

Sustainable Digital Accounting Transformation: A Strategy for Strengthening Financial Governance to Elevate MSMEs

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Abstract

This study aims to analyze the implementation of the SIAPIK application-based digital accounting system to support business upgrading among MSMEs in Bukittinggi. The research is motivated by the persistently low quality of financial recording in MSMEs and the growing need for digital transformation to achieve effective, transparent, and sustainable business management. A qualitative case study design was employed to gain an in-depth understanding of the phenomenon. The research informants consisted of 15 MSME practitioners selected through purposive sampling, based on the criteria of being registered entities, possessing a Taxpayer Identification Number (NPWP), and having operated for over 2 years. Data were collected via semi-structured interviews, participatory observation, and documentation, and subsequently analyzed using the Miles and Huberman interactive model, encompassing data reduction, data display, and conclusion drawing. The findings reveal four major themes: SIAPIK as an instrument for business regularity, digitalization as a strategy for business upgrading, challenges in digital literacy and technological adaptation, and digital accounting as a driver for business sustainability. The use of the SIAPIK application assists MSMEs in enhancing financial administration, operational efficiency, and informed decision-making, as well as facilitating access to financing and business legality. However, its implementation still encounters obstacles, such as limited technological proficiency and a lack of digitalization mentoring. This research contributes to the development of sustainable accounting discourse and MSME digital transformation, providing practical implications for the reinforcement of digital literacy programs and specialized mentoring in the use of the SIAPIK application

Keywords: Accounting Digitalization, MSMEs, SIAPIK Application, Sustainable Accounting.

1. INTRODUCTION

The rapid advancement of digital technology has significantly transformed economic activities and business management practices worldwide. In the era of Industry 4.0 and Society 5.0, business actors are increasingly required to integrate digital systems into their operational and financial management processes to maintain competitiveness and sustainability. A pivotal transformation in the business sector is the implementation of digital accounting systems, which enable more effective and efficient financial recording, reporting, and decision-making. Globally, sustainable digital accounting has emerged as a crucial strategy for fostering transparency, efficiency, and long-term business viability. In Indonesia, this issue is particularly relevant as Micro, Small, and Medium Enterprises (MSMEs) serve as the backbone of the national economy, contributing significantly to employment and economic growth (Ubaidillah, 2019). Nevertheless, many MSMEs continue to face challenges in adopting digital accounting practices due to limited technological understanding, inadequate financial literacy, and insufficient access to digital infrastructure. The

majority of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia continue to rely on manual, non-standardized financial recording systems. This condition frequently results in weak financial management, inaccurate financial statements, difficulties in monitoring cash flows, and limited access to formal financing institutions. Previous studies reveal that MSME practitioners often encounter significant barriers in understanding accounting concepts and using accounting software. In many instances, business owners prioritize operational activities over systematic financial management due to constraints in both knowledge and time (Susilowati et al., 2022). Furthermore, a low level of awareness of the importance of sustainable accounting practices impairs MSMEs' ability to maintain long-term business performance. These circumstances suggest that digital transformation within MSMEs requires not only technological support but also educational interventions and mentoring to strengthen the capacity of business actors.

From a community empowerment perspective, implementing sustainable digital accounting is imperative, as it directly bolsters the financial resilience and sustainability of MSMEs. Digital accounting systems offer a myriad of benefits, including enhanced efficiency, reduction in recording errors, improved financial transparency, and streamlined business evaluations. Through digital accounting applications, MSME practitioners can monitor business transactions in real-time, organize financial documentation systematically, and generate financial reports that facilitate strategic decision-making (Juwita & Handayani, 2022). Furthermore, sustainable digital accounting encourages MSMEs to adopt responsible financial practices and heighten accountability toward stakeholders. Consequently, community service initiatives focused on digital accounting literacy and mentoring are considered strategic efforts to enhance the competitiveness and adaptability of MSMEs in the digital economy.

