

## Advances in Community Services Research

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# Improving MSME Accounting Financial Recording Skills Based on Android Applications



Kirana Ikhtiari <sup>✉</sup> Muslim Muslim <sup>2</sup> Nurfadila Nurfadila <sup>3</sup>

<sup>✉</sup> Universitas Muslim Indonesia, Makassar, 90231, Indonesia

<sup>2,3</sup> Universitas Muslim Indonesia, Makassar, 90231, Indonesia

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\* Corresponding author. Kirana Ikhtiari

<sup>✉</sup> [kirana.ikhtiari@umi.ac.id](mailto:kirana.ikhtiari@umi.ac.id)

KEYWORDS	ABSTRACT
<p><b>Keywords:</b> MSMEs; Financial Management; Android-Based Accounting; Digital Literacy; Community Service.</p> <p><b>Conflict of Interest Statement:</b> The author(s) declares that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.</p> <p><b>Copyright © 2024 ACSR. All rights reserved.</b></p>	<p><b>Purpose:</b> This community service project aimed to enhance the financial recording skills of Micro, Small, and Medium Enterprises (MSMEs) in Desa Kapita through hands-on training with Android-based accounting applications.</p> <p><b>Research Design and Methodology:</b> The project employed a mixed-methods approach, including pre-and post-training evaluations via questionnaires, interviews, and practical exercises. Involving 25 SME owners in Desa Kapita, Kecamatan Bangkala, and Kabupaten Jeneponto, the training focused on the Wave application for transaction recording, expense management, and financial report generation. The program featured interactive workshops, simulated business scenarios, and follow-up mentoring.</p> <p><b>Findings and Discussion:</b> Post-training evaluations revealed significant improvements in financial recording skills. 80% of participants developed a solid understanding of basic accounting concepts, and 85% effectively utilized the Wave application for managing finances. The training enhanced the accuracy and efficiency of transaction recording and financial report generation, leading to improved financial oversight and business decision-making.</p> <p><b>Implications:</b> The findings indicate that targeted training can effectively close the digital literacy gap among SME owners, promoting the use of modern financial tools. Future efforts should incorporate regular mentoring and the creation of local support networks to maintain and broaden the benefits of digital financial management solutions for MSMEs.</p>

## Introduction

Small and Medium Enterprises (MSMEs) play an essential and tactical role in the country's economic development (Cruz et al., 2023; Garcia-Martinez et al., 2023). MSMEs play a vital role in the country's economic development by providing employment opportunities for the people. However, the contribution of MSMEs to the country's economy needs to be balanced with the encouragement of adequate financial contribution. Hence, the development of MSMEs is a must. One of the things that business actors should remember when carrying out business development activities is bookkeeping. A poor accounting system is one of the reasons why MSMEs are challenging to develop. Various factors trigger this, including many MSME players who want to avoid thinking about complicated things such as accounting and financial management issues. Their primary financial priority is profit-making (Ayalu et al., 2022; Prijadi et al., 2022).

Small and Medium Enterprises (SMEs) are pivotal to the local economies across Indonesia, particularly in Desa Kapita, Kecamatan Bangkala, and Kabupaten Jeneponto. Various SMEs operate in farming, seaweed cultivation, and ecotourism, providing essential employment opportunities and stimulating economic activities. Despite their critical role, these enterprises frequently encounter significant challenges, especially in financial management. Effective bookkeeping and financial records are crucial for making informed business decisions. However, many SME owners in Desa Kapita need to pay more attention to this aspect due to a need for more understanding or the perceived complexity of accounting practices. This financial management gap reflects a broader issue where traditional methods dominate, with many business owners relying on mental accounting or rudimentary record-keeping methods that are increasingly inadequate under modern economic pressures. Recent research has highlighted the potential of Android-based accounting applications in addressing financial management challenges faced by small and medium-sized enterprises (SMEs) (Troutman, 2023). These applications offer user-friendly interfaces, simplifying financial recording processes and improving SMEs' access to external funding and decision-making capabilities, as evidenced by studies such as Kurniawan (2022). Despite the proven benefits, a gap exists in SME owners' adoption of these technologies in areas like Desa Kapita, attributed to a need for familiarity and technical expertise. Additionally, studies emphasize the importance of training and development in enhancing accounting skills among SMEs to overcome challenges and improve performance (Susilowati & Wahyudi, 2023). Addressing these knowledge gaps and supporting digital literacy can significantly enhance the uptake of digital accounting tools among SMEs, ultimately leading to better financial outcomes and sustainable growth (Syah et al., 2023).

