# APPLICATION OF DIGITAL ACCOUNTING BY USING IT IN FINANCIAL DECISION MAKING

**Rahayu Dewi Zakiyah RF[1], Emi Rachmawati[2]**

(1) Faculty of Economics and Business, Trunojoyo University, Madura, Indonesia

[2]Faculty of Economics and Business, Trunojoyo University, Madura, Indonesia

[1]rahayu.zakiyah@trunojoyo.ac.id, [2]emi.rachmwati@trunojoyo.ac.id

## *ABSTRACT*

This study uses a qualitative method with the aim of understanding the application of digital accounting in the use of Artificial Intelligence (AI) to facilitate preparing financial reports. The population used in this study was MSMEs in the Sampang Beach tourism in Madura. The sample used was a purposive sampling technique. The results of this study indicate that there are still MSMEs that have not implemented digital accounting. This is due to a lack of knowledge to implement the system. But there are those who have implemented digital accounting using Artificial Intelligence (AI) to compile their financial reports. The application of digital accounting using the Artificial Intelligence (AI) system has a significant impact on MSMEs because it can facilitate and improve the performance of MSMEs.

**Keywords**: Digital Accounting, Artificial Intelligence (AI), Financial report

## I. INTRODUCTION

The development of technology at this time is very rapid, this can be seen from the sophistication of digitalization developments in all fields. Initially using a traditional system now uses a digitalization system. One of these fields is accounting, accounting utilizes technology, one of which is digital bookkeeping using Artificial Intelligence (AI). Artificial Intelligence (AI) has the ability to simplify processes, increase speed, and reduce errors in making financial reports (Resalia et al., 2024). Digital bookkeeping is very convenient because it is proven to be more effective and efficient than using manual bookkeeping. Bookkeeping records can be done by anyone who needs one of them, including MSME actors (Larasati et al., 2023). Although digitalization is vital, the adoption of technology by Micro, Small and Medium Enterprises (MSMEs) often faces various obstacles. MSMEs are the main pillar of the Indonesian economy, accounting for around 99% of total business units and 61.07% of the national Gross Domestic Product (GDP) (Brin (national research and innovation agency), 2025). Their productivity per business unit is very low which is the main reason why digitalization is considered an essential tool to improve efficiency and competitiveness.

In general, the barriers faced by MSMEs in adopting digital technologies including digital accounting and AI are very real. One of the main obstacles is the low digital literacy and understanding of technology among businesses. In addition, organizational culture plays a dual role as a driver and moderator of digital transformation. These findings confirm the role of digital transformation in changing modern accounting practices (Hasan et al., 2025).Many MSME owners, especially from the generation The use of AI in accounting has proven to provide great benefits for MSME players, from time efficiency to improving the quality of data analysis (Arsenio et al., 2024). IA-based systems are able to process data automatically and in real-time. So that it can facilitate MSME players in compiling more accurate and timely financial reports (Khasanah et al., 2024). The development of MSMEs in Indonesia has increased, MSMEs have an important role in Indonesia because they provide new jobs, and can reduce the level of unemployment and poverty in Indonesia. Another role is as a support to make it easier for low-income people to engage in positive economic activities. MSMEs have high productivity and economic levels. MSMEs must be able to move quickly to keep up with changes and adapt to technological advances. Especially in the field of finance, expertise and knowledge are lacking today, especially for small businesses. Although not a few entrepreneurs have completed formal education, but usually business owners experience problems because they have no experience in administration and accounting. This can be seen from minimal financial planning and small-scale bookkeeping (Wijaya Sukma et al., 2023).

Limited knowledge of accounting in bookkeeping can currently use digitalized bookkeeping assisted by IA. However, many MSMEs are reluctant to do digital bookkeeping, many still use it manually. Research on digital accounting and AI for MSMEs is still very scarce, especially in Indonesia. Moreover, there has been no research that specifically focuses on MSMEs in the north coast tourism sector in Sampang Regency, Madura. This location has unique characteristics, such as a community that is thick with religious and cultural values, lack of financial literacy, and limited infrastructure and capital. Thus, this case study has a fundamental novelty as it is located in an area that has not been studied before and has characteristics that differ significantly from previous study locations, such as large cities or more established markets. Previous studies on the digitalization of tourism MSMEs in Madura tend to focus on digital marketing aspects, such as the use of social media, marketplaces, and ICT for promotion. This indicates that digitalization is not limited only to promotion, but should include other core business functions. To date, there has not been sufficient empirical evidence that examines in depth how the integration of digital accounting reinforced with AI can holistically influence the financial decision-making of MSMEs at the micro level. This study will answer the crucial question of how the application of AI-based digital accounting can improve the quality of financial decision-making in MSMEs in the coastal tourism sector of Sampang, Madura.

