
The Role Of Information Technology Utilization And Managerial Support In Optimizing Digital Bookkeeping For MSMEs

Friska Dhea Narulita¹, Bunga Soraya², Irdakustiwi³

^{1,2,3}Faculty of Economics and Business, University of 17 Agustus 1945 Surabaya, Indonesia

E-mail: 1222200077@untag-sby.ac.id¹, 1222200086@untag-sby.ac.id², irdakustiwi@untag-sby.ac.id³

Received: April, 2025; Accepted: April, 2025; Published: June, 2025

Permalink/DOI:

Abstract

This study examines the role of information technology and managerial support in optimizing digital bookkeeping of MSMEs in Indonesia. Using a descriptive qualitative approach through a literature review of 2020-2025 national journals, the research identified that digital bookkeeping applications, mobile applications, and cloud computing can improve the accuracy, efficiency, and transparency of MSME financial records. Despite the great potential, the implementation of these technologies is hampered by low digital literacy, limited infrastructure, and resistance to change. Managerial support in the form of leader commitment in providing training, building an adaptive culture, and allocating resources are key factors for successful digitization. The integration of information technology with accounting information systems creates financial management that is integrated with other aspects of the business, resulting in improved access to formal financial services and business growth. Improved digital training, adequate infrastructure, and cross-sector collaboration are recommended to create an inclusive digital ecosystem for MSMEs.

Keywords: MSMEs, Information Technology, Digital Bookkeeping, Managerial Support, Accounting Information System

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a strategic role in supporting Indonesia's economic growth. According to data from the Ministry of Cooperatives and SMEs, this sector contributes more than 60% to the Gross Domestic Product (GDP) and absorbs approximately 97% of the domestic workforce. The resilience of MSMEs has also been tested during various crises, such as the 1998 monetary crisis and the COVID-19 pandemic, reaffirming their role in maintaining national economic stability.

However, the rapid advancement of digital technology has not yet been fully utilized by MSME actors, particularly in financial management and transaction recording. Many business owners still rely on conventional bookkeeping methods,

which are prone to errors, data loss, and difficulties in assessing overall financial conditions. As a result, MSMEs face challenges in evaluating business performance, making strategic decisions, and accessing funding from formal financial institutions.

Information technology presents a solution to these challenges. Various digital bookkeeping applications-such as BukuWarung, SiApik, and cloud-based platforms-offer convenience for MSMEs in recording, storing and managing financial transactions accurately and efficiently. According to a study by (Ahdi et al., 2023), the use of digital bookkeeping applications significantly improves the effectiveness and transparency of financial records while minimizing calculation errors.

(Rohmana & Hwihanus, 2023) also concluded that integrating digital technology into financial recording allows MSMEs to produce more accurate financial reports, which are easier to analyze for managerial purposes. Furthermore, (Pratama et al., 2023) stated that MSME actors who can understand and utilize information technology are able to transform data into valuable insights for strategic decision-making.

Nevertheless, technological advancement cannot be maximized without strong managerial support. Managerial roles are essential in providing resources, building commitment to digital transformation, and enhancing human resources capacity through continuous training. (Kustiwi, 2024) emphasized that without active involvement from management, the implementation of digital bookkeeping systems tends to stagnate and fails to integrate with broader business operations.

A study by (Hanif & Kurniawati, 2024) in Kartasura also found that the success of accounting information system implementation largely depends on a combination of appropriate technology usage and effective, adaptive managerial management.

Findings from community engagement activities conducted by (Cahyaning et al., 2024) further support this. MSMEs that participated in intensive training on social media and digital bookkeeping applications showed improvements in managerial capacity and awareness of the importance of structured financial systems.

Unfortunately, MSME integration into the digital ecosystem remains relatively low. Data from the Ministry of Cooperatives and SMEs show that only about 13% of MSMEs have fully adopted digital technology. This reflects significant challenges, such as limited digital literacy, uneven infrastructure, and resistance to changes in traditional work systems.

Against this backdrop, this study aims to examine The Role of Information Technology Utilization and Managerial Support in Optimizing Digital Bookkeeping for MSMEs. The findings are expected to provide practical contributions to business practitioners, policymakers, and academics in accelerating MSME digitalization in a more systematic and sustainable manner.