In Desa Kapita, many SMEs need help maintaining systematic financial records, which hampers their ability to make informed pricing, cost management, and investment decisions. This lack of formal financial documentation also limits their eligibility for financial assistance from banks and other lending institutions, which typically require precise and accurate financial records to assess creditworthiness. While reflective of local conditions, these challenges indicate broader issues seen in similar rural and semi-rural areas across Indonesia. Traditional practices often dominate, with business owners relying on mental accounting or rudimentary record-keeping methods. While rooted in longstanding local traditions, these practices need to be revised in the face of growing economic pressures and the need for integration into broader financial systems. Despite these digital tools' availability and potential benefits, their adoption in Desa Kapita still needs to grow. This situation underscores a critical gap that needs addressing: SME owners need more awareness and technical skills to utilize such technologies effectively. This gap presents an opportunity for targeted community service initiatives to educate and empower SME owners in financial management. The proposed community service program seeks to bridge this gap by providing hands-on training in financial management using Android-based accounting applications. The program's primary objective is to enhance the financial literacy of SME owners in Desa Kapita, enabling them to adopt modern bookkeeping practices. By focusing on practical, application-based training, the program will equip participants with the skills to maintain accurate financial records, make informed business decisions, and access financial resources more effectively.

The program will be implemented in several phases, beginning with a thorough assessment of SMEs' current financial management practices in Desa Kapita. This will involve surveys, interviews, and focus group discussions to identify specific challenges and areas for improvement. Based on this assessment, a training curriculum will be developed, including modules on the basics of financial management, Android-based accounting applications, and practical exercises to reinforce learning. The program will then organize interactive, hands-on workshops for SME owners, allowing participants to practice using the accounting applications on their devices. Ongoing support will be provided through follow-up sessions and one-on-one mentoring to address any issues that arise during the implementation of the new financial management practices and ensure sustained adoption of the digital tools. Finally, an evaluation will be conducted to assess the program's impact on SMEs' financial management practices, involving participant feedback and assessing changes in their financial records and business performance. Implementing this program may encounter several challenges, including resistance to change among SME owners, limited access to smartphones or internet connectivity, and varying levels

of financial literacy. To address these challenges, the program will engage local community leaders and influencers to promote the benefits of the program and encourage participation, ensure that participants have access to the necessary resources, and customize training methods to suit the varying levels of financial literacy among participants, using simple language and practical examples to illustrate key concepts. Additionally, the program will foster peer learning and support among participants to build a community of practice and facilitate knowledge sharing.

The successful implementation of this community service program is expected to have several positive impacts on the SMEs in Desa Kapita, including improved financial management, enhanced access to funding, increased business growth, and the promotion of sustainable practices. SME owners will be able to maintain accurate financial records, leading to better decision-making and more efficient business operations. With proper financial documentation, SMEs will be better positioned to secure loans and other forms of financial assistance from banks and other institutions, enabling them to invest in business expansion, increase their competitiveness, and contribute to the overall economic development of Desa Kapita. By addressing the current gaps in financial literacy and technical skills, this community service program aims to empower SME owners to adopt modern bookkeeping practices and leverage digital technologies to achieve long-term success, thereby supporting SMEs in navigating the complexities of financial management and contributing to the economic resilience and development of Desa Kapita.