## II. RESEARCH METHOD

The type of research used in this study is qualitative research. Qualitative research is a method for exploring and understanding the meaning ascribed to several individuals or groups of people on social or humanitarian issues. Anyone involved in this form of research must apply an inductive research perspective, analyze data inductively from specific themes to general themes, focus on individual meanings, and interpret the complexity of a problem (John W. Creswell, 2019).

This research was conducted on the North Coast of Sampang, Madura. Maritime tourism has many MSME centers that require concepts. In this study, researchers used a phenomenological approach with an interpretative paradigm. The interpretative paradigm is research that places the researcher and the person under study, as part of what must be explored properly in order to understand a phenomenon or event both within a person and in life or daily thoughts and beliefs (Djasuli et al., 2017). The phenomenological approach is a concept or design that is a research design derived from philosophy and psychology in which researchers describe human life experiences regarding a particular phenomenon (John W. Creswell, 2019). Phenomenological research looks at individual interpretations of their experiences by trying to understand the meaning of an experience from the participant's point of view, as in this study regarding the phenomenon of knowing how the application of AI-based digital accounting can improve the quality of financial decision-making in MSMEs in the coastal tourism sector of Sampang, Madura.

The technique of determining informants was carried out using a purposive sampling method. This method was chosen instead of purposive sampling because this research does not aim to generalize the findings, but rather to extract rich and in-depth information from the most relevant individuals who have in-depth knowledge of the research topic. Informants will be selected based on specific criteria, such as being MSME owners operating in the coastal tourism area of Sampang, Madura, and Groups of similar studies may be referenced. having direct experience in managing their business finances. In qualitative research, a small but relevant number of informants can provide sufficient depth of data. Therefore, this study will involve four informants who are considered sufficient to achieve data saturation, which is the point at which no more new information or insights are obtained from additional information. Primary data will be collected through in-depth interviews with the selected informants. These interviews will allow researchers to explore the experiences, perceptions, and challenges faced by MSME actors in detail.

## III. RESULTS AND DISCUSSION

his study conducted a survey and interviews with five MSME actors regarding the digitization of financial statement accounting. However, only four informants were willing to participate in the interviews. The first piece of information gathered was how much MSME owners knew about digital accounting. The following are direct statements from the four MSME owners

**Table 1. Result of interviews with 4 MSME actors**

| no | Informant | Type of question | Description |
|---|---|---|---|
| 1 | Suliha (owner of seafood processing SMEs) | How much do you know about digital bookkeeping/financial reporting? | "When it comes to digital bookkeeping, I have been doing it for about three years. I first learned about it by attending seminars." |
| 2 | Mat shaleh (Owners of marine product handicraft MSMEs) | | "We started using digital accounting not long ago...if I remember correctly, it's been about a year. Before that, we did manual accounting by writing everything down in a book." |
| 3 | Siti Zubaida (owner of Sekar laut MSME) | | We don't use digital accounting here,ma'am ... The accounting is still manual. It's just simple bookkeeping.The thing is, I don't really understad how to use it, ma'am, it's also complicated. |
| 4 | Ruhaina (batik SME owner) | | "I have been implementing digital bookkeeping using the new IA system for about a year now, since attending an information session and seminar." Previously, records were also kept, but manually. |

Of the four statements that have been submitted, there are three MSMEs that have implemented digital accounting and one MSME that has not implemented it. *The Technology Acceptance Model* (TAM) method by (Beynon et al., 2018).

which describes the elements that contribute to technology acceptance, has relevance to this issue. TAM identifies two components of trust *perceived usefull* and *perceived ease of use* as the main determinants of whether people accept or reject information technology (Flynn & Davis, 2017). These two main factors certainly have different meanings, *perceived useful* is that an individual will believe that the application of technology will lead to improved performance. The use of technology should make work easier if the use of technology on the contrary is difficult and not worth the benefits that will be obtained, then someone prefers not to use technology. Meanwhile, *perceived ease of use* is a belief about the ease when applying technology.

