

## **The Role of Technology and Accounting Information Systems in Improving the Operational Activities of MSMEs**

**Nur Melianda Herman<sup>(1)</sup>, Nirwana<sup>(2)</sup>, Muhammad Alief Fahdal<sup>(3)</sup>, Hasnawiyah Hasan<sup>(4)</sup>**

<sup>1)</sup>Study Program of Accounting, Economy and Business Departement, Hasanuddin University, Makassar, Indonesia.

<sup>2)</sup>Economy and Business Departement, Hasanuddin University, Makassar, Indonesia.

<sup>3)</sup>Program Studies of Information Engineering, Engineering Departement, Hasanuddin University, Makassar, Indonesia.

<sup>4)</sup>Engineering Study Program of Naval System, Engineering Department, Hasanuddin University, Makassar, Indonesia

\*Corresponding Author

Email: [nurmeliandaherman@gmail.com](mailto:nurmeliandaherman@gmail.com)

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### **Abstract**

*Micro, Small, and Medium Enterprises (MSMEs) play a significant role in a country's economic growth. However, MSMEs often face challenges in managing their operations. This article aims to describe the role of technology and accounting information systems in improving the efficiency and effectiveness of MSME operations. This research uses the literature review method to analyze previously published articles, books, and other related sources. The results of this literature review reveal that technology and accounting information systems have become important tools in helping MSMEs overcome various obstacles in managing their business. Technologies such as accounting software, electronic payment systems and e-commerce platforms have changed the way MSMEs operate and communicate with their customers. This research also highlights the benefits provided by technology in optimizing inventory management, financial monitoring, and data analysis for better decision-making.*

**Keywords:** *MSMEs, Technology, Accounting Information System, Economic Growth*

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## **INTRODUCTION**

Micro, Small and Medium Enterprises (MSMEs) are one type of business that the majority of people are engaged in. The development of Micro, Small and Medium Enterprises or MSMEs is one of the strategies to improve the welfare of the community in avoiding economic crises in a country. MSMEs are a business sector that is always stable in a country's economy (Hasan et al., 2022). Micro, Small and Medium Enterprises (MSMEs) play a very vital role in the global economy. Not only do they provide the backbone for many countries by creating significant employment opportunities, but they also help to boost incomes by giving many individuals access to entrepreneurship and income generation. In addition, MSMEs are often a source of innovation, creating new products and services that can meet the needs of a rapidly evolving market.

The potential of MSMEs in Indonesia as drivers of the national economy can be realized, however, the lack of socialization efforts has led to a poor understanding of business management. One of the problems often faced by MSME players is that human resources in MSMEs in Indonesia do not yet have multiskill capabilities in managing businesses, including in terms of management, finance, marketing, and technology. This is often the reason why MSMEs in Indonesia find it difficult to survive and lose out to more stable competitors. Another obstacle often faced by MSME actors is related to financial management and lack of understanding of technology, which is actually very important in implementing MSME accounting systems. (Saraswati et al., 2021).

It is undeniable that MSMEs often face major challenges in managing their operational activities. Conventional MSMEs certainly cannot use conventional methods continuously, so the

change to the form of digitization of MSMEs is expected to facilitate business operations (Hasan et al., 2023). Proper financial management, efficient inventory management, and effective marketing are often the main obstacles. In the ever-evolving digital era, technology and accounting information systems have become important solutions to help MSMEs overcome these obstacles. They can use accounting software and inventory management applications to better track their finances, manage product stocks more efficiently, and utilize digital platforms to reach a wider market (Juita, 2016).

With the right technology adoption, MSMEs can optimize their operations and continue to contribute to global economic growth. Apart from that, there are several benefits of utilizing technology for MSME players, including; an increase in revenue of up to 80% (Hasan et al., 2022).

Rapid changes in information technology have fundamentally altered the business landscape. In this context, Micro, Small and Medium Enterprises (MSMEs) are one of the groups most affected by technological advancements. Various technological tools, such as sophisticated accounting software, efficient electronic payment systems, and easy-to-use e-commerce platforms, have opened up new opportunities for MSMEs. By adopting these technologies, MSMEs can improve their operational efficiency and effectiveness, which was often a big challenge before. By automating business processes, they can save valuable time and resources (Prastika & Purnomo, 2014).

