

Digital Financial Literacy Education For Coffee Shop Businesses to Support MSME Sustainability

Nadya Annisa Nasruddin*, Rahayu Alkam, Muhammad Raihan Mubaraq, Nurul Emil Safitri,
&Faizah Khaeruddin

Universitas Negeri Makassar, Makassar and 90222, Indonesia

Abstract

This community service program aimed to improve the digital financial literacy of the managers of By Bar Coffee, an MSME operating in the food and beverage (F&B) sector in Makassar City. Although the business had already adopted digital payment systems such as QRIS, the partner still faced limitations in understanding transaction security, internal controls, and digital risk mitigation. The program was expected to enhance the managers' ability to manage digital transactions in a secure and effective manner. The program was conducted on April 15, 2026, at By Bar Coffee, Makassar, involving managers and employees responsible for financial transaction management. The methods employed included interviews to identify the partner's needs, interactive educational sessions, demonstrations of digital transaction security practices, and mentoring through discussions and consultations. Prior to the program, participants' understanding was largely limited to the operational use of payment applications without adequate awareness of the security risks associated with digital transactions. Following the educational sessions and mentoring activities, participants gained a better understanding of digital transaction risks, the importance of payment verification, financial data protection, and transaction security measures. Participants' enthusiasm was reflected in their active engagement during discussions and question-and-answer sessions. The program enhanced the awareness and capability of the business managers in implementing safer and more accountable digital transaction practices. Improved digital financial literacy is expected to support operational efficiency, strengthen customer trust, and contribute to the long-term sustainability of MSMEs in the digital era.

Keywords: Digital Financial Literacy; Msmes; QRIS; Digital Transaction Security; Business Sustainability.

1. Introduction

The rapid advancement of digital technology has brought significant changes to both global and national economic systems, particularly in the way people conduct financial transactions. The transition toward a cashless society has accelerated alongside the increasing adoption of digital financial services such as e-wallets, mobile banking, and the Quick Response Code Indonesian Standard (QRIS) (Alfiana et al., 2025). Data from Bank Indonesia further supports this trend, reporting that QRIS users have reached tens of millions, with the majority of merchants originating from the Micro, Small, and Medium Enterprises (MSME) sector. Within this ecosystem, MSMEs play a strategic role as the backbone of the Indonesian economy. However, to remain relevant and competitive, the sustainability of MSMEs increasingly depends on their ability to adapt to technological developments (Yahya et al., 2026). Digitalization is no longer merely an option but has become a crucial strategy for enhancing operational efficiency and maintaining competitiveness in an increasingly dynamic market environment (Yuttama & Widadi, 2025).

Digital financial literacy refers to an individual's ability to understand, utilize, and manage technology-based financial services and instruments effectively and securely. With the rapid advancement of financial technology (fintech), digital financial literacy has become a critical factor influencing the successful adoption of digital payment systems among micro, small, and medium-sized enterprises (MSMEs) (Yahya et al., 2026). The utilization of services such as QRIS, mobile banking, and digital wallets can enhance transaction efficiency, expand market access, and support business sustainability (Alfiana et al., 2025).

¹ Corresponding author:
E-mail address: xxxx@xxxxxx.edu

Beyond facilitating transactions, digital financial literacy also contributes to improving the quality of business financial management. (Epitasari & Heliani, 2026) argue that the use of digital accounting applications among MSMEs enables more systematic, accurate, and accessible financial record-keeping compared to conventional manual methods. These findings suggest that digital technology not only simplifies transaction processes but also enhances the quality of financial information that can support managerial decision-making.

Nevertheless, the adoption of financial technology is accompanied by various risks, including account misuse, phishing attacks, QR code manipulation, and financial data breaches. Therefore, digital financial literacy encompasses not only the ability to use technology but also an understanding of transaction security, internal controls, and digital risk mitigation (Hasanah et al., 2025). For MSMEs, strengthening digital financial literacy is essential for maintaining transaction security while enhancing customer trust and confidence in business operations (Yuttama & Widadi, 2025).