## **Literature Review**

Micro, Small, and Medium Enterprises (MSMEs) are indispensable to both global and local economies, serving as catalysts for job creation and economic dynamism, especially in developing countries. Their flexibility and resilience enable them to respond quickly to market changes, creating opportunities and fostering economic inclusivity. In developing nations, MSMEs account for a substantial proportion of employment and GDP, driving community-based growth and innovation. However, despite their significant contributions, MSMEs need help in financial management. Traditional bookkeeping methods often prevail, leading to inadequate financial recording that hinders accurate financial analysis and informed decision-making. This lack of precise financial oversight can stifle business growth, impede access to credit, and ultimately affect the sustainability of these enterprises. Digital solutions have revolutionized financial management, offering MSMEs innovative tools to enhance their accounting practices. Digital applications, particularly those designed for Android platforms, provide accessible, cost-effective means for accurate financial recording and analysis. These technologies facilitate real-time data entry, seamless report generation, and integration with broader financial systems, which can significantly improve financial transparency and operational efficiency. Adopting such digital tools addresses critical gaps in traditional financial management, enabling MSMEs to transition from manual, error-prone processes to streamlined, automated systems. This shift enhances financial accuracy and empowers MSMEs to leverage their financial data for strategic planning and growth. Thus, the relevance of digital solutions in modern financial management cannot be overstated; they represent a vital progression toward sustainable economic development for MSMEs, aligning their financial practices with contemporary technological advancements and market demands.

### ***Current State of Financial Management in MSMEs***

Micro, Small, and Medium Enterprises (MSMEs) frequently rely on traditional financial management practices, typically characterized by manual record-keeping methods. These conventional approaches include handwritten ledgers, informal note-taking, and sporadic financial updates, often executed without standardized procedures or technological support. While entrenched in the operational norms of many MSMEs, such practices present significant limitations and inefficiencies. The lack of structured financial recording mechanisms leads to errors, data redundancy, and delays in financial reporting (Cruz et al., 2023). Moreover, the absence of real-time financial visibility impedes the ability to accurately track expenses, revenues, and profits, creating challenges in budgeting, forecasting, and strategic planning (Sharma et al., 2023).

The impact of inadequate financial recording extends beyond mere operational inefficiencies; it fundamentally undermines MSMEs' financial health and growth potential (Basuki & Ode, 2023; Susilowati & Wahyudi, 2023). Case studies reveal that poor financial management often results in cash flow problems, misguided pricing strategies, and difficulty managing credit and debt. For instance, an MSME that fails to maintain accurate financial records might need help to identify its cost structures accurately, leading to pricing decisions that either erode profit margins or render products uncompetitive. Furthermore, adequate financial documentation can ensure access to external funding, as lenders and investors require reliable financial statements to assess creditworthiness and investment potential. This limitation restricts MSMEs' ability to secure capital for expansion and constrains their capacity to innovate and scale operations. Thus, traditional financial management practices, while prevalent, are increasingly inadequate in meeting the demands of modern business environments. Addressing these challenges through the adoption of digital financial tools is essential for enhancing the financial resilience and growth trajectories of MSMEs, aligning their financial management practices with contemporary economic realities (Siringoringo et al., 2023).

### **Digital Transformation in Financial Management**

The evolution of financial management tools has profoundly influenced how Micro, Small, and Medium Enterprises (MSMEs) manage their financial operations. Historically, financial management in MSMEs relied heavily on manual methods, characterized by paper-based ledgers and rudimentary record-keeping. These traditional tools, while foundational, presented significant challenges in accuracy, efficiency, and scalability. Over time, digital technology has transformed financial management, developing sophisticated software solutions that automate and streamline financial processes. The emergence of mobile applications represents a pivotal trend in this digital transformation, providing MSMEs with accessible and user-friendly platforms to manage their finances effectively (Campanella et al., 2023; Kumari & Kumar, 2023). Android-based accounting applications exemplify the benefits of digital tools over conventional methods, offering enhanced accuracy, real-time data processing, and seamless integration with other financial systems (Dewi, 2023; Krisdiyawati & Maulidah, 2023). These applications facilitate comprehensive financial tracking, enabling MSMEs to record transactions, generate financial reports, and precisely monitor cash flows. The ease of use and accessibility of these tools democratize advanced financial management capabilities, allowing even those with limited technical expertise to adopt and benefit from them. Furthermore, integrating mobile applications into financial management practices supports better decision-making by providing immediate insights into financial health, thus enabling proactive business planning and risk management.

The adoption of digital accounting tools among Micro, Small, and Medium Enterprises (MSMEs) is indeed on the rise, driven by factors such as the increasing availability of affordable technology, growing awareness of the benefits of digitalization, and supportive policy frameworks (Avira et al., 2023; Fauzi, 2023; Gnatiuk et al., 2023). These technologies offer significant advantages, including enhanced financial transparency, improved operational efficiency, and real-time access to financial data for better decision-making. The digital transformation of financial management practices reshapes how MSMEs operate and positions them for sustained growth and competitiveness in today's dynamic economic landscape (Tran, 2023). By leveraging digital tools, MSMEs can modernize their financial management processes, ensuring long-term viability and success amidst evolving market demands. This transition underscores the critical role of technology in driving the modernization and efficiency of financial management practices within MSMEs, paving the way for their continued success and growth.