Information Technology in MSMEs

Information Technology (IT) is a collection of hardware, software, and infrastructure that functions to manage, process, and distribute information

efficiently and effectively. In the context of Micro, Small, and Medium Enterprises (MSMEs), IT has a very important strategic role. IT not only serves as an administrative tool, but also as a key driver in improving the efficiency and effectiveness of business operations. With the use of IT, MSMEs can record transactions systematically, manage financial data centrally, and accelerate the decision-making process based on accurate and timely information (Kustiwi, 2024; Rohmana & Hwihanus, 2023).

In addition to accelerating business processes, IT also enables MSMEs to overcome resource limitations, such as labor and capital, by automating various manual activities that have been time- and labor-consuming. The use of IT opens up opportunities to expand business networks and strengthen competitiveness by providing broad and real-time access to information. Furthermore, the use of IT encourages MSMEs to adapt to technological developments and global market trends, thus accelerating the transformation of organizational culture towards a digital mindset that is innovative and adaptive to change (Pramartha et al., 2024).

Types of Information Technology for MSMEs

MSMEs currently use various types of information technology according to their business needs and scale. Digital accounting software such as Zahir Accounting, Buku Kas, and Buku Warung are popular choices due to their ease of use and complete features that support automated bookkeeping and financial reporting activities (Azizah et al., 2020; Rosdiyati et al., 2024). Apart from desktop software, mobile-based applications that can be accessed via smartphones provide high flexibility in recording transactions directly in the field, so that financial data is always updated in real-time.

Cloud computing technology is also increasingly being adopted by MSMEs. Cloud computing provides easy access to data anytime and anywhere without requiring large physical storage. The use of cloud computing facilitates collaboration between team members in a business or between MSME actors and financial consultants, so that financial management and audits become more transparent and efficient (Indriastuti & Permatasari, 2022). In addition, digital marketing technology, which includes social media, marketplaces, and online advertising, plays an important role as part of the IT ecosystem in MSMEs. Platforms such as Shopee, Tokopedia, Instagram, and Facebook not only serve as marketing channels, but also provide transaction data that can be directly integrated into the digital bookkeeping system, accelerating the reconciliation process and accurate and timely financial analysis (Mansir & Fatimah, 2021; Pramartha et al., 2024).

Digital Bookkeeping for MSMEs

Bookkeeping is the activity of systematically recording all financial transactions that occur in a business. In the context of MSMEs, bookkeeping is not just an administrative obligation, but is the main tool for managing business finances, knowing business performance, and being the basis for planning business development strategies (Indriastuti & Permatasari, 2022). With good bookkeeping,

business actors can control cash flow, know the level of profit or loss, and anticipate working capital needs in a more planned manner.

In addition, bookkeeping also serves as an effective internal control tool to identify financial leaks and prevent fraud. With valid and accurate bookkeeping data, MSME actors can evaluate business performance objectively and continuously so that they can design more effective and efficient development strategies (Rosdiyati et al., 2024).

In the long term, bookkeeping is also evidence of business accountability that is needed in various administrative processes, such as tax reporting, financial audits, and business credit applications to financial institutions. Therefore, the ability of MSME actors to conduct bookkeeping correctly and regularly is a key factor that greatly determines business sustainability (Azizah et al., 2020).

Challenges in Information Technology Implementation

Despite the many benefits derived from the use of information technology, MSMEs also face various challenges in its implementation. One of the main challenges is the lack of understanding and skills in using digital technology. Many MSME players are still accustomed to manual methods and find it difficult to adapt to new systems.

In addition, limited resources, both financial and human, are also an obstacle. Many MSMEs do not have sufficient budget to invest in the necessary information technology. Therefore, support from the government and relevant agencies is crucial to provide MSMEs with access to better technology and adequate training.

The Role of Managerial Support

Strong managerial support is necessary to ensure successful implementation of information technology in MSMEs. Training and mentoring provided by the government, educational institutions, and non-governmental organizations can help MSME players understand and utilize technology better. Research by (Indriastuti & Permatasari, 2022) shows that MSMEs that receive good managerial support tend to be more successful in adopting information technology and improving their business performance.

This support includes not only technical training, but also guidance in planning business strategies that utilize information technology. With the right support, MSME players can overcome the challenges and take advantage of the opportunities offered by digital technology to improve their competitiveness and business sustainability.