While previous studies have addressed digital transformation and accounting adoption among MSMEs, most research has focused on quantitative approaches that emphasize the correlation between technology adoption and business performance. There remains a paucity of studies exploring how MSME practitioners experience and internalize the implementation of sustainable digital accounting practices within their daily business activities. In practice, the successful implementation of technology is influenced not only by technical aspects but also by social, educational, and behavioral factors (Anan et al., 2024; Bellon et al., 2022; Hardik, 2024). Consequently, participatory community service activities are essential to bridge the gap between technological innovation and the practical capabilities of MSME actors. Sustained educational support and mentoring are required to ensure that digital accounting systems are implemented effectively and sustainably. Building on these conditions, this community service program aims to enhance understanding and implementation of sustainable digital accounting among MSME practitioners in Indonesia. The activities focus on improving digital financial literacy, introducing accounting applications, and providing intensive mentoring to help participants integrate digital financial recording systems into their business operations. Through these training and mentoring initiatives, participants are expected to develop practical skills in managing digital financial transactions and to heighten their awareness regarding the significance of sustainable financial management (Beryl Odonkor et al., 2024). Furthermore, this program aims to contribute to the development of community empowerment models that support MSME sustainability through digital transformation.

One application available to MSMEs is SIAPIK, developed collaboratively by Bank Indonesia and the Institute of Indonesian Chartered Accountants (IAI). This application is designed to assist MSME practitioners in preparing financial statements in accordance with the Financial Accounting Standards for Micro, Small, and Medium Entities (SAK EMKM) in a simplified, accessible manner. Research indicates that the utilization of SIAPIK enhances the effectiveness of financial recording and improves the accounting literacy of MSMEs (Putri & Candra, 2024; Thungasal & Boki, 2025). The primary challenge partners face in this initiative is that MSMEs generally operate with simple business models and have yet to fully implement digital financial recording. Consequently, this community service activity focuses on training and mentoring in accounting digitalization through the SIAPIK application, aiming to facilitate MSMEs in scaling up through more professional financial management.

2. RESEARCH METHODOLOGY

This community service initiative was conducted in Bukittinggi, West Sumatra, Indonesia, involving MSME practitioners as community partners. The program employed a participatory and educative approach designed to enhance participants' understanding and practical skills regarding sustainable accounting digitalization. The activity was executed in several stages: initial observation, implementation, mentoring, and evaluation.

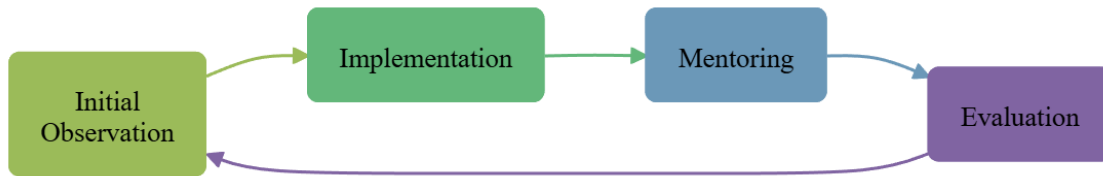


Figure 1. Activity Stages

Source: Developed by the activity implementation team

The initial observation stage was performed to identify the characteristics and financial management practices of the MSME practitioners. The findings revealed that most participants still operate their businesses using rudimentary management systems and manual bookkeeping practices. Business finances are frequently commingled with personal funds, and many participants possess a limited understanding of accounting standards for MSMEs. These conditions adversely impact financial accountability and business sustainability.

The implementation stage consisted of socialization and hands-on training regarding digital financial recording systems using the SIAPIK application developed by Bank Indonesia. The training curriculum encompassed an introduction to MSME accounting standards, transaction recording procedures, cash flow management, financial statement preparation, and the technical operation of the SIAPIK application. Participants were directly guided in recording digital financial transactions and compiling simplified financial reports in accordance with MSME accounting standards (IAI, 2016).



(a)



(b)



(c)

Figure 2. Figure (a), (b), and (c) Socialization and Practical Training

Furthermore, mentoring activities were conducted to help participants integrate digital accounting practices into their business operations. The mentoring process focused on reinforcing participants' comprehension, resolving technical issues, and encouraging consistency in digital financial recording. Evaluation was conducted through direct observation, participant feedback, and an assessment of participants' proficiency in operating the SIAPIK application independently.

3. RESULTS AND DISCUSSION

3.1. Initial Profile of MSME Partners

Initial observations in Bukittinggi revealed that the majority of MSME practitioners manage their businesses using rudimentary, traditional methods. Financial recording activities are generally performed manually, using simple ledgers or handwritten notes that do not comply with MSME accounting standards. Many participants admitted prioritizing operational activities and sales, while systematic financial management is often neglected. Furthermore, several participants encountered difficulties separating personal finances from business funds, leading to ineffective financial control and limited business evaluation.

The findings also indicated that participants possess a limited understanding of digital accounting systems and software applications. Most MSME practitioners have never received formal training regarding digital bookkeeping or the implementation of accounting standards. Participants generally perceive accounting systems as complex and applicable only to large-scale enterprises. This condition underscores the need for educational interventions and mentoring activities to enhance MSMEs' financial literacy and technological readiness.

