

THE INFLUENCE OF ACCOUNTING INFORMATION SYSTEM IMPLEMENTATION ON THE EFFICIENCY AND ACCURACY OF FINANCIAL REPORTS IN MSMEs

Seto Indarto^{1*}, Agustin Saputra², Aristo Famolala Zato Hia³, Dhea Annisa⁴

¹²³⁴Program Studi Pendidikan Ekonomi, Institut Keguruan dan Ilmu Pendidikan PGRI Kalimantan Timur, Samarinda, Indonesia

*Correspondence Email: indiarto@ikipgrikaltim.ac.id

ABSTRACT

Micro, Small, and Medium Enterprises (MSMEs) play a crucial role in Indonesia's economic development, contributing more than 60% to the national Gross Domestic Product and absorbing the majority of the workforce. However, many MSMEs continue to rely on manual bookkeeping systems, which are prone to inefficiency, recording errors, and lack of transparency. This study aims to analyze the impact of Accounting Information System (AIS) implementation on improving both the efficiency and accuracy of financial reporting in MSMEs. Using a literature review method, this research synthesizes findings from various empirical studies conducted between 2020 and 2025. The results show that AIS significantly enhances financial recording efficiency through automation, reduction of administrative costs, integration with digital payment systems, and real-time access to financial reports. Additionally, AIS improves the accuracy of financial statements by minimizing human error, eliminating data duplication, and ensuring compliance with applicable accounting standards. Case studies from Indonesian MSMEs indicate improvements ranging from 45% to 85% in efficiency and accuracy after adopting AIS. Despite these benefits, challenges such as high implementation costs, limited digital literacy, and resistance to technological change remain significant barriers. The study concludes that broader education, government support, and policy incentives are essential to encourage wider adoption of AIS and strengthen the financial management capabilities of MSMEs.

Keywords: Accounting Information System (AIS); Financial Reporting Accuracy; MSMEs; Digital Financial Recording; Automation in Accounting.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a significant role in economic growth in many countries, including Indonesia. According to data from the Ministry of Cooperatives and SMEs (2023), MSMEs contribute more than 60% of Indonesia's Gross Domestic Product (GDP) and absorb over 97% of the national workforce. Given their crucial role, the sustainability of MSMEs has become a primary concern for the government and stakeholders. One of the key challenges faced by MSMEs in running their businesses is the management of accurate and efficient financial reporting. Many MSMEs still rely on manual bookkeeping systems, which are prone to recording errors and lack transparency in financial processes (Fikrul et al., n.d.-a).

In recent years, rapid technological development has enabled MSMEs to adopt Accounting Information Systems (AIS) to support their financial management. An Accounting Information System is a technology-based system designed to collect, store, and process financial data to produce accurate and timely reports (Khoviva Dwianingrum, 2025). The implementation of AIS in MSMEs offers two major benefits: improving operational efficiency and enhancing the accuracy of financial reports. Research conducted by (Khoirina, 2024) indicates that MSMEs that have transitioned to digital-based accounting systems experienced up to a 40% increase in financial recording efficiency and a 70% reduction in bookkeeping errors compared to manual methods. Efficiency in financial management is a critical factor for MSME sustainability. Many business owners struggle with bookkeeping due to limited accounting knowledge and insufficient human resources in financial management (Suryantara & Ridhawari, 2023). As a result, they often encounter discrepancies in financial records, which lead to poor business decision-making. The implementation of Accounting Information Systems can help address these challenges by automating transaction recording, reducing the time required to prepare financial reports, and increasing efficiency in cash flow management (Zaki et al., 2025).

In addition to efficiency, the accuracy of financial reports is also a major concern in the implementation of AIS for MSMEs. According to Al Jupri & Sisdiyanto (2024), MSMEs that adopted technology-based accounting systems were able to reduce recording errors by up to 80% compared with manual bookkeeping. Errors in financial records can cause serious consequences, including incorrect business decisions, challenges in obtaining financing from financial institutions, and a higher risk of tax audit issues. Therefore, implementing AIS serves as a solution to improve the accuracy of financial reports, ultimately enhancing the transparency and credibility of MSMEs. Despite the proven benefits of AIS implementation, its adoption among MSMEs still faces several challenges. A study by (Ronardi et al., 2024), indicates that obstacles to adopting Accounting Information Systems include relatively high implementation costs, lack of understanding of the system, and resistance from business owners to shift from manual to digital systems. This highlights the need for broader outreach and education regarding the importance of AIS in supporting MSME business sustainability.