METHOD

Research Approach and Type

This study employs a descriptive qualitative approach through literature review. The main objective is to explore scientific journal articles that discuss the use of information technology, accounting information systems, and financial management in the Micro, Small, and Medium Enterprises (MSMEs) sector. The goal is to investigate the role of information technology and managerial support in

enhancing the effectiveness of digital bookkeeping practices among Indonesian MSMEs.

Data Sources

The data used in this study are secondary in nature, obtained from reputable national journal publications published between 2020 and 2025.

Data Collection Technique

Data collection was conducted by searching for relevant scholarly articles through academic databases such as Google Scholar, Garuda (Indonesian Reference Portal), and university journal repositories. The articles selected specifically address themes related to MSME digitalization, the role of information technology in bookkeeping, and management information systems.

Data Analysis Technique

The data were analyzed using content analysis, whereby each article was carefully reviewed to identify recurring patterns, themes, and findings relevant to the research topic. The results were then categorized into two major themes: the use of information technology and the role of managerial support in strengthening MSME digital bookkeeping.

Data Validity

To ensure data credibility, source triangulation was applied by comparing findings from several reputable articles. All references used had undergone peer-review processes and were published in accredited journals with official ISSN numbers.

RESULTS AND DISCUSSION

Utilization of Information Technology in MSME Digital Bookkeeping

Digital transformation in the business world increasingly requires MSME players to adopt information technology in carrying out their operational activities, including in terms of financial recording. Information technology, especially through accounting information systems (AIS), has been proven to provide various tangible benefits for the efficiency and effectiveness of small business financial management.

In a study conducted by (Rosdiyati et al., 2024), the application of digital accounting information systems with the help of software such as Zahir Accounting is able to improve the accuracy and efficiency of the financial recording process. This allows MSME players to make more informed business decisions based on real-time and reliable information (Rosdiyati et al., 2024). Previously, many MSME players still used manual recording methods, making them prone to recording errors and data loss.

In line with these findings, research by (Sholikudin et al., 2024) on Kampung Kue MSMEs also confirmed that the adoption of digital bookkeeping applications has a positive impact on financial transparency, time efficiency, and prevention of recording errors (Sholikudin et al., 2024). In fact, the adoption of this

technology also minimizes the risk of fraud that often occurs due to disorderly recording.

However, there are still significant challenges in the application of this technology. In (Hasanah, 2024), it is stated that the low understanding of MSME actors of information technology and digital accounting is a major obstacle. Many small business owners do not understand the importance of financial records, let alone digitizing their bookkeeping system. Therefore, training and mentoring are important strategies in increasing the capacity and digital skills of MSME players.

Another challenge is related to the limitations of supporting equipment and infrastructure. As pointed out by (Rachmatsyah, 2025), limited internet access and lack of hardware such as computers and smartphones are still serious obstacles, especially in rural areas. In fact, digital connectivity is crucial in supporting cloud-based recording systems and other online applications.

The Role of Managerial Support in Optimizing Digital Bookkeeping

In addition to the technology itself, managerial support is an important aspect that cannot be ignored in the optimization of digital bookkeeping. This support is not only in the form of internal company policies, but also includes HR training efforts, budget provision for technology adoption, and the formation of an organizational culture that is open to change.

Research by (Arjang et al., 2025) highlights that leadership that is adaptive to digital innovation plays a strategic role in accelerating the adoption of information systems in MSMEs. This support includes setting a vision for digitalization, providing technology infrastructure, and allocating time and resources for HR training. Without commitment from business leaders, digitization initiatives often stop at the planning stage.

Research by (Rohmana & Hwihanus, 2023) shows that MSME players who actively participate in training and socialization of digital bookkeeping adapt more quickly to new technologies. In the study, businesses that were provided with training were able to understand the use of digital accounting applications and use them to prepare neat and accountable financial reports.

Support from the government and non-governmental organizations is also needed. As stated by (Mansir & Fatimah, 2021) a structured mentoring program through the socialization of digital marketing and social media-based bookkeeping applications can significantly improve the digital literacy of MSMEs. This intervention also accelerates the transition process from conventional recording to digital systems.

In this context, it is important to highlight the collaborative role between various parties such as academics, government, private sector, and MSME actors. Cross-sector collaboration will result in a conducive digital ecosystem for MSMEs. With this collaboration, capacity building, technology procurement, and knowledge transfer can be done more efficiently and equitably.