Numerous studies have demonstrated the positive contribution of financial digitalization to MSME development. (Alfiana et al., 2025) reported that the increasing use of QRIS and digital payment systems has fostered a more efficient and transparent transaction ecosystem. (Hasanah et al., 2025) identified persistent security risks associated with digital payment systems, highlighting the need for transaction security education among business operators. Similarly, (Yahya et al., 2026) emphasized that the ability to adapt to digital technologies is a key determinant of MSME competitiveness and sustainability in the digital economy.

Furthermore, (Fevriera et al., 2025) found that both financial literacy and digital financial literacy positively influence the adoption of cashless payment systems among MSMEs. Their findings indicate that greater knowledge of financial management and digital technologies increases the likelihood that business owners will adopt and utilize digital payment systems in their operations. This evidence reinforces the view that digital financial literacy is a crucial driver of MSME digital transformation.

In addition, (Yuttama & Widadi, 2025) demonstrated that digital transformation can improve operational efficiency, although its success largely depends on users' levels of digital literacy. Existing studies have primarily focused on the influence of digital financial literacy on cashless payment adoption, transaction digitalization, and business financial management. However, limited attention has been given to strengthening MSME capacity in transaction security and digital risk mitigation through community-based educational and mentoring programs.

Therefore, this community service initiative focuses on enhancing digital financial literacy among MSMEs in the food and beverage sector, particularly regarding secure digital transaction practices and risk mitigation strategies. Through educational and mentoring activities, the program seeks to strengthen business owners' capabilities in utilizing financial technology in a secure, effective, and sustainable manner.

The food and beverage (F&B) sector is among the industries that have been at the forefront of adopting digital payment technologies. The modernization of payment systems through cashless methods, such as QRIS, represents an important innovation that facilitates faster, more convenient, and more transparent transactions (Hasanah et al., 2025). Strategically, the adoption of financial technology not only improves customer convenience but also has the potential to significantly increase the daily sales volume of MSMEs by expanding access to payment alternatives (Yahya et al., 2026).

This condition is clearly reflected in By Bar Coffee, a coffee shop business that has demonstrated promising growth since its establishment in 2019. Starting as a small home-based enterprise, By Bar Coffee successfully navigated its critical growth phase and eventually expanded to a more strategically located business site. Currently, the coffee shop operates at Jl. AR. Dg. Ngunjung 1 No. 18, Jl. Yusuf Dg. Ngawing (Kompleks Pemda E24/1), Makassar. The new location is situated within an area characterized by active commercial and residential activities, where customers increasingly demand fast and convenient services, particularly in terms of payment transactions. This relocation has encouraged By Bar Coffee to continuously improve its service quality, including optimizing its digital transaction system. To meet customer expectations, the management has implemented cashless payment methods using barcode-based payments and QRIS as the primary transaction platforms.



Figure 1. By Bar Coffee

However, based on the situational analysis conducted, the adoption of financial technology at By Bar Coffee has not been accompanied by an adequate level of digital financial literacy. Although digital payment systems have been implemented, several security vulnerabilities remain that may pose risks to the business. Managers and employees frequently encounter technical challenges and concerns related to transaction security, including the potential manipulation of fraudulent QR codes and inaccuracies in payment verification procedures (Hasanah et al., 2025). These vulnerabilities not only threaten the company's cash flow but also risk undermining the reputation and customer trust that have been built over time. Furthermore, reliance on manual verification processes and limited understanding of cyber risk mitigation make daily operations susceptible to human error (Yahya et al., 2026). This gap between technological advancement and users' digital literacy represents a critical weakness in maintaining business financial stability (Yuttama & Widadi, 2025). In addition, insufficient digital financial literacy often makes it difficult for managers to reconcile daily transaction records with incoming balances, resulting in uncertainty and potential inaccuracies in financial reporting.

