



## APPLICATION OF ACCOUNTING INFORMATION SYSTEM IN IMPROVING FINANCIAL MANAGEMENT EFFICIENCY IN MSME ASSOCIATIONS

Dimas Arya Winata<sup>1)</sup>, Suwandi<sup>2)</sup>

<sup>1,2)</sup> Department of accounting, University of Muhammadiyah Gresik, Indonesia

<sup>1,2)</sup> Winataarya848@gmail.com, Suwandi@umg.ac.id

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\*Correspondence:

Name: Dimas Arya

E-mail: winataarya848@gmail.com

### Editorial Office

Ambon State Polytechnic

Center for Research and

Community Service

Ir. M. Putuhena Street, Wailela-

Rumahtiga, Ambon

Maluku, Indonesia

Postal Code: 97234

### ABSTRACT

**Introduction:** This study investigates how the application of Accounting Information Systems (SIA) enhances financial management efficiency in Micro, Small, and Medium Enterprises (MSMEs). Recognizing the challenges faced by MSMEs in managing finances, the research emphasizes the role of information technology in supporting more effective and transparent accounting processes.

**Methods:** Using a qualitative case study approach involving several MSME associations that have adopted SIA, data was collected through interviews, observations, and document analysis.

**Results:** The findings reveal that implementing SIA positively impacts financial management by automating transaction recording, improving data accuracy, and accelerating reporting. Additionally, SIA facilitates better decision-making by providing timely and relevant financial information. Based on these results, the study recommends that MSME associations integrate SIA into their management systems to boost business performance and competitiveness.

### INTRODUCTION

Efficient financial control of Micro, Small and Medium Enterprises (MSMEs) is critical to the Indonesian economy. As business actors, MSMEs are the main drivers of employment and contribute significantly to the national Gross Domestic Product (GDP). By 2022, there will be more than 64 million Micro, Small, and Medium Enterprises (MSMEs) in Indonesia, representing approximately 99.9% of all business units. These MSMEs contribute significantly to the nation's economic stability and growth, accounting for 61.07% of Indonesia's Gross

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Domestic Product (GDP), which is equivalent to approximately IDR 9,580 trillion. This substantial contribution highlights the critical role MSMEs play in supporting the country's economic development. ( Ministry of Cooperatives and SMEs, 2022) , ( Bank Indonesia et al., 2021).

However, the contribution of MSMEs is not only limited to economic aspects. By absorbing more than 97% of Indonesia's workforce, MSMEs are the main supporters in creating jobs and reducing the unemployment rate, especially among the lower middle class. For many individuals and families, the existence of MSMEs means an opportunity to earn income and improve their quality of life. Therefore, the sustainability and growth of MSMEs is very important, not only for the business owners themselves, but also for the millions of workers and their families who depend on this sector ( Nugraha et al., 2021), ( Mulyani & Setiawan, 2020) and ( Rustan et al., 2022).

However, despite having great potential, many MSMEs still face serious challenges in terms of effective and efficient financial management. Based on a survey conducted by Bank Indonesia, most MSMEs in Indonesia still rely on manual recording methods, such as recording transactions using notebooks or simple applications. This method is indeed accessible, but it is less effective in dealing with increasingly complex business needs and increasingly fierce competition. Without a reliable financial management system, MSMEs are prone to recording errors, find it difficult to monitor cash flow, and often face difficulties in producing accurate financial reports ( Riyadi et al., 2020) and ( Hariyati et al., 2023).

In the context of MSMEs, an Accounting Information System (AIS) refers to a system, often supported by digital technology, that is designed to collect, store, manage, process, and report financial data and transactions. It integrates accounting principles with information technology to support the financial and operational activities of a business. For MSMEs, AIS can take the form of software applications—ranging from simple bookkeeping tools to more advanced cloud-based accounting platforms—that help streamline financial processes. Therefore, AIS is not just about technology, but rather the structured use of information systems to enhance the quality, accuracy, and timeliness of financial management and reporting within MSMEs. ( Nurhayati et al., 2022) and (CDeliana et al., 2020).

To overcome these challenges, this study suggests an approach to implementing SIA that is tailored to the needs of the MSME Association. Some of the recommended steps are to provide special training on SIA for MSME members in the Association. Utilize an easily accessible and cost-effective application-based SIA, such as simple accounting software that is friendly to non-technical users. Forming a mentoring team within the Association that functions as a consultant for MSMEs in the use of SIA to support better financial management ( Budi Setya Nusa et al., 2021).