### **Android-Based Accounting Applications**

Android-based accounting applications have revolutionized financial management for Micro, Small, and Medium Enterprises (MSMEs), offering a range of tools designed to simplify and enhance accounting processes. Popular applications like QuickBooks, Zoho Books, and Wave are widely adopted among MSMEs due to their robust features and functionalities. These platforms provide comprehensive financial services, including invoicing, expense tracking, and payroll management, all accessible

through intuitive interfaces. QuickBooks, for example, allows users to easily connect bank accounts, categorize expenses, and generate detailed financial reports. Zoho Books offers automation capabilities such as recurring invoices and payment reminders, streamlining routine accounting tasks. Wave caters to small businesses with free accounting software, including receipt scanning and customizable invoicing, making it a cost-effective solution for startups and micro-enterprises (Syah et al., 2023).

The user experience and accessibility of these Android-based applications are critical to their success. Designed for non-experts, these tools emphasize ease of use, with simple navigation and minimal accounting jargon (Dewi, 2023). They are equipped with features that enhance accessibility for diverse users, including offline functionality for areas with limited internet access and multi-language support to cater to a global user base. This focus on usability ensures that even users with limited accounting knowledge can manage their finances effectively, reducing the learning curve and encouraging broader adoption. Case studies highlight the effectiveness of Android-based accounting applications in improving financial management among MSMEs. For instance, a study conducted in rural India demonstrated significant improvements in financial accuracy and efficiency among MSMEs using Wave, with users reporting a 30% reduction in time spent on accounting tasks. Another example from Southeast Asia showed that MSMEs adopting Zoho Books experienced enhanced cash flow management and quicker turnaround times for financial reporting. Quantitative data from these studies underscore the benefits of these applications, revealing increased financial transparency and better decision-making capabilities. Qualitative feedback further supports these findings, with users appreciating the applications' intuitive design and comprehensive functionality, collectively contributing to improved financial health and operational resilience. Thus, Android-based accounting applications are critical in empowering MSMEs by providing accessible, efficient, and practical financial management solutions (Krisdiyawati & Maulidah, 2023).

#### ***Challenges and Strategies in Adopting Android-Based Accounting Applications for MSMEs***

Adopting Android-based accounting applications among Micro, Small, and Medium Enterprises (MSMEs) encounters significant challenges rooted in technical, knowledge, and financial barriers. Technical and infrastructure barriers are predominant, particularly in areas with limited internet access, unreliable electricity, and inadequate device availability. MSMEs in remote regions often need more technological infrastructure, which impedes the consistent use of digital tools (Susilowati & Wahyudi, 2023). Additionally, the absence of robust technical support exacerbates these challenges, as MSMEs may need help troubleshooting issues independently, leading to discontinuation of technology use. Knowledge and skill gaps present another formidable barrier. Many MSME owners must know the benefits of digital accounting tools or lack the technical skills to implement them effectively. Resistance to change is expected, from comfort with traditional practices to apprehension about transitioning to new, unfamiliar technologies. This resistance is often compounded by a lack of tailored training programs to bridge these skill gaps and build confidence in using digital tools. Financial and resource constraints further hinder the adoption of digital accounting applications. Acquiring and maintaining the necessary technology, including devices and software subscriptions, can be prohibitive for many MSMEs. Additionally, resource limitations, such as insufficient staff or time to manage and learn new systems, can deter MSME owners from investing in digital solutions. To overcome these barriers, comprehensive strategies are essential. Training and education programs are critical in enhancing the skills required for digital financial management. Effective initiatives include workshops and online courses tailored to MSMEs, which provide hands-on experience with digital tools and demonstrate their practical benefits. Government and institutional support can facilitate adoption by offering incentives, subsidies, and policy frameworks encouraging digital transformation. Successful case studies, such as government-led digital literacy campaigns, illustrate how targeted support can accelerate the integration of digital tools among MSMEs.

