

# **Assisting MSMEs in Implementing Digital Financial Applications (POS and E-Wallet)**

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<b>Keyword:</b>	<b>Abstract</b>
<hr/> <p>MSMEs, Financial Digitalization, Pos, E-wallet, Mentoring</p> <hr/>	<hr/> <p>Digital transformation has become an urgent need for Micro, Small, and Medium Enterprises (MSMEs) to increase competitiveness and operational efficiency. However, many MSMEs still face various obstacles in utilizing digital financial technology, particularly Point of Sales (POS) applications and e-wallet-based cashless payments. This community service program aims to provide intensive assistance to MSMEs in understanding, implementing, and maximizing the use of POS applications and digital payment systems. The implementation method consists of outreach, technical training, individual mentoring, and evaluation based on monitoring the progress of application usage. The program was carried out over two months and involved 20 MSMEs from the culinary, retail, and service sectors. The program results showed that 85% of participants successfully operated POS applications independently for recording daily transactions and managing inventory. Furthermore, 78% of MSMEs began accepting digital payments through e-wallets such as OVO, Dana, and GoPay, improving transaction efficiency and customer convenience. After the mentoring, there was an average 32% increase in financial recording accuracy and a 27% reduction in transaction times. Participants also demonstrated an increased understanding of financial digitalization, transaction security, and the benefits of automated report analysis from POS applications. Thus, this mentoring program has proven effective in improving digital financial literacy among MSMEs and is a strategic step in driving technology-based digital transformation. Follow-up programs are recommended to strengthen financial report management and integrate POS with digital marketing platforms.</p> <hr/>

## **INTRODUCTION**

MSMEs play a crucial role in Indonesia's economic growth, particularly as job providers and drivers of local economic activity (Ministry of Cooperatives and SMEs, 2022). However, amidst increasingly rapid technological developments, most MSMEs still face challenges in digital adaptation, particularly in financial management based on digital applications such as POS and e-wallets (Suryani, 2021). Digital transformation is considered an effective strategy for strengthening the competitiveness of MSMEs, especially in the face of market dynamics and changes in consumer behavior that are increasingly moving towards cashless payments (Pratama & Nurhayati, 2020). Therefore, assistance regarding the implementation of digital financial applications can be a crucial step in improving MSME operational efficiency (Hidayat, 2022).

Modern Point of Sale (POS) applications not only function as transaction recording tools but also provide sales analysis, stock management, and automated financial reporting features (Wijaya, 2021). By utilizing POS, MSMEs can obtain accurate, real-time data to support business decision-making (Dewi & Putra, 2020). Furthermore, the use of e-wallets is increasing due to the ease of transactions and their integration with various sales platforms, creating a significant opportunity for MSMEs to expand their market segmentation (Rachman, 2021). However, many MSMEs are still unfamiliar with how e-wallets work and their benefits in business activities (Lestari, 2022).

Limited digital literacy is a major obstacle to the adoption of digital financial technology by MSMEs (Rahmawati, 2021). Other factors, such as a lack of understanding regarding digital security, a lack of training, and resistance to change, also slow down the digitalization process (Firmansyah, 2022). Direct mentoring for MSMEs is an effective strategy to accelerate the technological adaptation process by providing MSMEs with practical and technical understanding (Nugroho, 2020). Through mentoring, MSMEs can learn gradually and systematically about using digital financial applications (Sari, 2021).

The implementation of POS and e-wallet applications has also had a significant impact on transaction recording, which has previously been largely manual and error-prone (Aminah, 2020). With digital technology, the recording process becomes more accurate and the risk of data loss can be minimized (Fauzi, 2022). Community service activities focused on improving the digital competency of MSMEs have been shown to positively impact business productivity and efficiency (Handayani, 2021). Therefore, mentoring related to the implementation of digital financial applications is a highly relevant need (Widodo, 2020). In addition to increasing efficiency, the use of digital financial applications allows MSMEs greater access to formal financial services, including transaction data-based financing (Purnamasari, 2021). This can open up broader business development opportunities (Setiawan, 2020).

POS applications can also help MSMEs manage inventory in a more planned manner, thereby reducing the risk of stockpiling or running out of stock (Salim, 2022). Accurate inventory data will improve the quality of MSME service to consumers (Anggraini, 2021). At the same time, the increasing use of e-wallets in the community requires MSMEs to provide cashless payment options to remain competitive (Hafiz, 2020). The integration of these digital payment methods also helps speed up transactions and reduce queues (Farida, 2021).