Integration of Information Technology and Accounting Information Systems in MSME Transformation

Digitalization is not only limited to changing the method of recording from paper to applications, but also a broader process of system integration, including the integration of information technology (IT) with accounting information systems (AIS). The combination of the two creates a financial management system that is not only accurate but also connected to other aspects such as inventory management, payment systems, and customer management.

In a study by (Hanif & Kurniawati, 2024) , it was found that the implementation of AIS significantly affects the growth of MSMEs when combined with skills in using information technology. While the understanding of AIS theory has not had a significant impact on business development, its application and utilization have a direct positive impact on increasing revenue and operational efficiency.

The link between the use of IT and AIS is also explained in (Arjang et al., 2025) which states that the use of technologies such as big data analytics, e-commerce, and chatbots directly increases the competitiveness of MSMEs. The case studies presented show that MSME players who use integrated digital systems are able to increase customer loyalty and respond to the market more dynamically.

Social and Economic Implications of MSME Digital Bookkeeping

Digitalization of MSME financial records not only provides benefits on a micro scale, but also has a broad macro impact on a social and economic level. With a digital bookkeeping system, MSMEs become more administratively orderly and are able to prepare regular financial reports. This provides greater opportunities for MSMEs to access financing from banking institutions and investors.

According to (Akhmad & Purnomo, 2021), digitalization helps MSMEs increase production volume, number of customers, and revenue. This is because MSME players become more adaptive to market dynamics through data available in real-time. On the other hand, the use of information technology also helps MSME players reach a wider market through digital platforms such as e-commerce and social media.

Furthermore, the digitization of records also has implications for transparency and accountability. In this context, MSMEs not only become more administratively professional, but also more trustworthy in the eyes of business partners and the government. This creates a positive cycle where MSMEs grow because they have a sound and auditable financial system.

However, it should be noted that not all MSMEs are ready for digital transformation. Affirmative policies and more inclusive interventions from both the government and the private sector are needed so that digital transformation does not fall by the wayside.

CONCLUSION

The utilization of information technology has an important role in increasing the effectiveness of digital bookkeeping in MSMEs. Digital accounting applications enable more accurate, faster and orderly financial records, thus helping

businesses to make better business decisions. In addition, the system also opens access to formal financial services through the provision of more transparent financial reports.

However, technology adoption still faces barriers, such as low digital literacy, limited infrastructure, and the habit of MSME players using manual methods. This shows that the availability of technology alone is not enough without user readiness and a supportive environment.

Managerial support is a key factor in successful digitization. The commitment of business leaders in providing training, building an adaptive culture, and allocating resources determines the continuity of digital system implementation. Without this support, the transformation process often stops at the planning stage.

Therefore, an increase in equitable digital training, provision of adequate infrastructure, and cross-sector collaboration to create an inclusive digital ecosystem are recommended. Digital transformation of MSMEs must be accompanied by strengthening managerial capacity so that it can run sustainably and have a real impact on business growth.

REFERENCES

Ahdi, F., Ayyub, A., Fadillah, M. R., & Pradiandy, H. (2023). Pengembangan Pembukuan Digital Dalam Upaya Pengelolaan Keuangan UMKM. *Jurnal Pengabdian Kepada Masyarakat*, 2(3), 15–25. <https://doi.org/10.56184/jpkmjournal.v2i3.296>

Akhmad, K. A., & Purnomo, S. (2021). Pengaruh Penerapan Teknologi Informasi Pada Usaha Mikro Kecil Dan Menengah Di Kota Surakarta. *Sebatik*, 25(1), 234–240. <https://doi.org/10.46984/sebatik.v25i1.1293>

Arjang, Ausat, A. M. A., & Prasetya, Y. B. (2025). Optimalisasi Sistem Informasi dalam Meningkatkan Daya Saing UMKM : Analisis Sinergi Inovasi Digital dan Fenomena FOMO dalam Dinamika Pasar. *Jurnal Minfo Polgan*, 14.