Community and peer support also significantly influence technology adoption. Community networks and peer learning models provide a platform for sharing experiences, challenges, and best practices. This collective learning approach helps build a supportive environment where MSME owners can gain confidence and insight from their peers, fostering a culture of digital adoption. Examples

include local business associations that organize peer mentoring and technology-sharing sessions, which have proven effective in promoting digital tools. By addressing these multifaceted challenges through education, support, and community engagement, MSMEs can be better equipped to integrate Android-based accounting applications into their financial management practices, enhancing their operational efficiency and financial resilience in an increasingly digital economy.

## **Research Design and Methodology**

Implementing the Ibm (Ipteks bagi Masyarakat) program involves delivering materials and technical training to partner groups, explicitly targeting community members with businesses. Partners are selected based on prior surveys and discussions with the Secretary of Desa Kapita. The program consists of structured activities, including lectures, tutorials, and discussions, using an Android-based application to enhance financial reporting skills. The methodology begins with preparation, which includes socializing the program to potential participants, selecting a field coordinator for effective communication, and holding meetings to finalize the training schedule with partners. Training involves a lecture introducing financial report preparation, followed by hands-on tutorials to guide participants in using the Android application to record financial transactions. Additionally, discussions allow participants to address specific issues they face in financial management and local economic development. Finally, the program includes an evaluation phase to assess participants' ability to independently prepare financial reports using the application, ensuring that participants are proficient in managing their financial records by the program's conclusion.

## **Findings and Discussion**

### ***Skill Improvement***

The community service program was designed to elevate the financial recording competencies of Micro, Small, and Medium Enterprises (MSMEs) in Desa Kapita through comprehensive training on Android-based accounting applications. To rigorously gauge the effectiveness of this intervention, a detailed evaluation of the participants' skills was carried out both before and after the program's execution. The pre-training assessment employed a combination of questionnaires that probed basic accounting knowledge and understanding of financial recording practices. Additionally, participants were asked to present actual examples of their financial records. The initial findings were stark, revealing that only 20% of the 25 participants possessed fundamental accounting knowledge. Most participants relied heavily on rudimentary methods such as handwritten daily cash books or even mere mental accounting, underscoring a significant gap in understanding essential financial concepts, including cash flow management, profit and loss statements, and ending balances. This highlighted a critical area for development, as these deficiencies in financial literacy and recording practices can severely impede effective business decision-making and growth.

Following the training, the evaluation process mirrored the initial assessment but was enhanced by practical applications, such as solving financial case studies using the taught application. This dual-method approach ensured a robust measurement of skill acquisition and application. The results post-training was markedly positive. A substantial 80% of the participants exhibited a solid grasp of basic accounting principles, a testament to the efficacy of the training modules, which focused on fundamental financial concepts and their practical implications. Furthermore, 85% of participants demonstrated proficiency in utilizing the Android application to record daily financial transactions, generate accurate financial reports, and understand their cash flow dynamics comprehensively. This indicated improved technical skills and suggested a significant shift towards modernized financial practices. Moreover, the training significantly boosted the participants' confidence, with 90% expressing satisfaction and a newfound confidence in managing their business finances. This sentiment is crucial, as confidence in financial management is often a precursor to the sustained adoption of new practices and technologies. The program's impact, therefore, extended beyond mere skill enhancement, fostering a more profound transformation in the participants' approach to financial management, ultimately positioning them for better financial control and business sustainability.

### ***Application Implementation***

The training program utilized the Wave Android-based accounting application. It was selected for its intuitive design and robust feature set, making it particularly apt for MSMEs with limited accounting backgrounds. Wave was identified as a superior tool due to its balance of simplicity and functionality, which caters well to users who may find traditional accounting systems daunting. This application offers a comprehensive suite of financial management tools, including manual and automated transaction recording, expense category management, and financial report generation. The implementation process was meticulously structured to familiarize participants with these fundamental aspects through direct demonstrations and independent practice.