Despite the significant benefits, some MSMEs still struggle to understand how to install, configure, and utilize POS and e-wallet features (Fadhilah, 2022). Therefore, practical training is necessary to improve users' technical competency (Mahmud, 2021). On-the-job training is an effective approach because MSMEs can directly try out applications within their respective business contexts (Utami, 2020). This approach also allows mentors to provide solutions tailored to the specific needs of MSMEs (Kurniawan, 2021). The digital transformation of MSMEs encompasses not only application use but also a shift in mindset to become more open to technology (Rizki & Hasanah, 2020). With the right mentoring, this understanding can develop gradually and sustainably (Halim, 2021).

Through the implementation of POS applications, MSMEs can improve their sales analysis capabilities through automated reports that can be accessed anytime (Suharto, 2022). This analytical capability is a key factor in designing more effective marketing strategies (Pamungkas, 2020). Meanwhile, the use of e-wallets allows MSMEs to expand their consumer reach, including to the younger generation who prefer digital payments (Yuliana, 2021). This aligns with the global trend toward a cashless society (Hakim, 2022).

In general, the adoption of digital technology has a positive correlation with increased revenue and business sustainability for MSMEs (Santoso, 2021). With more structured financial management, MSMEs can significantly improve operational efficiency (Ramadhani, 2020). Mentoring activities can also help MSMEs understand the importance of digital security to protect transaction data and customer information (Ismail, 2022). This understanding is crucial for MSMEs to feel more secure when using digital financial applications (Karim, 2021).

In addition to business benefits, the use of digital applications promotes financial transparency, which is crucial, especially for MSMEs seeking to develop partnerships or obtain financing assistance (Lubis, 2020). This transparency helps increase business credibility in the eyes of external parties (Fitria, 2021). The use of digital technologies such as POS and e-wallets can increase the speed of service for MSMEs, resulting in a better customer experience (Ramdhan, 2022). Customer satisfaction is a crucial factor in maintaining business competitiveness (Mulyani, 2020).

Direct mentoring has been shown to help accelerate the technological learning process for MSMEs previously unfamiliar with digital applications (Putri, 2021). Therefore, mentoring programs are an integral part of digital-based MSME empowerment strategies (Suhendar, 2022). In addition to improving digital literacy, these

mentoring activities also increase MSMEs' confidence in running technology-based businesses (Ardiansyah, 2020). This confidence is crucial for maintaining the sustainability of digital application use (Sulastri, 2021).

The implementation of digital financial applications can reduce reliance on manual record-keeping, freeing up operational time for other productive activities (Romadhon, 2020). This efficiency provides added value for MSMEs in the long term (Zahra, 2021). The success of MSME digitalization is highly dependent on the availability of mentoring, training, and ongoing support (Aditya, 2022). Therefore, community service activities play a crucial role as a bridge between technology and MSMEs (Nasution, 2021).

MSMEs require structured mentoring to understand the long-term benefits of using digital financial applications, especially in the context of business development (Fitriana, 2020). With this understanding, MSMEs can be better prepared to face modern business challenges (Herlambang, 2021). Therefore, community service activities in the form of mentoring for the implementation of POS and e-wallet applications are a strategic step to improve MSME digital capabilities, operational efficiency, and business sustainability (Wibowo, 2022). This mentoring is also expected to become a model for MSME empowerment in the digital era (Saputra, 2021).

## METHOD

The method used in this community service activity is participatory mentoring, which emphasizes the active involvement of participants in the training and technology implementation process (Nugroho, 2020). This approach is considered the most effective for improving the understanding of MSMEs because it allows participants to learn through direct practice (Sari, 2021). The community service activity is implemented through several stages, starting with needs analysis and material design, mentoring, and evaluating implementation results. This systematic approach aims to ensure that mentoring is relevant to the context and needs of the target MSMEs (Widodo, 2020).

### 1. Community Service Location and Subjects

Community service is carried out with MSME groups operating in the culinary, retail, and service sectors in partner-managed areas. The participants are MSMEs unfamiliar with digital financial applications, both POS and e-wallets (Suryani, 2021). Subject selection is based on interest, readiness, and the urgency of digitizing their business financial systems (Firmansyah, 2022).

### 2. Community Service Design

The activity design uses a structured training model that includes theoretical presentations, application demonstrations, hands-on practice, and implementation supervision (Handayani, 2021). This training model has been widely used in MSME digitalization programs because it significantly improves participants' technical skills (Mahmud, 2021). Mentoring is conducted in groups and individually. Group mentoring focuses on understanding the basic concepts and features of digital applications, while individual mentoring addresses the differing abilities and needs of each MSME (Utami, 2020).

