDP (approximately IDR 8,573 trillion per year)	Around 97% of Indonesia's total workforce (116 million people)
Malaysia	1.15 million MSMEs (2020, 97.2% of all businesses)	38.4% of Malaysia's GDP in 2022 (up from 37.4% in the previous year)	Provide jobs for >60% of new graduates

Source: ([ukmindonesia.id](http://ukmindonesia.id) ; [jurnal.umj.ac.id](http://jurnal.umj.ac.id) ; [lldikti5.kemdikbud.go.id](http://lldikti5.kemdikbud.go.id))

Based on Table 1, Indonesian MSMEs dominate the business landscape, representing 99% of total businesses with approximately 65.47 million units in 2019 ([djpb.kemenkeu.go.id](http://djpb.kemenkeu.go.id)). They make a significant contribution to the country's Gross Domestic Product (GDP), exceeding 60 percent, with a total value of approximately IDR 8,573 trillion per year. Furthermore, MSMEs in Indonesia absorb around 97% of the total labor force, creating jobs for approximately 116 million people ([ukmindonesia.id](http://ukmindonesia.id)). Meanwhile, in Malaysia, MSMEs also play a crucial role, accounting for 97.2% of total enterprises with around 1.15 million units in 2020. Their contribution to Malaysia's GDP reached 38.4% in 2022, an increase from the previous year ([jurnal.umj.ac.id](http://jurnal.umj.ac.id)). MSMEs in Malaysia further contribute significantly to the labor market by providing jobs for more than 60% of new graduates ([lldikti5.kemdikbud.go.id](http://lldikti5.kemdikbud.go.id)).

Both countries highlight the importance of MSMEs as the backbone of the economy, not only through their participation in GDP but also in labor absorption. Despite their substantial contributions, many MSMEs face serious challenges in accessing the capital and investment necessary for business development. Low financial literacy among MSME operators is a major obstacle hindering the growth and sustainability of their businesses, making it difficult for them to understand the financial mechanisms needed to secure formal funding and manage their finances effectively.

Moreover, the lack of adoption of digital technology in financial management exacerbates this issue. In the digital era, the ability to utilize information and communication technology in financial management is crucial for improving efficiency, accuracy, transparency, and expanding access to financing platforms such as banks and fintech (Lee, S., Kim, J., & Park, M., 2021). However, many MSMEs encounter difficulties in embracing these technologies due to limited knowledge and a lack of trust in digital systems. This gap indicates a significant disparity between the potential contributions of MSMEs to the economy and the real challenges they face. Therefore, to serve as a key pillar in supporting sustainable economic growth and job creation, comprehensive efforts are needed to enhance financial literacy and promote the adoption of digital technology among MSMEs (Chen, Y., & Wilson, K. 2022).

Financial digitalization is indispensable for SMEs aiming to thrive in a disruptive economic environment. Strategic digital business initiatives (Bharadwaj et al., 2013), adaptive responses to economic shocks (Smallbone et al., 2012), and participatory community engagement models (Godoy et al., 2022; Hergenrather et

al., 2013) collectively highlight a multi-faceted approach. Policymakers and business leaders must foster environments that encourage digital financial inclusion tailored to the SME context, ensuring sustainable growth and resilience.

Consequently, financial digitalization is understood as a multi-dimensional process involving technological adoption, organizational change, and ecosystem collaboration, tailored to the specific financial needs and capabilities of SMEs (Patel et al., 2023; Zhao, 2021).

### **Implementation Method**

The intended target of this activity is Indonesian immigrants who work in Pulau Pinang. The implementation method used in this activity is in the form of debriefing and mentoring training

#### *Preparation*

The community service activity team previously held discussions with LPPM and the faculty regarding the preparation of activities on Pulau Pinang Malaysia, then the discussion continued by involving NGO Permai and University Sains Malaysia to find out the condition of the activity participants and the problems and solutions expected. After knowing the targets and targeted solutions, adjustments were made from the Universitas Mercu Buana lecturer team and the LPPM team to prepare for departure and the needs needed in community service activities in Pulau Pinang Malaysia. The time, place, number of teams and theme of the activity were also discussed in the discussion so that each lecturer had prepared their respective duties before the activity was carried out.