### ***Implementation Process and Training***

To begin with, the training sessions introduced participants to the core functionalities of the Wave application. The initial training phase focused on transaction input, where participants learned how to record income and expenses. This involved a step-by-step walkthrough of the process, demonstrating how to enter transactions manually and use the application's features to categorize expenses accurately. Participants were encouraged to input various transaction types to understand the flexibility of the application in handling different financial scenarios, including sales, purchases, payments, and receipts. Expense category management was another crucial component of the training. Participants were shown how to create and manage categories for their transactions, which is essential for accurate financial tracking and analysis. This feature allows users to organize their expenses into predefined categories or create custom categories that reflect their unique business operations. Proper categorization facilitates better monitoring of spending patterns and helps identify areas where costs can be optimized. The training emphasized the importance of consistency in categorizing expenses to ensure clarity and accuracy in financial reports. The training also covered the creation of financial reports, an integral feature of the Wave application. Participants were taught to generate vital financial reports such as profit and loss statements, balance sheets, and cash flow reports. The process involved guiding the participants through the application's reporting functions, demonstrating how to filter data, select report parameters, and interpret the results. This aspect of the training was precious as it empowered participants to understand their financial health better and make informed business decisions based on accurate financial data. The ability to produce these reports quickly and regularly gave participants a clearer view of their business's financial performance, enabling them to plan and strategize more effectively.

### ***Simulated Practice and Evaluation***

To reinforce the training, participants were tasked with applying the skills they had learned through simulations of real business scenarios. Over one week, participants recorded transactions using the Wave application as if they were managing their business finances. This hands-on practice was crucial in helping participants transition from theoretical knowledge to practical application. They entered various transactions, categorized expenses, and generated financial reports based on these simulated scenarios. This practical exercise allowed participants to experience firsthand the advantages of using the application and to gain confidence in their ability to manage their finances digitally. The results of this simulated practice were reviewed in follow-up sessions. These reviews provided an opportunity to assess the participants' proficiency in using the application and to address any issues or questions that arose during the practice period. The feedback indicated that participants could record transactions more accurately and consistently than their previous manual methods. The application's features, such as automated transaction matching and categorization, helped reduce errors and discrepancies common in manual bookkeeping. Participants found creating financial reports significantly more accessible with the Wave application. They could generate accurate profit and loss statements and cash flow reports with minimal effort, a notable improvement over their previous experiences with manual financial reporting. This ease of use translated into increased efficiency, as participants reported spending less time on financial recording and reporting tasks. The time saved allowed them to focus more on other critical aspects of their business operations.

### ***Advanced Features and Integration***

The training also delved into some of the more advanced features of the Wave application. Participants explored the application's debt and receivables management capabilities, which are crucial for maintaining healthy cash flow. They learned to track outstanding invoices, manage payments, and monitor their receivables more effectively. This feature helps businesses keep a close eye on their cash inflows and outflows, reducing the risk of cash flow issues arising from unpaid invoices or delayed payments. The application's ability to integrate with bank accounts and other financial systems was another advanced feature highlighted during the training. Participants were shown how to link their bank accounts to the Wave application, allowing for automatic import and categorization of transactions. This integration simplifies the reconciliation process, ensuring that financial records in the application match those in their bank accounts. This seamless integration reduces the need for manual data entry and minimizes the potential for errors, making financial management more accurate and efficient.

### ***User Experience and Feedback***

The user experience with the Wave application was overwhelmingly positive. Participants appreciated the application's user-friendly interface and found it easy to navigate, even those with minimal experience with accounting software. The application's design, which includes simple navigation menus, intuitive icons, and helpful tutorials, contributed to a smooth learning curve. Participants also valued the application's accessibility, which could be used on Android devices without extensive technical knowledge or additional hardware. Feedback from participants indicated that the Wave application met their needs effectively, providing a practical solution to their financial management challenges. Accessing their financial data anytime and anywhere was particularly beneficial for participants who operated mobile businesses or needed to manage their finances while on the go. The application's offline functionality was also highlighted as a critical advantage, allowing participants to record transactions even in areas with limited internet connectivity, with the data syncing automatically once they regained access.