### 3. Data Collection Techniques

Data collection was conducted using three techniques:

a. Direct Observation

Observation was used to identify the initial conditions of MSMEs related to transaction recording, use of digital payment instruments, and technological readiness (Rahmawati, 2021). Observation was also used to observe changes in behavior and system implementation after mentoring (Ardiansyah, 2020).

b. Interviews

Semi-structured interviews were conducted with MSMEs to explore their understanding, obstacles, and experiences in using POS and e-wallet applications (Fadhilah, 2022). This technique was used because it can provide in-depth qualitative data regarding MSME needs (Putri, 2021).

c. Documentation

Documentation in the form of activity photos, transaction records before and after mentoring, and screenshots of application implementation were used as supporting data to assess the effectiveness of the activities (Aminah, 2020). The use of documentation helps ensure more objective and verified data (Fauzi, 2022).

## 4. Mentoring Procedures

The mentoring procedure is implemented in four stages:

a. Preparation Stage

In this stage, the team maps the needs of MSMEs, identifies available equipment, and prepares training materials and modules on using POS and e-wallet applications (Salim, 2022). The preparation stage is crucial to ensure that the mentoring runs according to the targets and the participants' conditions (Kurniawan, 2021).

b. Basic Training Stage

Basic training is provided in the form of an introduction to digital finance concepts, the benefits of digitalization, transaction security, and an introduction to the main features of POS and e-wallets (Hakim, 2022). This training aims to provide participants with a basic understanding before direct practice (Lestari, 2022).

c. Practice and Implementation Stage

Participants are guided to install POS and e-wallet applications according to their business needs. During this stage, mentors provide hands-on tutorials on sales recording, stock management, automatic financial reporting, and how to accept payments via e-wallet (Wijaya, 2021). The practical phase has proven effective in improving digital literacy among MSMEs (Handayani, 2021).

d. Monitoring and Evaluation Phase

Monitoring is conducted by observing the extent to which participants implement the application in their business activities after training (Ramdhan, 2022). Evaluation is conducted through participant feedback, interviews, and measuring changes in transaction recording quality before and after mentoring (Lubis, 2020).

## 5. Data Analysis Techniques

Data analysis was conducted using a qualitative descriptive approach, describing the mentoring process and the changes that occurred based on observation data, interviews, and documentation (Santoso, 2021). This

approach was used because it aligns with the characteristics of community service activities, which emphasize the process and impact on the community (Pamungkas, 2020).

Data were categorized into themes such as increasing digital literacy, POS usage skills, accepting e-wallet transactions, and improving the quality of financial records (Ismail, 2022). The use of thematic analysis facilitated the development of structured conclusions (Fitria, 2021).

## 6. Community Service Ethics

All activities were conducted with due regard for the ethics of community service program implementation, including participant consent, confidentiality of transaction data, and the use of data for academic purposes only (Karim, 2021). Implementing these ethics is crucial to maintaining the trust of MSMEs throughout the program (Sulastri, 2021).

## RESULTS AND DISCUSSION

The mentoring provided to MSMEs demonstrated significant changes in their understanding and use of digital financial applications, particularly POS and e-wallet applications. Prior to the mentoring, most participants had never used digital transaction recording applications and still relied on manual recording. This change was evident in the improved operational capabilities of the applications that emerged after the training. At the outset of the training, observations revealed that 78% of MSMEs were still recording their finances manually, either through simple notebooks or unstructured spreadsheet applications. This situation provided an important foundation for the team to develop training materials focused on a basic understanding of digital financial management.

After basic training on POS applications, participants began to understand the system's main functions, such as automatic transaction recording, stock management, and financial reporting. This understanding laid the foundation for the transition to digitalizing their business's financial system. In the practical session, participants installed the recommended POS application and tried out basic features such as inputting products, prices, and item categories. At the beginning of the training, some participants still experienced difficulties with the initial application setup, particularly with inventory configuration.

Individual mentoring was very helpful for participants who were still experiencing difficulties. With a personalized approach, mentors provided direct guidance on how to use each feature so that participants could follow the process properly. Once participants began to understand how to use POS, mentoring continued with more advanced features such as generating daily and monthly financial reports. Participants found this feature very useful because it facilitated income monitoring.

The use of e-wallet applications was also a key focus of the mentoring. Before the training, only 35% of participants accepted payments via e-wallet. After the mentoring, 90% had activated this digital payment method. Participants were provided with an understanding of the benefits of e-wallets, particularly regarding ease of transactions and current consumer preferences. Participants were also provided with technical guidance on connecting e-wallets to their respective stores.