Moreover, the use of these technologies has changed the way MSMEs interact with their customers. In the past, promotion and sales were mainly done through conventional channels, but now MSMEs can utilize digital platforms and social media to reach a wider audience. This creates opportunities to grow their business further, reach markets that were previously difficult to access, and build a strong brand online.

Micro, Small and Medium Enterprises (MSMEs) are one of the important pillars of the global economy. They are a diverse business sector, covering a wide range of industries and contributing significantly to economic growth, job creation, and community empowerment. There are varied definitions of MSMEs around the world, which generally depend on asset size, number of employees, or annual revenue. MSMEs are often identified as key economic drivers that contribute to social inclusion and poverty alleviation. However, MSMEs are also faced with various challenges, including limited access to financial resources, less efficient business management, and changes in the competitive global business environment (Wulandari, 2021).

Micro, Small, and Medium Enterprises (MSMEs) refer to businesses that are independent, small in scale, and managed by community groups or families. MSMEs, for short, are a very important part of a country's economy, especially in Indonesia. MSMEs have a significant role in driving the economic growth of the community. The types of MSME businesses include various sectors, such as trade, agriculture, industry, services, and so on (Wulandari, 2021).

The development of information technology has been a key driver of change in the way Micro, Small and Medium Enterprises (MSMEs) manage their businesses. Technology and Accounting Information Systems (AIS) have emerged as important solutions in overcoming various operational barriers that are often faced by MSMEs. In principle, an accounting information system has the potential to provide benefits for Micro, Small, and Medium Enterprises (MSMEs) by increasing operational efficiency, improving MSME quality standards, providing accurate and reliable information in decision making, strengthening the competitive position of MSMEs, and improving communication channels (Prastika & Purnomo, 2014).

Financial information and accounting have a very close relationship. Financial information, often referred to as accounting information, refers to the data provided by accounting systems managed by accountants. Typically, this information is displayed in the form

of financial statements, such as income statements and balance sheets. In addition, financial information also includes all financial ratios generated from these reports. On the other hand, accounting itself is basically the process of measuring, processing, and communicating financial information of an economic entity (Juita, 2016).

Accounting Information System or abbreviated as AIS is a framework that involves the use of software, hardware, and procedures to collect, process, store, and communicate relevant accounting information. With AIS, MSMEs can automate various time-consuming accounting tasks and minimize the risk of human error. This allows them to have better visibility into their finances, produce more accurate financial reports, and take more timely decisions (Kantun, 2019).

In addition, AIS also helps MSMEs manage inventory and supplies more efficiently. They can use the system to track product stock, predict demand, and avoid overstocks that can erode profit margins. In addition, AIS allows MSMEs to improve their marketing effectiveness by analyzing customer data and market trends, so they can direct their promotional efforts more precisely. Thus, an Accounting Information System is not only an essential tool for managing the financial aspects of MSMEs, but it is also key to improving their overall operational efficiency. In this digital era, MSMEs that adopt technology and AIS well can gain a significant competitive advantage, allowing them to better compete and grow in the ever-changing global economy (Cahyani, 2022).

According to previous research conducted by Kantun (2019), the application of fixed asset accounting in MSMEs has complied with the principles of SAK EMKM, especially in recognizing and releasing fixed assets through sales. However, the results of Cahyani's research (2022) show that MSMEs have not implemented the Accounting Information System (AIS) due to two factors, namely limited Human Resources (HR) and lack of experience in conducting accounting records. Research conducted by Latifah (2021) states that MSMEs should implement AIS as part of management control to identify standards and lead to the achievement of organizational goals. This can eliminate innovations whose processes are inefficient and have a high risk of failure.

In this context, this study aims to describe the role of technology and accounting information systems in supporting the growth and success of MSMEs. This research will use the literature review method to analyze previously published articles, books, and other related sources. The results of this literature review are expected to reveal the various benefits provided by technology in optimizing inventory management, financial monitoring, and data analysis for better decision-making by MSMEs (Latifah, 2021).