### ***Challenges Encountered and Solutions Implemented***

Despite the success of the training, several challenges were encountered during the implementation process. One of the primary challenges was resistance to change. Some participants were initially reluctant to adopt the new technology, preferring to stick with their familiar manual methods. This resistance was addressed through persuasive demonstrations and practical examples showcasing the benefits of using the Wave application. Participants were shown how the application could streamline their financial processes, save time, and reduce errors, which helped alleviate their concerns and encouraged them to embrace the new technology. Another challenge was the limited access to compatible smartphones and internet connectivity among some participants. To overcome this, the program provided smartphones and internet access during the training sessions for those who did not have their own devices. This ensured that all participants could fully engage with the training and practice using the application. Additionally, the training sessions were designed to be flexible, allowing participants to work at their own pace and revisit the material as needed. The varying levels of financial literacy among participants also posed a challenge. The training was structured modularly to address this, with content tailored to different skill levels. Participants with a firmer grasp of accounting concepts could advance to more complex modules, while those who needed more foundational support could focus on the basics. This approach ensured that all participants received the appropriate level of instruction and support, enhancing their overall learning experience.

### ***Long-term Impact and Sustainability***

The successful implementation of the Wave application training is expected to have several positive long-term impacts on the MSMEs in Desa Kapita. By adopting a modern accounting tool, participants can maintain more accurate and up-to-date financial records, facilitating better business decision-making. The ability to generate clear and comprehensive financial reports will enhance participants' understanding of their business's financial health, enabling them to identify opportunities



for growth and areas for improvement. Furthermore, the application's debt and receivables management features will help participants maintain healthier cash flows, reducing the risk of financial strain caused by delayed payments or outstanding invoices. The integration with bank accounts will streamline financial reconciliation, ensuring that participants' financial records are accurate and reliable. This improved financial management will benefit the participants' individual businesses and contribute to the broader economic development of Desa Kapita. In conclusion, the training program's use of the Wave Android-based accounting application effectively enhanced the financial recording skills of MSMEs in Desa Kapita. Participants gained the knowledge and confidence to modernize their financial management practices through practical training, hands-on practice, and advanced feature exploration. Despite challenges such as resistance to change and limited access to technology, the solutions implemented ensured the successful adoption of the application. The program's long-term impacts are expected to include improved financial accuracy, better business decision-making, and enhanced economic resilience for MSMEs in the community.

### ***Challenges and Solutions***

Implementing the community service program to improve financial recording skills among MSMEs in Desa Kapita faced several challenges, each posing a unique obstacle to adopting the new Android-based accounting technology. These challenges included resistance to transitioning from traditional methods to new technology, limited access to compatible smartphones or adequate internet connectivity, and varying levels of financial literacy among participants. Addressing these issues required a multifaceted approach that combined persuasive techniques, logistical support, and customized educational strategies.

#### ***Resistance to Change***

A significant challenge was the resistance to change among participants accustomed to traditional financial management methods. Many MSME owners had relied on manual bookkeeping methods for years, using handwritten ledgers or memory to track financial transactions. This familiarity bred a certain level of comfort and resistance to adopting new digital tools, which they perceived as complex and unnecessary. Introducing a new system was often met with skepticism and reluctance, with participants questioning the need to change methods they believed had worked well enough. To mitigate this resistance, the program employed a strategy centered on persuasive demonstrations of the practical benefits offered by the Wave accounting application. Trainers conducted live demonstrations showcasing how the application could streamline financial recording, reduce errors, and save time compared to manual methods. For instance, participants were shown how transactions could be entered quickly, categorized accurately, and retrieved easily for reporting purposes. These demonstrations included real-life scenarios relevant to the participants' businesses, highlighting how the application could directly address common challenges they faced, such as tracking expenses or generating financial reports. Additionally, the trainers emphasized the long-term benefits of digital financial management, such as improved accuracy in financial records, enhanced decision-making capabilities, and better eligibility for external funding due to more reliable financial documentation. Participants were encouraged to try the application hands-on during these sessions, allowing them to experience its user-friendly interface and see the immediate benefits of digital financial recording. This hands-on experience was crucial in reducing anxiety about the transition and building confidence in their ability to use the new tool effectively. As a result, many participants who were initially resistant began to appreciate the practical advantages of the application, leading to greater acceptance and willingness to adopt the new technology.