This research contributes by providing a SIA implementation model that can be applied to MSME Associations. Through this research, it is hoped that the MSME Association can adopt SIA that is in accordance with the capacity and needs of its members, thereby improving the efficiency of financial management among MSMEs. This research also offers practical guidance for associations in integrating information technology into MSME financial management (Herman et al., 2023), ( Fahdal & Hasan, 2023). The implementation of Accounting Information Systems (AIS) in MSME associations can significantly improve the efficiency of financial management through faster, more accurate and transparent processes. The initial step involves identifying needs such as transaction recording and financial reporting, followed by the selection of appropriate software. Training is provided to ensure members understand the use of the system, including data input and report analysis. Digitization of financial processes replaced error-prone manual records, allowing real-time access to financial reports through dashboards. Periodic evaluations improved data accuracy and efficiency, reducing work time and increasing transparency in fund disbursement. The implementation saves time and costs, builds trust among members through professional management, supports strategic decision-making, and strengthens MSME competitiveness.

The novelty of this research lies in the development of an Accounting Information System (AIS) application model specifically tailored for implementation within the MSME Association in Indonesia. Unlike previous studies that primarily focused on large enterprises, this model is designed by considering the unique characteristics and resource limitations of MSMEs. The usefulness of this research is reflected in its provision of practical, cost-effective, and user-friendly AIS solutions, particularly suitable for non-technical users. This approach is expected to improve the accessibility and adoption of accounting systems among MSME actors, thereby enhancing their financial management capabilities ( Yahya et al., 2024).

## **LITERATURE REVIEW**

### **Management Accounting Theory**

Management Accounting Theory emphasizes the important role of accounting systems in providing relevant and timely information for managerial decision-making. This information includes financial data that is processed into reports that can be used to plan, control, and evaluate various aspects of the organization's operations. In the context of MSME associations, the implementation of the Accounting Information System (SIA) allows the process of collecting financial data to be carried out in a structured and automated manner, thereby increasing the accuracy of the information needed to support strategic decision-making. This information also provides a foundation for MSMEs to better identify financial opportunities and risks (Hansen & Mowen, 2020).

Furthermore, SIA supports the financial control function in MSME associations by providing tools to monitor resource allocation efficiently. This system helps MSME managers or managers in comparing actual results with previously set budgets or targets, so that they can detect and overcome irregularities early. In addition, SIA allows financial reporting to be carried out in a transparent and accountable manner, both to members of the association and external parties such as investors or financial institutions. Thus, SIA not only serves as a record-keeping tool, but also becomes a system that supports risk management and increased efficiency (Alivia et al., 2020), (Suryantini & Sulindawati, 2020).

The financial information produced by SIA also plays an important role in evaluating the financial performance of MSME associations on a periodic basis. Through systematic data, MSME managers can analyze income, expenditure, and profitability trends, which are then used to design cost efficiency strategies and resource allocation. In addition, with SIA, MSMEs can ensure that decisions taken are based on valid data, supporting business sustainability in the long term. Therefore, the implementation of SIA based on the principles of Management Accounting is a strategic step to strengthen the competitiveness of MSMEs, especially in the face of changing market dynamics (Subagio & Saraswati., 2020).

### **Accounting Information System**

The implementation of accounting information systems (SIA) is becoming increasingly important in the era of digitalization, especially for micro, small, and medium enterprises (MSMEs) that want to compete and adapt to technological developments. MSMEs as a business sector that dominates the Indonesian economy are expected to optimize their resources efficiently, especially in terms of financial management. The MSME Association, as a community that houses various types of small businesses, is faced with a major challenge in managing their collective finances effectively and efficiently. Efficiency in financial management is not only about reducing costs, but also ensuring that financial decisions can support the growth and sustainability of the business as a whole.

Accounting information systems provide a comprehensive solution in presenting accurate and relevant financial data. SIA allows for neater management of transaction data and makes it easier to prepare financial statements. According to (Kustanti et al., 2024) , SIA acts as a link between transaction data and managerial decision-making, which is certainly relevant for MSMEs who have limited resources in managing financial information. Operational efficiency theory states that the proper use of information technology can reduce redundancy and improve accuracy in financial reporting, ultimately supporting the achievement of business objectives. The implementation of SIA in MSME associations can be a key factor in increasing efficiency, because this system is able to provide access to financial information that is faster, more accurate, and easier to understand for MSME managers.

In addition, the implementation of SIA in MSME associations also plays a role in strengthening transparency and accountability. MSME associations that use SIA in their operations are able to maintain the trust of members by ensuring that every transaction and financial activity is recorded clearly and documented. Accountability theory emphasizes the importance of transparent reporting in increasing stakeholder trust. In the context of MSME associations, high transparency through the use of SIA will encourage member participation to actively contribute to financial management.