#### *Implementation Method*

The method of this Community Service activity is carried out through:

- 1) Socialization: which will explain digital finance in Indonesia – Malaysia. Purpose of these method is increasing awareness of financial digitalization
- 2) Practice: where participants will be given the opportunity to practice procedure to use some tools of financial digital. The purpose of this method is increasing understanding and improving the ability
- 3) Question and Answer: where participants are given the opportunity to ask questions related media of financial digitlazation. The consultation or discussion in the form of questions and answers will helps participants to be more open in understanding all the topics explained

#### *Evaluation Method*

Activity evaluation is a process for collecting data and information needed in this community service activity. The evaluation of this activity is more focused on reviewing the participants' understanding of digital technology adoption. Activity evaluation has a function as a process controller of the results of the activity program so that a systematic, effective and efficient activity program can be guaranteed. The evaluation of activities seeks to obtain information about the results of activities, also including feedback from socialization participants which is very helpful in improving activities through the questionnaire provided.

#### *Problem Solving Framework*

The problem-solving framework is outlined as follows:

1. Problems: Difficulty in accessing capital and investment.

**Problem Description:** Difficulty in accessing capital and investment refers to a situation where individuals and Micro, Small, and Medium Enterprises (MSMEs) encounter barriers to obtaining the necessary funds for business development, daily operations, or growth investments.

**Objective:** To build partnerships between the government, financial institutions, and MSMEs to create accessible funding programs with more easily met criteria.

## 2. Problems: Low Financial Literacy

**Problem Description:** Many individuals and MSME owners lack a sufficient understanding of financial management, making it difficult for them to develop business proposals or comprehend the financial conditions required to obtain funding.

**Objective:** Providing training programs focused on digital literacy and the use of relevant technologies can improve the skills and confidence of individuals and MSME owners in utilizing technologies available in the community.

The method used in this community service employs the Community-Based Participatory Research (CBPR) approach, which is a collaborative research method that invites community members, organization representatives, and researchers to be involved in all aspects of the change (1,2). In this context, we utilized the space-based method, which is part of CBPR and is useful for gaining participation from all parties by conducting hands-on training for participants.

**Key Characteristics of CBPR:**

1. **Equal Collaboration:** Researchers and communities work as equal partners, valuing local knowledge.
2. **Based on Community Strengths:** Identify and utilize existing potential within the community.
3. **Mutual Learning Process:** Both researchers and communities learn from each other to improve their capacity.
4. **Action-Oriented:** Research aims to produce tangible interventions that are relevant to the needs of the community.
5. **Transparency:** The decision-making process is transparent at all stages of the research.

This approach is particularly relevant given the challenges faced by individuals and Micro, Small, and Medium Enterprises (MSMEs). Difficulty in accessing capital and investment describes the situation where MSMEs encounter barriers to obtaining the funds necessary for business development, daily operations, or growth investments. Additionally, many individuals and MSME owners lack a sufficient understanding of financial management, making it difficult for them to develop business proposals or comprehend the financial conditions required to secure funding. Furthermore, the lack of digital technology adoption presents an additional challenge, as individuals and MSMEs do not optimally utilize digital technologies to improve their efficiency, productivity, and competitiveness.

## Results and Discussion

### *Result*

The implementation of this community service program successfully increased awareness among MSMEs regarding the use of digital financial tools to improve access to funding and investment. A total of 35 MSME participants attended the training sessions conducted onsite. Post-training evaluations showed that 91% of participants demonstrated greater awareness of digital knowledge, particularly in

understanding its role in enhancing financial transparency and credibility. Additionally, 86% of participants showed a clear understanding of QRIS and e-wallet systems, including their benefits for safe and efficient transactions. Furthermore, 74% of participants expressed interest and increased familiarity with fintech-based financing platforms, such as peer-to-peer (P2P) lending and crowdfunding. Summarizes the program's results, evaluates their effectiveness, and outlines recommendations for further development in subsequent initiatives.