Along with the advancement of the digital economy, transitioning toward technology-based accounting systems has become an inevitable necessity. The government and related institutions have also begun encouraging MSMEs to adopt more modern and efficient systems. One example is the development of SIAPIK (Sistem Informasi Akuntansi untuk UMKM), a free accounting application provided by the government to help MSMEs maintain more systematic and accurate financial records (Sari, 2024). Based on this background, the present study aims to analyze the extent to which the implementation of Accounting Information Systems can improve the efficiency and accuracy of financial reporting in MSMEs. By understanding the impact of AIS adoption, this research is expected to provide deeper insights for MSME practitioners, academics, and policymakers in promoting broader technological adoption within the business sector.

RESEARCH METHODS

The most appropriate research method for this study is the literature review method, in which the researcher collects and analyzes various previous research findings relevant to the topic of accounting information systems in MSMEs. Through this method, the researcher examines a number of scholarly articles, conference proceedings, and other academic sources to identify key findings, patterns, and research gaps. All data are obtained from existing publications, eliminating the need for direct field data collection. The results of the analysis are then synthesized into a comprehensive discussion that provides an in-depth understanding of the influence of accounting information system implementation on the efficiency and accuracy of MSME financial reports. This method also

enables the researcher to construct strong arguments based on empirical evidence generated by previous studies (Wahyuni, 2023), (Ayem et al., n.d.)

RESULTS AND DISCUSSION

Implementation of Accounting Information Systems in Improving the Efficiency of Financial Recording in MSMEs

Efficiency in financial recording is one of the key aspects that supports the sustainability of micro, small, and medium enterprises (MSMEs). Efficient financial recording not only enables business owners to understand the financial condition of their businesses in real time but also supports more accurate and strategic decision-making processes (Ode Anto & Lestari Labangu, n.d.). However, many MSMEs still rely on manual systems to record their transactions, which may lead to inefficiencies, delays in reporting, and potential recording errors (Ramadhan, 2025).

With technological advancements, the use of Accounting Information Systems (AIS) has become a solution for MSMEs to enhance efficiency in financial recording. These systems enable the automation of transaction recording, reduce the time required for financial administrative processes, and increase transparency in financial statements (Hamonangan & Firdaus, n.d.). According to Pratama (2024), the implementation of an Android-based cashier application in MSME accounting systems can improve the efficiency of financial recording by up to 45% compared to manual methods. Therefore, this section provides an in-depth discussion of how AIS implementation can enhance financial recording efficiency in MSMEs, based on recent studies conducted between 2020 and 2024.

The Concept of Efficiency in Financial Record-Keeping for Micro, Small, and Medium Enterprises (MSMEs)

Efficiency in financial record-keeping refers to how quickly, accurately, and effectively financial transactions are recorded without compromising the quality of financial information (Saragih & Firdaus, 2024). In the context of MSMEs, efficiency can be measured using several key indicators, including:

- **Speed of Recording:** How quickly transactions can be entered into the financial system.
- **Accuracy in Reporting:** The precision of transaction records to prevent errors in financial reports.
- **Reduction of Administrative Costs:** Efficiency gained through reduced manual labor and minimized use of paper-based or physical documentation.
- **Ease of Data Access:** How easily business owners can obtain financial reports without time-consuming manual searches or reconciliations.

According to research conducted by Wisna et al. (2024), MSMEs that implement accounting information systems experience up to a 50% increase in recording efficiency compared to businesses that continue using manual methods

The Impact of Accounting Information System Implementation on the Efficiency of Financial Record-Keeping

A number of studies have demonstrated that the implementation of Accounting Information Systems (AIS) contributes significantly to improving the efficiency of financial record-keeping in MSMEs. Several key impacts of AIS adoption include:

a. Automation of the Recording Process

AIS enables the automation of financial transaction recording, thereby reducing the time required for data input. For example, a study by Indriyani and Friya (2024) found that the use of the Si APIK application in MSME financial recording systems was able to reduce transaction-recording time by up to 60% compared to manual methods. With this system, each transaction is automatically stored, minimizing recording errors caused by human factors.

b. Reduction of Errors in Financial Records

Errors in transaction recording are a major issue commonly found in MSMEs that still rely on manual systems. These errors may include incorrect numerical input, duplicate entries, or missing transaction evidence. According to Pratama (2024), MSMEs that have adopted cloud-based AIS experienced a reduction in recording errors of up to 70% compared to MSMEs that continued using manual systems.