In response to these challenges, this community service program was conducted to bridge the digital literacy gap among the managers of By Bar Coffee, an MSME operating in the food and beverage sector. The primary focus of the program was to provide education and hands-on mentoring on digital financial management, the development of transaction security Standard Operating Procedures (SOPs), and the enhancement of transaction security practices. Specifically, the program aimed to improve the knowledge and skills of managers and employees in identifying security risks, conducting proper transaction verification, and managing the privacy of financial data independently. By strengthening digital financial literacy, By Bar Coffee is expected to enhance customer trust and achieve more sustainable business performance in the digital era.

2. Methods

2.1. Location and time

The digital financial literacy education program was conducted at By Bar Coffee, a micro, small, and medium-sized enterprise (MSME) operating in the food and beverage (F&B) sector, particularly in the coffee shop business. The business was selected as the partner for this community service activity due to its active utilization of digital payment systems in daily business operations. As consumer preferences increasingly shift toward cashless transactions, coffee shops have become one of the business sectors that frequently interact with various forms of digital financial technology.

The activity was carried out on April 15, 2026, at the business location in Makassar, Indonesia. The implementation schedule was determined through prior coordination with the management to ensure that the activity would not interfere with normal business operations. Conducting the activity directly at the business premises also enabled the participants to relate the educational materials to their actual work environment and daily transaction processes.

2.2. Target Audience and Community Partner

The target audience of this community service program was the management of By Bar Coffee. As an MSME operating in the highly competitive coffee shop industry, the business has adopted several digital payment methods to facilitate customer transactions and improve service efficiency. The increasing use of digital financial services has created opportunities for business growth while simultaneously introducing new challenges related to transaction security and financial risk management.

Based on preliminary discussions, the management demonstrated a strong interest in improving their understanding of digital financial practices and security measures. Although digital payment systems had been routinely utilized, there was limited awareness regarding the identification of digital threats, fraud prevention mechanisms, and the implementation of internal controls. Therefore, the partner represented an appropriate target for educational and mentoring activities focused on strengthening digital financial literacy and promoting safer financial management practices.

2.3. Needs Assessment and Problem Identification

Prior to the implementation of the community service program, a needs assessment was conducted through interviews and discussions with the management of By Bar Coffee. This preliminary assessment aimed to obtain a comprehensive understanding of the partner's business operations, particularly regarding the use of digital financial services and payment systems. The discussions focused on identifying the current practices adopted by the business, the level of understanding of digital financial management, and the challenges experienced in conducting digital transactions.

The assessment findings indicated that digital payment systems had become an essential component of the coffee shop's daily operations. Customers frequently utilized cashless payment methods such as QRIS and digital wallets, which contributed to transaction efficiency and convenience. Despite the widespread use of digital payment technologies, the management demonstrated limited awareness regarding transaction security measures, internal control procedures, and potential risks associated with digital financial services.

Several challenges were identified during the assessment process, including the lack of knowledge concerning fraud prevention, phishing attempts, account security management, and the protection of sensitive financial information. These issues may increase the vulnerability of MSMEs to financial losses and cybersecurity threats. Therefore, strengthening digital financial literacy, particularly in the areas of transaction security and risk mitigation, was considered necessary to support safer and more sustainable business operations.

Based on these findings, the community service team developed educational materials that were specifically tailored to the characteristics and operational needs of the coffee shop business. The identified challenges served as the primary foundation for determining the topics, learning objectives, and educational approaches employed throughout the program.

2.4. *Educational Material Development*

The educational materials were developed based on the results of the preliminary needs assessment and a review of relevant literature concerning digital financial literacy among MSMEs. Academic articles, government publications, and other credible sources were examined to ensure that the content reflected current developments in financial technology and digital transaction practices. Particular attention was given to issues commonly encountered by MSMEs in adopting digital financial services.

The materials covered several key topics, including the concept of digital financial literacy, the utilization of digital payment systems, transaction governance, and financial technology applications for business operations. In addition, the materials addressed various risks associated with digital transactions, such as phishing attacks, unauthorized account access, QR code manipulation, and financial data breaches. Practical strategies for maintaining transaction security and mitigating digital risks were also incorporated into the educational content.