3.2. Implementation of Sustainable Accounting Digitalization Training

The training program was executed through socialization sessions, practical demonstrations, and direct mentoring on the utilization of the SIAPIK application developed by Bank Indonesia. Participants were introduced to the significance of sustainable accounting practices and digital financial recording systems in bolstering business growth and accountability. The training emphasized a pragmatic and user-friendly approach to ensure that participants could easily comprehend and implement the acquired knowledge. During the practical sessions, participants learned to record daily transactions, manage cash inflows and outflows, categorize business expenses, and compile simplified financial statements using the SIAPIK application. The mentoring team provided real-time assistance during software operation. Participants demonstrated high levels of enthusiasm and active participation throughout the process, perceiving the SIAPIK application as simple, practical, and highly relevant to their specific business needs. The implementation of digital accounting via SIAPIK enabled participants to recognize the importance of systematic financial recording. Furthermore, participants gained a deeper awareness of the benefits of financial transparency, business evaluation, and financial accountability in supporting business sustainability. This training initiative successfully encouraged MSME practitioners to adopt digital financial management practices with greater confidence.

3.3. Impact of the Community Service Program

The results of the mentoring and evaluation activities indicate a significant improvement in participants' understanding and implementation of digital accounting. MSME practitioners demonstrated enhanced capabilities in preparing financial records in accordance with MSME accounting standards and performing digital bookkeeping using the SIAPIK application. Participants demonstrated greater discipline in recording transactions and in systematically managing financial documentation.

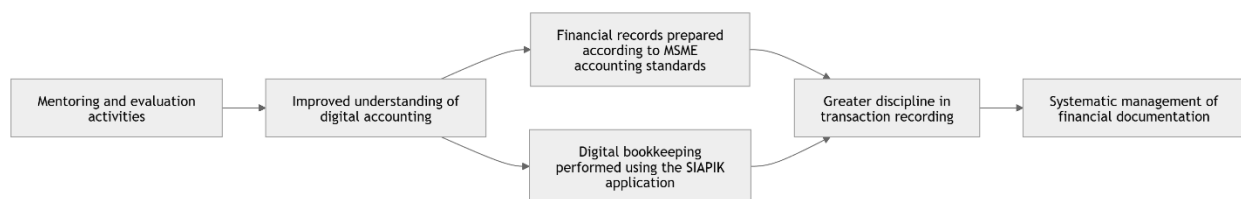


Figure 3. Improvement of MSME Practitioners' Digital Accounting Understanding and Implementation through Mentoring and Evaluation Activities

Furthermore, the implementation of digital accounting practices enhanced financial monitoring processes and business evaluation among MSMEs. Participants acknowledged that the SIAPIK application simplifies transaction recording, reduces calculation errors, and enables them to monitor business cash flows more efficiently. Several participants also stated that digital financial statements could facilitate access to financing institutions and future business development programs. These findings align with previous research indicating that the application of SIAPIK assists MSMEs in improving financial report accuracy and operational management efficiency (Nasihin et al., 2025; Zhafirah et al., 2024). Moreover, digitalization of accounting supports business sustainability, as financial data can serve as a foundation for long-term strategic decision-making and business expansion.

Despite these positive outcomes, several challenges persisted during the implementation process. Some participants encountered difficulties due to limited digital literacy, limited smartphone proficiency, and unstable internet access. Additionally, sustained mentoring remains essential to ensure the long-term continuity of digital accounting implementation among MSMEs. Consequently, collaboration between universities, government agencies, and financial organizations is crucial to fortify digital transformation and sustainable financial literacy for MSME practitioners.

4. CONCLUSION

The community service program on implementing sustainable digital accounting has successfully enhanced the knowledge and practical skills of MSME practitioners in managing digital financial systems. Through training and mentoring activities, participants gained a deeper understanding of accounting concepts, digital transaction recording, and sustainable financial management practices. The implementation of digital accounting applications improved efficiency, financial transparency, and business accountability among participants. Furthermore, this program demonstrates that a participatory, practical approach is effective in increasing MSMEs' readiness to adopt digital technology. However, challenges related to digital literacy, infrastructural constraints, and technological adaptation continue to necessitate sustained support. Consequently, future community service programs should focus on long-term mentoring and broader digital empowerment strategies to fortify the sustainability of MSMEs in Indonesia.

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