## RESEARCH METHOD

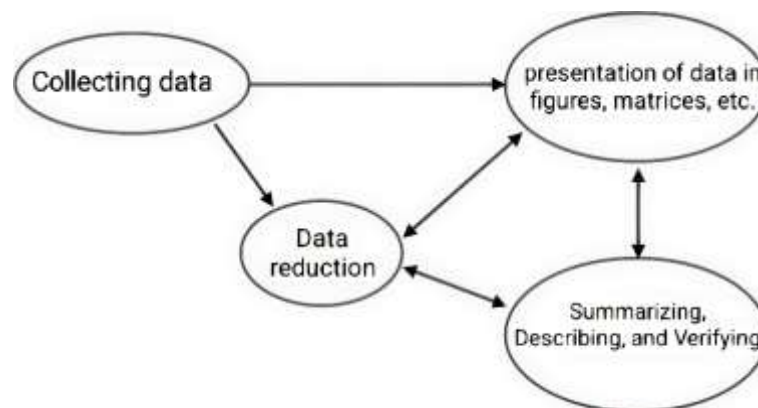
This study uses a qualitative approach to explore the application of Accounting Information System (SIA) in improving the efficiency of financial management in MSME associations in Gresik Regency, with a focus on Menganti District as a sample. The qualitative approach was chosen because it was able to provide a deep understanding of the experiences and views of MSME actors in implementing SIA, as well as the obstacles and benefits faced in financial management. Through this research, it is hoped that comprehensive insights can be obtained regarding how SIA can support efficiency and professionalism in financial management in local MSMEs.

The population in this study includes all MSMEs that are members of the MSME association in Gresik Regency. However, the research focuses on a sample of MSMEs located in Menganti District. The selection of Menganti District was based on several considerations, such as the diversity of business sectors present, the notable growth rate of MSMEs in the area, and the initiation of digitalization efforts in various business activities. A purposive sampling method was used to ensure the selection of respondents who meet the research criteria—namely, MSMEs that have implemented or are currently in the process of implementing an Accounting Information System (AIS) in their financial management. In total, the population consists of approximately 250 MSMEs in the Menganti District that are registered under the MSME association. From this population, a sample of 50 MSME owners or managers was selected as research informants, based on their relevance and experience with AIS usage.

This research uses data collection techniques including in-depth interviews, direct observation, and documentation analysis. Interviews were conducted with owners or managers of MSMEs in Menganti Sub-district who have used or tried to implement AIS, with the aim of gaining insight into the benefits, challenges, and its role in efficient financial management. Observations provided a direct understanding of the application of AIS in daily activities such as financial recording, inventory management, and reporting. In addition, secondary data was collected from relevant documents, including financial reports and transaction records, to illustrate the use of AIS.

This study employed qualitative methods, and data were collected through in-depth interviews, direct observations, and documentation. The interviews were conducted with selected MSME owners or managers who met the research criteria, while observations were carried out during field visits to understand the actual implementation of the Accounting Information System (AIS). Supporting documents such as financial reports, transaction records, and system usage logs were also examined to enrich the data.

The collected data were then analyzed using a thematic analysis method, which included data reduction, data presentation, and conclusion drawing. Relevant information from interviews, observations, and documents was summarized and filtered to remove irrelevant or redundant content. The reduced data were organized into descriptive narratives and matrices to identify recurring patterns and themes related to AIS implementation. Finally, conclusions were drawn and verified through triangulation to ensure the validity and consistency of the findings. The process of analyzing this data is cyclical, as the image adopted (Bungin, 2003:69) from Huberman and Miles, as follows:



Picture 1: Interactive Model Data Analysis Component

To ensure the validity of the data, this study uses triangulation of sources and methods. Source triangulation is done by comparing information from interviews, observations, and documentation. Meanwhile, the triangulation method is achieved by using a combination of in-depth interviews, observations, and documentation studies as complementary data collection techniques.

With this designed research method, it is hoped that this study will be able to provide a comprehensive overview of the application of SIA in improving the efficiency of financial management in MSME associations in Gresik Regency, especially in Menganti District.

Interviews with administrators and members of the MSME Association revealed that the Accounting Information System (AIS) significantly improved financial management. Most respondents found it easier to record transactions, track income and expenses, and generate accurate financial reports. Before AIS, many faced cash flow management challenges and frequent manual recording errors. Now, 80% report improved efficiency in terms of time and resources, along with increased reliability of financial data, enabling faster and more informed business decisions through real-time information.

In addition, the implementation of SIA facilitates collaboration between association members in monitoring and analyzing each other's financial performance, especially in determining business development strategies that are in accordance with measurable financial conditions. Some members also stated that SIA helps them in better long-term financial planning. However, there are several challenges faced, such as the need for training to improve members' technical understanding of the use of the system, as well as the cost of maintaining the system that needs to be considered in the long term.