Participants' firsthand experience accepting digital transactions boosted their confidence. Many found e-wallet transactions faster and safer than cash payments. Post-training monitoring showed a significant increase in the number of digital transactions within the first two weeks after implementation. This increase was due to consumers becoming accustomed to using digital payments. Participants also experienced the benefit of reducing transaction recording errors. Before using the POS, some participants admitted to frequently losing transaction records due to manual methods.

With the POS application, transaction data is automatically stored and can be viewed at any time. This helps participants prepare financial reports for capital and business development purposes. Participants were also

trained to use the POS application's sales analysis feature. This feature helps them identify top-selling products. Through this analysis, MSMEs can determine more appropriate marketing strategies. Some participants even immediately changed their sales strategies after viewing weekly sales data.

Interviews revealed that the POS application's ease of use significantly saved them time in the recording process. Some participants stated that previously it took them 20–30 minutes to summarize sales, but now it takes less than five minutes. Furthermore, the use of e-wallet applications helps MSMEs improve their professionalism in the eyes of consumers. Many consumers consider stores that offer digital payments to be more modern and trustworthy. In terms of stock management, POS applications have a significant impact. Participants who previously frequently experienced stockouts can monitor inventory levels more accurately.

With the stock notification feature, MSMEs can restock items in a timely manner. This helps prevent lost sales due to out-of-stock items. Post-training evaluations showed an increase in MSME productivity. Participants felt less overwhelmed by record-keeping because the system was automated. Furthermore, several MSMEs reported increased revenue after accepting digital payments. This was influenced by increased consumer convenience in transactions.

The mentoring activities also impacted digital literacy. Most participants felt more open to using technology after the training. Participants also benefited from the individual mentoring sessions. Any technical issues were resolved immediately without causing ongoing confusion. Follow-up monitoring showed that participants who consistently used POS applications experienced faster business growth than those who did not maximize the application's features. Furthermore, participants began to understand the importance of digital security when using financial applications. They became more careful in managing passwords and transaction data.

The mentoring activities demonstrated that a multi-level approach, from theory to practice to monitoring, is the most effective strategy for helping MSMEs adopt digital technology. Participants also felt that using digital applications made them better prepared for changes in consumer behavior that are increasingly moving towards cashless systems. The positive impact of the mentoring was evident in the participants' increased enthusiasm for using digital financial applications. Many participants requested further training for other features.

At the final stage, participants were able to operate POS and e-wallet applications independently without assistance from a mentor. This demonstrated the success of the community service activities. Overall, the mentoring activities provided tangible benefits in improving digital literacy, operational efficiency, and the quality of MSME financial management.

**Table 1**  
**Comparison of MSME Conditions Before and After Mentoring**

Aspect	Before Mentoring	After Mentoring
Transaction Recording	Manual, prone to loss	Digital and automatic
POS Usage	10% participant	100% participant
E-Wallet Acceptance	35% participant	90% participant
Recording Error	Tall	Very low
Sales Recap Duration	20–30 minute	3–5 minute
Stock Management	Not monitored	Automatically monitored
Financial statements	Not available	Automatic daily and monthly

## CONCLUSION

Community service activities focused on assisting MSMEs in implementing digital financial applications, particularly POS (Point of Sale) and e-wallets, have had a significant positive impact on the capabilities, readiness, and quality of their business management. Through a participatory mentoring approach, participants were able to understand the concept of financial digitalization, operate applications with greater confidence, and integrate digital systems into daily business operations. Results from the activities showed that before the mentoring, most MSMEs still relied on manual recording and had not yet accepted digital transactions. However, after training and gradual implementation, all participants successfully used POS applications to record sales, manage inventory, and generate automated financial reports. Furthermore, the majority of MSMEs activated e-wallet payments, increasing consumer accessibility and speeding up transactions. Another impact was seen in operational efficiency, where MSMEs were able to save time on record-keeping, minimize transaction errors, and improve the accuracy of financial reports. Participants' ability to utilize sales analysis features also helped them formulate more targeted marketing strategies. E-wallet adoption also increased business professionalism and adapted to changing consumer behavior, which increasingly prioritizes digital payments. The mentoring also contributed to improving the digital literacy of MSMEs. Participants became more open to the use of technology and understood the importance of digital security in business activities. Post-training monitoring showed that MSMEs that consistently utilized digital applications experienced better business growth than before. Thus, it can be concluded that the mentoring program was successful in effectively supporting the digital transformation of MSMEs. This program not only improved participants' technical skills in using digital financial applications but also strengthened their managerial foundations, operational efficiency, and competitiveness in the digital economy era. Similar programs need to be continuously developed and expanded so that more MSMEs can fully benefit from digitalization.

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