Azizah, N. L., Indahyanti, U., Latifah, F. N., & Sumadyo, S. B. (2020). Pemanfaatan Pembukuan Digital pada Kelompok UMKM di Sidoarjo Sebagai Media Perencanaan Keuangan. *Community Empowerment*, 6(1), 64–70. <https://doi.org/10.31603/ce.4378>

Cahyaning, N., Iskandana, D., Salsabila, N. A., Apriliana, S., Nisak, A., Ananta, A. A., Wijaya, M., Putri, M. M., & Ayu, Z. (2024). *Sosialisasi Optimalisasi Usaha melalui Digital Marketing dan Aplikasi Pembukuan Digital di Kelurahan Pesantren Kota Kediri*. 73–79.

Hanif, A. N., & Kurniawati, L. (2024). Pengaruh Pemahaman, Penerapan, Pemanfaatan Sistem Informasi Akuntansi dan Keterampilan Penggunaan Teknologi Informasi Dalam Perkembangan UMKM. *Jurnal Akademi Akuntansi Indonesia Padang*, 4(1), 115–125. <https://doi.org/10.31933/h8jese04>

Hasanah, R. (2024). TRANSFORMASI UMKM DESA MELALUI TEKNOLOGI DIGITAL DAN PRAKTIK AKUNTANSI. *Jurnal Ekonomi Dan Bisnis Islam*, 4, 135–147.

Indriastuti, M., & Permatasari, D. (2022). Peningkatan Kemampuan Akuntansi UMKM Berbasis Digital. *JPPM (Jurnal Pengabdian Dan Pemberdayaan Masyarakat)*, 6(1), 33. <https://doi.org/10.30595/jppm.v6i1.9352>

Kustiwi, I. A. (2024). Accounting Information System (Ais): Integration of Artificial Intelligence and Management in Farm Tourism Kelompok Tani Elok Mekar Sari. *DiE: Jurnal Ilmu Ekonomi Dan Manajemen*, 15(1), 123–131.

https://doi.org/10.30996/die.v15i1.10634

Mansir, F., & Fatimah, S. (2021). Penggunaan Aplikasi Pembukuan Melalui Digital Marketing Dan Media Sosial Pada Umkm Bangunjiwo Bantul. *Kumawula: Jurnal Pengabdian Kepada Masyarakat*, 4(2), 256. <https://doi.org/10.24198/kumawula.v4i2.32694>

Pramartha, I. M. A., I Putu Gde Chandra Artha Aryasa, & Anak Agung Istri Krisna Gangga Dewi. (2024). Optimalisasi Pembukuan dan Pemasaran Berbasis Digital Kelompok Industri Kecil Menengah Pengrajin Perak di Desa Batubulan. *International Journal of Community Service Learning*, 7(3), 308–317. <https://doi.org/10.23887/ijcsl.v7i3.65047>

Pratama, I., Suria, O., Chandra, A. Y., & Prasetyaningrum, P. T. (2023). Pemanfaatan Teknologi Informasi dalam Mendukung Perkembangan UMKM (Nyong Group). *Jurnal Pengabdian Masyarakat Indonesia*, 3(2), 269–274. <https://doi.org/10.52436/1.jpmi.991>

Rachmatsyah, T. H. (2025). Pemberdayaan Masyarakat Berbasis Teknologi untuk Optimalisasi UMKM sebagai Pilar Utama Ekonomi Indonesia. *Jurnal Abdi MOESTOPO*, 1, 164–173.

Rohmana, A., & Hwihanus. (2023). Pembukuan Digital Pada Umkm. *Jurnal Kajian Dan Penalaran Ilmu Manajemen*, 1(1), 54–63.

Rosdiyati, R., Kurniyawati, I., & ... (2024). Optimalisasi Pengembangan Bisnis Melalui Penerapan Sistem Informasi Akuntansi Digital Pada UMKM (Studi Kasus Fashion Baju Thrift). *Innovative: Journal Of ...*, 4, 8447–8463. <http://j-innovative.org/index.php/Innovative/article/view/11419>

Sholikudin, M., Nikmah, A. L., & Kustiwi, I. A. (2024). Peran Sistem Informasi Akuntansi Dalam Pemanfaatan Teknologi Terhadap Pembukuan Digital Pada UMKM Kampung Kue. *MUQADDIMAH: Jurnal Ekonomi, Manajemen, Akuntansi Dan Bisnis*, 2(2), 61–72. <https://doi.org/10.59246/muqaddimah.v2i2.703>