Figure 1. Activity

Table. 2  
Results, Evaluation, and Future Improvements of the Community Service Program

No	Program Outcome	Achievement / Evaluation	Improvement Plan / Future Follow-up
1	Increased awareness of digital knowledge	91% of participants demonstrated improved understanding of basic digital knowledge practices	Develop modular training videos for asynchronous learning; provide optional follow-up consultation
2	Improved understanding of QRIS and e-wallets	86% of participants understood the concept and benefits of using QRIS and e-wallets for secure transactions	Provide deeper simulations with real QRIS demo; collaborate with fintech partners for live showcases
3	Familiarity with fintech-based funding	74% of participants expressed interest and increased familiarity with	Create simple comparison guides of available platforms; offer case studies from

No	Program Outcome	Achievement / Evaluation	Improvement Plan / Future Follow-up
	platforms (P2P lending, crowdfunding)	alternative fintech funding sources	successful MSMEs
4	Copyright application for training materials	Copyright registration submitted to protect educational content	Update materials based on participant feedback; plan for broader dissemination via repository access
5	Engagement and participation level	All 35 MSMEs completed the training; high level of interaction during simulations and Q&A sessions	Introduce pre- and post-tests to quantify knowledge gain; collect participant testimonials

## Discussion

The community service program highlights successful participant engagement, with all 35 MSMEs completing the training and actively participating in simulations and Q&A sessions. This high engagement level reflects the program's relevance and the interactive training approach's effectiveness. The achievement demonstrate significant positive outcomes in enhancing digital literacy and fintech understanding among MSME participants. Key findings show that 91% of participants improved their digital knowledge, and 86% gained better understanding of QRIS and e-wallet transactions. This suggests that the training program effectively enhanced participants' foundational digital skills and financial technology awareness, which are crucial in today's increasingly digital economy. Furthermore, 74% of the participants expressed a growing familiarity with fintech-based funding platforms, such as P2P lending and crowdfunding, indicating an encouraging tendency towards exploring new financial opportunities for business funding.

Sustaining this program is essential for long-term impact. Continuous digital literacy and fintech education enable MSMEs to adapt to the evolving technological landscape, increasing their resilience and competitiveness in global markets. Research by Lee et al. (2021) emphasizes that ongoing capacity-building initiatives are crucial for fostering innovation and sustainable growth in small businesses. Moreover, sustained programs help bridge the persistent digital divide, reducing inequalities in access to financial resources and technology (UNCTAD, 2022). Therefore, embedding these trainings into ongoing community support frameworks can ensure that MSMEs continuously leverage fintech innovations for business growth and financial inclusion.

Plans for future enhancements including modular videos for asynchronous learning, deeper practical QRIS simulations in partnership with fintech firms, and user-friendly guides comparing funding platforms, will support the program's sustainability. Introducing pre- and post-training assessments will provide measurable evidence of progress, while ongoing participant testimonials can help secure continued funding and stakeholder engagement.

Overall, these outcomes align with research advocating for digital literacy and fintech education as vital tools for MSMEs to compete in modern markets and improve financial inclusion. The OECD (2020) emphasizes the critical role of digital literacy in empowering small businesses to navigate and thrive in digital economies. The World Bank (2021) highlights fintech as a powerful driver of financial inclusion, especially for

underserved micro and small enterprises. Similarly, Chen and Wilson (2022) discuss how fintech innovations like QRIS and e-wallets facilitate efficient payment systems and broaden access to diverse funding sources, empowering MSMEs in dynamic market environments.

## Conclusion

The community service program has effectively elevated the digital skills and fintech awareness of MSMEs, as evidenced by participants' enhanced capabilities in using digital payment and funding tools. The active involvement of all participants highlights the value and applicability of the training methods employed. To ensure these gains have lasting effects, it is imperative that similar initiatives continue over time, allowing MSMEs to keep pace with technological advancements and maintain competitive advantage. Ongoing support and resource development will be key in addressing digital inequities and fostering sustained economic empowerment. These efforts resonate with existing literature underscoring the necessity of continual digital and financial education for small business growth and resilience

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