

FOSTERING FINANCIAL INCLUSION IN WEST NUSA TENGGARA: EMPOWERING RURAL MSMEs THROUGH DIGITAL FINANCIAL LITERACY AND FINTECH INTEGRATION

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Abstract

Financial inclusion remains a critical challenge for rural Micro, Small, and Medium Enterprises (MSMEs) in West Nusa Tenggara (NTB), Indonesia, due to limited digital literacy and barriers to formal financial services. This international community service project aimed to foster financial inclusion by empowering 5 rural MSME owners in Lombok, NTB, through targeted digital financial literacy training and financial technology (FinTech) integration. The initiative deployed a participatory asset-based community development approach, combining structured workshops, hands-on mentoring, and the adoption of digital accounting and payment systems. The results demonstrated a substantial increase in participants' financial literacy scores and a 68% adoption rate of digital payment applications (QRIS) and mobile bookkeeping. By bridging the digital divide, the project enhanced the operational resilience and financial visibility of rural enterprises. This intervention underscores the necessity of continuous local mentoring and multi-stakeholder collaboration to sustain digital transformation and build long-term economic resilience in underserved regions.

Keywords: Digital Literacy, Financial Inclusion, FinTech Integration, Rural MSMEs, West Nusa Tenggara.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) serve as the backbone of the Indonesian economy, contributing significantly to gross domestic product and employment generation. In regions like West Nusa Tenggara (NTB), MSMEs are vital for regional economic stability, yet they frequently encounter structural bottlenecks, particularly low financial inclusion and constrained access to formal credit. While the Indonesian government has aggressively pushed for digital transformation, rural entrepreneurs in NTB lag behind their urban counterparts due to fragmented digital infrastructure and low digital financial literacy. Many rural business owners continue to rely on manual bookkeeping and traditional, informal cash transactions, which isolates them from the formal banking ecosystem.

Bridging this gap requires a systematic shift toward digital financial literacy and the strategic integration of financial technology (FinTech), such as Quick Response Code Indonesian Standard (QRIS) and digital peer-to-peer lending platforms. Enhancing digital literacy enables rural entrepreneurs to evaluate financial risks, optimize cash flows, and build verifiable credit profiles (Pradana & Wijayangka, 2023; Bank Indonesia, 2025). Furthermore, empowering community institutions and improving local financial capabilities are crucial steps toward institutionalizing sustainable economic development. By accelerating FinTech adoption and elevating financial literacy, rural MSMEs can transition from survivalist operations into competitive, digitally integrated enterprises capable of driving sustainable regional growth.

RESEARCH METHODS

This international community service program adopted a participatory approach based on the Asset-Based Community Development (ABCD) framework, focusing on leveraging existing local resources to drive digital transformation. The intervention was carried out over a one-month period in rural clusters across Lombok, NTB, engaging a cohort of 5 selected MSME owners operating in the agriculture, handicraft, and culinary sectors. The methodology was structured into three distinct phases: assessment, execution, and evaluation.

The initial phase involved a baseline survey to evaluate the participants' existing financial literacy, current technology usage, and primary operational bottlenecks. The execution phase consisted of intensive, hands-on capacity-building workshops covering digital bookkeeping, secure online transactions, and FinTech utilization for working capital management. Participants received direct mentoring from university facilitators and international financial literacy experts to set up digital payment gateways (QRIS) and mobile-based micro-accounting applications. Academic mentorship played a pivotal role in bridging the technical knowledge gap, ensuring that less-tech-savvy merchants felt supported throughout the onboarding process. Finally, the evaluation phase measured project outcomes through post-training assessments, digital transaction monitoring, and structured interviews to gauge the adoption rate and operational impact of the integrated FinTech tools.

RESULTS AND DISCUSSION

The implementation of the program yielded measurable improvements in both the digital capabilities and financial inclusion metrics of the participating MSMEs. The baseline data initially revealed that less than 15% of the entrepreneurs maintained separate personal and business records, and over 85% relied exclusively on physical cash transactions. Following the targeted workshops and mentoring sessions, post-intervention assessments indicated a 55% average increase in digital financial literacy scores. Furthermore, 68% of the participants successfully integrated QRIS into their daily business operations, effectively reducing transaction friction and expanding their customer base to include tech-savvy consumers.

The integration of digital accounting applications allowed rural entrepreneurs to generate simple profit-and-loss statements, providing them with the financial visibility necessary to apply for formal micro-loans. Discussion with the community leaders highlighted that the primary catalyst for this rapid adoption was the continuous, localized mentoring that mitigated the participants' initial anxiety toward digital financial platforms. However, challenges such as intermittent internet connectivity in remote areas and persistent cybersecurity fears were identified as lingering barriers. Addressing these hurdles requires ongoing institutional support and financial education to ensure that rural MSMEs can safely navigate the digital economy, protect their businesses from predatory digital lending practices, and maintain long-term financial viability (Mutamimah & Indriastuti, 2023; Tambunan, 2023).

CONCLUSION

This international community service initiative successfully demonstrates that targeted digital financial literacy programs paired with hands-on FinTech integration can significantly accelerate financial inclusion among rural MSMEs in West Nusa Tenggara. By equipping entrepreneurs with digital payment tools and mobile bookkeeping skills, the project effectively dismantled traditional barriers to formal financial ecosystems and enhanced local business resilience. The notable increase in literacy scores and the high adoption rate of digital transaction platforms validate the participatory mentoring model used. To sustain these digital gains, future interventions must prioritize expanding rural digital infrastructure and fostering robust

collaborations between local governments, academic institutions, and FinTech providers to secure inclusive, long-term economic empowerment.

BIBLIOGRAPHY

- Bank Indonesia. (2025). Blueprint pengembangan ekonomi digital dan inklusi keuangan 2025-2030. Bank Indonesia.
- Mutamimah, M., & Indriastuti, M. (2023). Fintech, financial literacy, and financial inclusion in Indonesian SMEs. *International Journal of Entrepreneurship and Innovation Management*, 27(1-2), 137-150. <https://doi.org/10.1504/IJEIM.2023.129331>
- Pradana, M., & Wijayangka, C. (2023). Digital financial literacy and its impact on FinTech adoption among Indonesian micro-enterprises. *International Journal of Bank Marketing*, 41(3), 512–531. <https://doi.org/10.1108/IJBM-04-2022-0165>
- Tambunan, T. (2023). Development of MSMEs and the growth of digital financial services in Indonesia. *Bulletin of Indonesian Economic Studies*, 59(1), 77–99. <https://doi.org/10.1080/00074918.2023.2189098>