#### ***Limited Access to Technology***

Another significant challenge was the participants' limited access to compatible smartphones and adequate internet connectivity. Many MSME owners needed the necessary devices or reliable internet access to utilize the Wave application effectively. This technological gap threatened to exclude some participants from fully benefiting from the training, potentially widening the digital divide. The program provided smartphones and internet access during training sessions to address this issue for

participants who needed more resources. Smartphones allowed all participants to engage with the application directly, ensuring equitable access to the training's benefits. Internet access was facilitated through mobile hotspots and community internet hubs at the training venue, enabling participants to connect to the application and explore its features without connectivity issues. Moreover, the training sessions were designed to include participants' varying technological capabilities. Trainers offered step-by-step guidance on using the smartphones and navigating the Wave application, ensuring that even those with minimal prior experience with technology could follow along. This inclusive approach not only equipped participants with the necessary tools but also provided support to overcome initial technical barriers, making the digital transition smoother and more accessible for everyone.

### ***Varying Levels of Financial Literacy***

Participants' financial literacy levels varied widely, from basic to relatively advanced understanding of accounting principles. This variation presented a challenge in delivering training that was both comprehensible and beneficial to all participants, regardless of their starting point. The training was structured modularly to accommodate these differing levels of financial literacy. The content was broken down into discrete modules, starting with fundamental concepts and gradually progressing to more complex topics. Participants could move through the modules at their own pace, allowing those with more advanced knowledge to delve into detailed aspects of the application. At the same time, those with basic understanding could focus on mastering the essentials. Each module included practical exercises tailored to different skill levels, ensuring that all participants could engage meaningfully with the training material. For example, initial modules covered basic transaction recording and expense categorization, while advanced modules explored report generation and financial analysis. This approach allowed participants to build their skills incrementally and provided a solid foundation for those with less experience in financial management. To further support participants, the program offered additional mentoring and follow-up sessions. Trainers provided one-on-one assistance to address specific challenges and technical issues that participants encountered while using the application. These sessions reinforced the training content, helped resolve lingering questions, and ensured that participants could apply their new knowledge effectively in their daily business operations.

### ***Overall Impact***

The strategies to address these challenges effectively overcame the new technology's obstacles. Persuasive demonstrations helped participants see the practical benefits of the Wave application, fostering a more positive attitude toward change. The provision of technological resources ensured that all participants had the tools needed to engage fully in the training. At the same time, the modular structure and additional mentoring accommodated varying literacy levels, enhancing the overall learning experience. As a result, the program positively impacted the financial management practices of MSMEs in Desa Kapita. Participants reported improved accuracy in financial recording, greater efficiency in managing their finances, and a better understanding of their business's financial health. These improvements not only facilitated better day-to-day financial management but also positioned participants to access external funding and support more effectively, contributing to the community's overall economic development.

## **Conclusion**

Community service to improve the financial recording skills of MSMEs in Kapita Village through training in using Android-based accounting applications showed very positive results. The training utilized the Wave application, which was chosen for its ease of use and comprehensive yet straightforward features, making it suitable for MSMEs with minimal accounting knowledge. Before the training, most participants still relied on manual record-keeping methods that were inefficient and prone to errors. The initial evaluation showed that only 20% of the 25 participants had basic accounting and financial recording knowledge, while the rest relied more on daily cash books or their memories. After the training, the evaluation results showed significant improvement: 80% of the participants

understood basic accounting concepts well, 85% could use the app to record financial transactions and create simple reports, and 90% felt satisfied and more confident in managing their business finances.

Implementing the Wave app has simplified various aspects of financial recording, from transaction input to financial report generation. Participants were trained to use the app's features, such as manual and automatic transaction recording, expense category management, and financial report generation. They were also taught to manage payables and receivables more effectively. During the simulation of recording actual business transactions for one week, participants could record transactions more accurately and consistently than the previous manual method. Creating financial statements such as income statements and cash flows became more accessible, which improved participants' understanding of the financial condition of their business and saved time previously spent on manual recording. This allows them to focus on other essential aspects of business operations.

For future work, it is recommended that the program be continued with regular mentoring sessions and the development of a local support network. Periodic mentoring will help participants address technical issues that may arise and ensure the continued use of the application in daily business activities. In addition, building a local support network involving other businesses and the local community can provide a platform for participants to share experiences, solve problems together, and get the latest information on financial management practices. We also recommend collaborating with financial institutions to introduce financial products that suit the needs of MSMEs and develop training programs that cover other aspects of finance, such as business planning and cash flow management. With these measures, the program's positive impact can be expanded, supporting more inclusive and sustainable local economic development.

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