## **RESEARCH METHODS**

This research uses the literature review method to collect and analyze articles, books, and other related sources that have relevance to the role of technology and accounting information systems in the context of Micro, Small and Medium Enterprises (MSMEs). This literature review method provides a solid foundation for exploring and investigating issues related to the role of technology and Accounting Information Systems (AIS) in the world of MSMEs.

The analysis approach in this research is descriptive and conceptual. Data found from the literature will be analyzed descriptively to describe the observed phenomenon in detail. This includes identifying trends, changes, and benefits that technology and AIS have provided to MSMEs. In addition, conceptual analysis will be used to understand the basic concepts and frameworks that underlie the role of technology and AIS in supporting MSMEs.

With this approach, this study aims to provide a comprehensive understanding of how technology and AIS have shaped and influenced MSMEs in various aspects of their operations. The results of this study will hopefully provide valuable insights for stakeholders, researchers, and business practitioners interested in developing MSMEs and understanding the positive impact that the application of technology and AIS can have in this context. Through a deeper understanding of this topic, we can make a positive contribution towards the growth and sustainability of the MSME sector in the ever-evolving digital era.

## RESULT AND DISCUSSION

Micro, Small and Medium Enterprises (MSMEs) are an important pillar in the global economy. In the ever-evolving digital era, technology has played an increasingly crucial role in supporting the operations and growth of MSMEs. In this context, let us further explore how technology has shaped various aspects of MSME operations:

Technology has brought about a significant revolution in the way Micro, Small and Medium Enterprises (MSMEs) manage their finances. Especially, accounting software such as QuickBooks, Xero, and Zoho have brought about a fundamental change in the way MSMEs manage their financial aspects. The advantages of using online bookkeeping are the ability to record transactions instantly as they occur, reducing the risk of recording errors, the ability to be customized as needed, as well as the ability to monitor transactions in real-time, preventing overspending (Rohmana & Hwihanus, 2023).

Such accounting software enables MSMEs to record transactions quickly and accurately, produce more understandable financial reports, and monitor their cash flow efficiently. This provides great benefits in making better financial decisions, with MSMEs able to make more informed budgets, manage debt more efficiently, and optimize their spending to increase profitability. For example, QuickBooks, one of the leading software in this category, can help MSMEs track their expenses in real-time and automatically generate financial reports that can be used for strategic decision making (Dewi, 2020).

The use of mobile-based accounting systems encourages Micro, Small and Medium Enterprises (MSME) owners to record their business transactions and monitor their progress through smartphones. This application allows MSME owners to track the development of their business without the need to bring a laptop (Sinarwati et al., 2019). In addition, this technology also allows MSMEs to be more transparent in financial relationships with business partners, investors, and financial institutions. By having organized and easily accessible financial records, MSMEs can build trust and attract the investment necessary for their growth.

The use of AIS applications in data entry has a significant positive impact on the quality of MSME financial data. In addition, the level of security of the AIS application also has a significant positive impact on the quality of MSME financial data. Therefore, the application of AIS in MSMEs must be maintained and improved, in accordance with the current development of information technology. This aims to continue to improve the quality of MSME financial data for users of these applications (Akadiati et al., 2022). Thus, accounting software and related technologies have become an essential component for MSMEs in managing their finances more effectively, reducing the risk of human error, and enabling sustainable business growth in an ever-evolving digital era.

The accounting information system also functions as a means to manage the transaction process and can be utilized by MSMEs in management control efforts, including organizing procedures for stocking goods and providing proof of transactions, both in the form of cash and credit payments. The implementation of accounting information systems can help MSMEs in

facilitating their business development (Saragih & Silalahi, 2023). Efficient inventory management is a key success factor for Micro, Small, and Medium Enterprises (MSMEs) in avoiding excessive inventory costs or shortages that can harm their business. Technology has come to the rescue by providing the necessary tools to track inventory in real-time and predict demand more accurately.

With the adoption of this technology, MSMEs can better plan purchases, reduce wastage due to excessive inventory, and improve their overall operational efficiency. For instance, integrated inventory management systems like Odoo allow MSMEs to manage their inventory more effectively. Features such as automatic ordering based on inventory levels and alerts if inventory is approaching the minimum limit provide better control in inventory management (Fitriani & Harahap, 2023).