To enhance relevance and applicability, the materials were adjusted to the operational context of By Bar Coffee as a coffee shop business. Real-world examples and case-based discussions were included to facilitate participant understanding and encourage the application of the presented concepts in daily business activities.

2.5. *Implementation of Educational Activities*

The educational session was delivered through an interactive learning approach consisting of presentations, discussions, and informal conversations. This approach was selected to create a participatory learning environment in which participants could actively engage with the material and share their experiences regarding the use of digital financial services. The educational content was presented using practical examples relevant to the operational context of the coffee shop business.



Figure2. Digital Financial Literacy Education

The materials discussed during the session included the fundamentals of digital financial literacy, the benefits and challenges of digital payment systems, transaction governance, and common risks associated with financial technology utilization. Particular emphasis was placed on transaction security issues, including phishing attacks, account protection, password management, and the verification of digital payment requests. These topics were considered highly relevant given the increasing prevalence of digital fraud targeting business owners and consumers.

In addition to theoretical explanations, the session incorporated demonstrations and practical guidance related to secure transaction practices. Participants were encouraged to discuss real situations encountered during business operations and explore possible solutions based on the concepts introduced during the training. This interactive approach was expected to enhance both participant engagement and knowledge retention.



Figure 3. Post-Training Documentation

3. Result and Discussion

3.1. Results

3.1.1. Initial Condition of Digital Financial Literacy at By Bar Coffee

The digital financial literacy education program at By Bar Coffee was successfully implemented and received positive responses from the coffee shop management. Based on observations and discussions conducted prior to and during the program, participants demonstrated a high level of interest in the topics presented, particularly those related to digital transaction security and risk management in electronic payment systems. Prior to the intervention, the managers' understanding of digital financial literacy was primarily limited to the operational use of digital payment applications. Their awareness of potential risks, such as phishing attacks, account misuse, data security vulnerabilities, and the importance of internal controls in digital transactions, remained relatively limited. This finding suggests that the adoption of digital payment technologies was not fully accompanied by adequate knowledge regarding transaction security and risk mitigation.

3.1.2. Improvement of Participants' Understanding

Through the interactive educational approach employed in this program, participants gained a more comprehensive understanding of digital financial literacy, including both the benefits and risks associated with digital financial services. During the discussion sessions, participants actively raised questions regarding digital transaction security and practical strategies for preventing fraud and financial losses. The high level of engagement indicated a strong need for information and guidance related to secure digital financial management among MSMEs.

Following the educational activities, participants demonstrated an improved ability to identify various digital transaction threats, including phishing attempts, unauthorized account access, and fraudulent digital payment requests. They also showed a better understanding of preventive measures, such as multi-factor authentication, account security management, and routine transaction verification procedures.

3.1.3. Practical Benefits of the Mentoring Activities

In addition to increasing conceptual understanding, the program provided practical benefits through demonstrations and tutorials on digital transaction security measures that could be directly applied in daily business operations. Participants gained valuable insights into account protection practices, password management, transaction verification mechanisms, and risk prevention strategies. These practical competencies are expected to reduce the likelihood of financial losses resulting from digital security threats and strengthen the overall governance of digital financial transactions within the business.

3.2. Discussion

3.2.1. *Digital Financial Literacy as a Foundation for Secure Digital Transactions*

The findings indicate that digital financial literacy extends beyond the ability to operate digital payment applications. MSME owners must also understand transaction risks, financial data protection, and appropriate security controls to ensure the safe utilization of digital financial services. These findings are consistent with (Hasanah et al., 2025), who highlighted that MSMEs remain vulnerable to various digital transaction risks and therefore require adequate education regarding digital security.

Furthermore, the results support the argument of (Yuttama & Widadi, 2025), who emphasized that the success of digital transformation largely depends on users' digital literacy capabilities. By improving their understanding of transaction security and digital risk mitigation, MSME owners are better prepared to adopt digital technologies responsibly and sustainably.