**Table 1. Research Results Data**

Yes	Research Aspects	Respondents Agree (%)	Description of Findings
1	Time Efficiency in Financial Management	80%	The implementation of SIA accelerates the process of recording and making financial statements that were previously done manually.
2	Financial Data Accuracy	85%	This system reduces the risk of recording errors that often occur during manual recording.
3	Faster Decision Making	75%	Real-time financial data makes it easier for managers to make strategic decisions.
4	Collaboration between Association Members	70%	SIA facilitates information transparency, allowing members to exchange data and analyze financial performance.
5	Technical Challenges (training and maintenance)	60%	Some members still feel the need for further training, and the cost of maintaining the system is quite a concern.
6	Long-Term Development and Financial Plans	65%	Members who use SIA can better make long-term financial planning based on historical data.

This study shows that the implementation of an Accounting Information System (AIS) has a positive impact on the efficiency and effectiveness of financial management in MSME Associations. Eighty percent of respondents reported improved time efficiency in financial recording, while 85% noted improved accuracy of financial data. AIS reduces time and effort, improves data reliability, and minimizes errors, facilitating better collaboration and faster decision-making in dynamic market conditions. While there are technical challenges in the use and maintenance of the system, they can be overcome through continuous training and proper budget allocation.

The implementation of the Accounting Information System (AIS) at the MSME Association has yielded positive results, benefiting almost all members. Previously burdened by error-prone manual record-keeping, 80% of members now experience significant time efficiencies in financial reporting, allowing more focus on business

development. In addition, data accuracy has improved dramatically, with 85% of respondents noting a reduction in recording errors, improving the reliability of financial reports and supporting better strategic decision-making.

The implementation of AIS offers the advantage of real-time access to financial information, which allows managers to quickly assess performance and make necessary adjustments, especially during cash flow challenges. This is important for MSMEs facing market uncertainty. In addition, 70% of members reported that AIS has improved collaboration among them, as transparent financial data encourages the sharing of insights and strategies, leading to improved collective performance.

However, this journey to efficiency is not without its challenges. Some members stated the need for further training so that they could maximize the use of SIA. Limited technical understanding and fear of change are obstacles that must be overcome. The cost of system maintenance also needs to be considered, as investment in technology must be balanced with adequate maintenance to keep the system functioning optimally. Nonetheless, 65% of members feel that the ability to plan for long-term finances is much better thanks to historical data generated by SIA. With all these benefits, there is no doubt that the implementation of an Accounting Information System is a strategic step for the MSME Association to improve the efficiency of their financial management and create a stronger foundation for future.

## RESULT AND ANALYSIS

Accounting Information Systems (AIS) are an important element in improving the efficiency of financial management of MSMEs in Menganti, which contribute greatly to employment, increasing community income, and contributing to Gross Domestic Product (GDP). Many MSMEs face obstacles in financial recording due to lack of accounting knowledge, so AIS is expected to help provide accurate and timely financial information.

AIS includes hardware, software, data, procedures, and user components that can be adjusted to the scale of MSME businesses. The benefits include increased accuracy of transaction recording, transparency of financial reports, and financial data analysis capabilities that assist decision making. . (Ministry of Cooperatives & UKM, 2020)

However, the implementation of AIS is not without challenges, especially the limited understanding of technology among MSME actors. (Kustiwi et al., 2020) Therefore, training and mentoring are the keys to the success of AIS implementation. For example, the XYZ MSME Association in Yogyakarta managed to increase the accuracy of financial reports by 75% after implementing AIS accompanied by intensive training. (Mulyana et al., 2021) Technological innovations such as cloud computing and mobile applications also make it easier to access and record finances in real time. Studies show that MSMEs that implement AIS experience increased turnover and profitability, as well as more accountable fund management. (Jannah & Rahman, 2022)

The MSME Association plays a major role in supporting the adoption of SIA, both through training, providing technology access, and sharing experiences. Government support is still needed so that more MSMEs can implement SIA effectively.

## CONCLUSION

The implementation of the Accounting Information System (AIS) in Micro, Small, and Medium Enterprises (MSMEs) in Gresik Regency, particularly in Menganti District, has shown a significant positive impact on financial management efficiency. AIS helps MSMEs accurately record transactions, enhance financial report transparency, and accelerate decision-making through real-time access to financial data. Research findings indicate that 80% of respondents experienced time efficiency in financial management, while 85% reported improved financial data accuracy.

Although there are challenges related to technical understanding and system maintenance costs, appropriate training and guidance can overcome these obstacles. SIA not only functions as a recording tool but also as a system that

supports risk management and enhances collaboration among association members. Thus, the implementation of SIA is a strategic step to strengthen the competitiveness of SMEs and support sustainable economic growth in Indonesia. Support from the government and associations is crucial to ensure that more SMEs can effectively adopt SIA.

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