In addition to reducing costs, good inventory management can also improve customer service. With technology, MSMEs can quickly identify available products and deliver orders faster to customers. This allows them to maintain customer satisfaction and increase customer loyalty in the long run. In conclusion, technology has helped MSMEs in optimizing their inventory management, which is an important step to avoid the risk of unnecessary inventory costs. With the right tools and systems, MSMEs can improve their operational efficiency, reduce the risk of lost sales, and strengthen their position in the increasingly fierce market competition.

The development of e-commerce platforms and social media has brought about significant changes in the way Micro, Small and Medium Enterprises (MSMEs) interact with their customers. Previously, MSMEs may have been limited to a local or regional scope in conducting their business, but now, they have access to a global market through technology. The use of Accounting Information Systems can increase sales, and when MSMEs utilize AIS, it can provide a clear picture of the financial condition of their business. Through this system, users can easily see the number of sales and existing customers. The impact of implementing this system is that users can understand the types of products being sold better. This, in turn, can be used to control those products (Cahyati, 2021).

One important aspect of this change is the use of technology to develop online marketing strategies. MSMEs can utilize social media platforms such as Facebook, Instagram, or TikTok to promote their products to a wider audience. They can interact with customers directly, listen to feedback, and build a stronger brand online. Moreover, analytics technology allows MSMEs to track the performance of their marketing campaigns and adjust their strategies according to the data obtained.

In addition, secure and easy-to-use electronic payment systems have helped MSMEs facilitate transactions with customers more efficiently. This includes not only product sales, but also services such as online ordering and payment. For example, selling on e-commerce platforms such as Etsy or Shopify makes it relatively easy for MSMEs to reach a global market share. They can accept payments from different countries and ship products worldwide without the need for expensive physical business infrastructure.

In addition to the role of technology in daily operations, modern Accounting Information Systems (AIS) also play an important role in MSME decision-making. They collect and analyze financial data automatically, providing valuable insights to business owners. MSMEs that have adopted Accounting Information Systems (AIS) can produce financial information that is reliable, relevant, timely, easy to understand, and tested for accuracy. This will help in the economic decision-making process. The better MSME players utilize AIS, the more it improves the performance of MSMEs and makes them more competitive compared to larger entities. By utilizing AIS for data processing, MSMEs will have more reliable information, which in turn will support making the right decisions in managing their business and increasing business profits (Opti, 2023).

The role of accounting has great significance in improving the performance of MSME players and can be considered as a tool of their defense. This is due to the important role of accounting in the current digital era, where accounting plays an important role in meeting the demands of shareholders and creditors, as well as potentially affecting the financial performance of MSMEs in obtaining additional capital through loans. The important role of accounting in MSME actors can improve economic efficiency, which has an impact on lower capital costs. This, in turn, can increase the level of confidence of investors and creditors in making investments and providing credit to MSME players. In the context of MSMEs' relationship with the government and financial institutions such as banks, the provision of accounting information is also very important (Hanifah et al., 2023). In an era where data is becoming a valuable asset, smart use of AIS can give MSMEs a significant competitive advantage. With careful data analysis, MSMEs can make better, evidence-based decisions for the growth and success of their business.

## CONCLUSION

Technology and accounting information systems have opened up new opportunities for MSMEs to improve their operational efficiency. With accounting software, electronic payment systems, e-commerce platforms, and data analytics, MSMEs can better manage their finances, inventory, and marketing. The use of these technologies also supports better decision-making, helping MSMEs to compete in an increasingly competitive market. Therefore, investment in technology and accounting information systems is important for MSMEs that want to grow and thrive in today's digital era.

- a. Mobile-based AIS Application Development: Research could propose the development of an AIS application that is more accessible through mobile devices. This will allow MSME players to more efficiently record transactions and access financial information from anywhere.
- b. Training and Education: MSMEs need to be provided with better training and education on the use of technology and AIS. This could include training on how to operate the AIS application, manage financial data, and interpret the information for decision-making.
- c. Improved Data Security: Research can highlight the importance of improving data security in AIS applications. MSMEs must know that their financial data is safe and protected from cyber threats.
- d. Integration with E-Commerce Platform: Propose the integration of the AIS application with e-commerce platforms. This will assist MSMEs in managing online and offline transactions simultaneously, and simplify recording and reporting.

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