3.2.2. *The Role of Digital Financial Literacy in MSME Competitiveness*

The increased understanding demonstrated by the managers of By Bar Coffee also reflects the importance of digital financial literacy in supporting MSME competitiveness. (Yahya et al., 2026) argued that the ability to adapt to digital technologies is a critical determinant of MSME sustainability and competitiveness in the digital economy. Similarly, (Fevriera et al., 2025) found that digital financial literacy positively influences the adoption of cashless payment systems among MSMEs.

Improved literacy regarding digital payment services may encourage business owners to utilize digital financial technologies more confidently and effectively. This finding is also aligned with (Alfiana et al., 2025), who reported that digital payment systems contribute to greater transaction efficiency and transparency in MSME operations.

3.2.3. *Strengthening Trust and Sustainable Digital Financial Management*

The results of this community service program support previous community empowerment initiatives that emphasize the importance of combining education and mentoring approaches in strengthening MSME digital capabilities. (Latief et al., 2026) reported that mentoring-based programs can significantly improve MSME entrepreneurs' understanding and readiness to utilize digital technologies in business activities. Similarly, the mentoring activities conducted at By Bar Coffee enabled participants to discuss practical challenges, receive direct guidance, and better understand the application of digital transaction security measures in their daily operations.

In addition, enhanced digital financial literacy may strengthen MSME owners' confidence in using digital financial services. Understanding transaction risks, security procedures, and digital risk mitigation strategies can reduce uncertainty and encourage the responsible use of financial technology. This finding supports (Hasanah et al., 2025), who emphasized the importance of transaction security awareness in minimizing vulnerabilities associated with digital payment systems. Furthermore, (Yuttama & Widadi, 2025) argued that the success of digital transformation depends largely on users' digital literacy capabilities. Therefore, improving digital financial literacy can foster greater confidence and readiness among MSME owners to adopt digital financial services in a secure and sustainable manner.

The findings also reinforce evidence suggesting that digital financial literacy contributes to broader business sustainability and performance outcomes. Digital financial literacy has been shown to support financial inclusion, digital finance adoption, operational efficiency, and MSME performance when accompanied by adequate access to digital financial services. Therefore, educational interventions focusing on digital financial literacy and transaction security may serve as an important foundation for strengthening MSME resilience and sustainability in the digital economy.

3.2.4. *Contribution of the Community Service Program*

Overall, the findings demonstrate that digital financial literacy education and mentoring provide meaningful contributions to enhancing MSME owners' knowledge, awareness, and preparedness regarding digital transaction security. Unlike many previous studies that primarily focused on financial technology adoption and digital payment utilization, this community service program emphasized transaction security awareness and digital risk mitigation within the food and beverage sector. Consequently, the program not only strengthened participants' capacity to utilize

digital financial technologies but also contributed to building trust, security, and sustainability in business operations amid the continuing digital transformation of MSMEs.

4. Conclusion

The digital financial literacy education and mentoring program implemented at By Bar Coffee successfully enhanced the knowledge and understanding of business managers regarding the importance of managing digital transactions in a secure, effective, and efficient manner. Through a series of activities, including problem identification, educational sessions, demonstrations, and interactive discussions, participants gained valuable insights into the fundamental concepts of digital finance, the potential risks associated with electronic transactions, and practical mitigation strategies that can be applied in daily business operations. The program also increased participants' awareness of the importance of internal controls and data protection in the utilization of digital financial services. Nevertheless, several challenges were encountered during implementation, particularly limitations in access and functionalities of certain applications, which prevented some tutorial components from being delivered optimally. Despite these constraints, the enthusiasm and active participation demonstrated by the business managers indicate a strong demand for digital financial literacy education among MSMEs. Therefore, similar initiatives should be conducted on a continuous basis through further training and mentoring programs to strengthen business owners' capacity to anticipate digital transaction risks, enhance customer security and convenience, and promote more professional, accountable, and sustainable business management practices in the digital economy.

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