c. Integration with Digital Payment Systems

AIS implementation enables direct integration with digital payment systems such as e-wallets and bank transfers, allowing each transaction to be recorded automatically without manual input. Research by Susanti and Kurniawan (2025) shows that MSMEs using AIS integrated with digital payments achieved up to 80% improvement in recording efficiency, as all transactions were automatically captured in the system.

d. Reduction in Administrative and Paper-Based Costs

Under manual recording methods, MSMEs often require paper, cash-books, or additional labor to record each transaction. With AIS implementation, the recording process becomes more cost-efficient because all transactions are recorded digitally without the need for physical documents or additional administrative staff. A study by Laulita and Fiona (2024) found that MSMEs using Microsoft Access-based AIS were able to reduce administrative costs by up to 30% compared to conventional recording methods.

e. Ease of Access to Real-Time Financial Reports

One of the key advantages of AIS is the ability to access real-time financial reports anytime and anywhere. Sinurat (2024) found that MSMEs using cloud-based accounting systems could access financial reports within seconds, compared to manual systems that require time-consuming data searches and processing.

Case Study: The Implementation of Accounting Information Systems (AIS) in Indonesian MSMEs

A number of studies have demonstrated that the implementation of Accounting Information Systems (AIS) can significantly improve the accuracy of financial reports in MSMEs. The following are several key ways in which AIS contributes to enhancing the precision of financial reporting:

a. Automatic Transaction Recording

By using AIS, financial transactions can be recorded automatically without the need for repetitive manual input. This automation reduces the likelihood of human error, such as entering incorrect transaction amounts or forgetting to record certain expenses (Khoirina, 2024).
Case example:

A study conducted by (Pratama, 2024) showed that after implementing an Android-based cashier application, MSMEs experienced an 80% increase in the accuracy of transaction records compared to manual systems.

b. Elimination of Data Duplication and Input Errors

Manual bookkeeping often leads to data duplication or input errors, which ultimately reduce the accuracy of financial statements. AIS includes data validation features that ensure each transaction is recorded only once and follows applicable accounting standards (Silfia Mahda et al., n.d.).

Case example:

study by Al (Fikrul et al., n.d.-b) on the MSME 7W Coffee found that after adopting a cloud-based accounting system, recording errors decreased by up to 70% compared to the previous manual method.

c. Integration with Digital Payment Systems

Many MSMEs now use digital payment methods such as e-wallets and bank transfers. Integration between AIS and digital payment systems enables automatic transaction recording, eliminating the risk of errors in recording cash receipts or expenditures (Khoirina, 2024).

Case example:

Research by (Ronardi et al., 2024) revealed that MSMEs using AIS integrated with digital payments had financial report accuracy levels 30% higher than those still using manual recording.

d. Compliance with Accounting Standards

One of the main causes of inaccurate financial reporting in MSMEs is the absence of formats that comply with accounting standards. AIS is designed to follow applicable accounting rules, allowing MSMEs that use the system to more easily meet proper financial reporting standards (Syamsul, 2024).

Case example:

According to (Silfia Mahda et al., n.d.), the implementation of an AIS based on the Financial Accounting Standards for Micro, Small, and Medium Entities (SAK EMKM) increased MSME reporting compliance by up to 90% compared to manual bookkeeping.

Despite offering significant benefits for improving efficiency, MSMEs still face several challenges in adopting accounting information systems, including:

1. Relatively High Implementation Costs-Some MSMEs still perceive digital accounting systems as expensive to implement.
2. Limited Technological Literacy-Many MSME actors lack adequate digital skills to operate technology-based accounting systems.
3. Resistance to Change-Some business owners prefer manual recording methods due to long-standing familiarity with traditional practices.

CONCLUSIONS

The use of Accounting Information Systems (AIS) significantly improves the efficiency, accuracy, transparency, and reliability of financial reporting in Micro, Small, and Medium Enterprises (MSMEs) by automating transaction recording, reducing errors and data duplication, ensuring compliance with accounting standards, and enabling faster integration with digital payment systems, which in turn facilitates easier access to funding and better tax compliance; however, challenges such as high initial costs, limited technological literacy, and resistance to change persist, making educational support, supportive government policies, and adoption incentives essential to maximize the benefits of AIS implementation among MSMEs.

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