Ease of technology implementation should be a factor that should be considered. Sekar laut MSMEs consider that the use of digital bookkeeping is difficult and complicated. Therefore, what becomes technology acceptance is the ease factor in terms of obtaining, operating, or maintaining accounting information technology (Larasati et al., 2023). A difficult system will make it difficult for MSME players, especially those who are unwilling to learn about digitized accounting information. Accounting records are fairly simple and not in accordance with applicable accounting guidelines. In Sekar laut MSMEs, the bookkeeping is done simply by calculating profits by calculating income minus expenses. Such calculations are of course not the actual profit or loss recorded. This simple bookkeeping is carried out because there is still limited knowledge about the components in accordance with the applicable accounting bookkeeping rules. Sekar laut MSMEs only apply a profit and loss statement and are made in a makeshift format. Bookkeeping is done manually, resulting in human errors, for example, errors in calculating the accounting. This limitation occurs due to low digital literacy and limited technological infrastructure, which hinders them from adopting more sophisticated digital technologies, including AI. However, there are indications that training and mentoring can improve their understanding of digitization in finance.

**Table 2. Result of interviews with 4 MSME actors**

| no | Informant | Type of question | Description |
|---|---|---|---|
| 1 | Suliha (owner of seafood processing SMEs) | What are the benefits of applying bookkeeping/financial reportin | Using digital accounting with the IA system made it very easy. At first it was still difficult, and I felt confused |

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|---|---|---|---|
| | | g with accounting digitization using the IA system? | at first. But after getting used to it, I found it easy to use. From here, I know the profits I get automatically. All financial reports are neatly organized, and from here I can even see daily sales data so I can make a budget for purchasing raw materials and increase income profits. |
| 2 | Mat shaleh (Owners of marine product handicraft MSMEs) | | When still using manual bookkeeping, you have to be careful in recording it so that there are no mistakes. If there is a mistake, you have to search for it one by one. When using digital bookkeeping in utilizing AI technology such as cash book applications, it is very easy. All sales and expenditure transactions are recorded digitally. At the end of the month, income statements, cash flow statements, and balance sheets are |

| | | | |
|---|---|---|---|
| | | | automatically generated. I now know exactly how much profit I've made, what the biggest expenses are, and how healthy the cash flow is. |
| 3 | Ruhaina (owner of a batik SME) | | I have gained a lot from implementing digital accounting using the IA system. I use the Mekari Jurnal application system, which is very easy to use. All sales and expenditure transactions are recorded digitally. At the end of the month, profit and loss statements, cash flow statements, and balance sheets are automatically available. I can also analyze sales, raw materials, etc., which makes me very effective and efficient. |

The changes in business after implemented digital bookkeeping using IA were felt by mat sholeh and ruhaina. After implementing digital bookkeeping, mat shaleh and ruhaina explained that they felt helped by digital bookkeeping, the time required was also less than using manual bookkeeping and the results were also more accurate. The digital bookkeeping applied by Mat Shaleh and Ruhaina has produced positive results, namely that their MSMEs are growing. The use of digital accounting makes it easier to book their business even though at first they found it difficult to apply it. For MSMEs that have not implemented digital bookkeeping, there is a need for re-education regarding information on the importance of digital accounting Digital bookkeeping is needed in the current era of digitalization.

The advantages of implementing digital bookkeeping are improving data accuracy, access to bookkeeping from anywhere, more complete financial visibility, saving time and effort, more efficient financial reports, and reducing technical errors in report writing. Apart from using a PC or laptop, smartphones can also be used to access digital bookkeeping. so that if MSME owners do not have a computer or laptop, they can still use digital bookkeeping (Larasati et al., 2023). Improved financial decision making through AI-based digital accounting can be seen from Digital accounting, with its ability to automate recording and reporting, significantly improves accuracy and efficiency in managing finances. Moreover, AI integration will transform raw financial data into actionable insights. With *Machine Learning* algorithms, AI can predict future financial trends, helping MSME players move from reactive to proactive decision-making. For MSME owners who often act as the "Chief Everything Officer," this automation of routine tasks will free up time and energy to focus on value-added business strategies, such as developing new products or services (Manel et al., 2023).

## IV. CONCLUSION

### A. Conclusion

This study aims to analyze the application of AI-based digital accounting in financial decision-making of MSMEs in coastal tourism of Sampang, Madura. It can be concluded that the low level of financial and digital literacy is a major obstacle for MSMEs in managing their finances effectively. Disorganized financial record-keeping practices and mixing personal and business finances hamper their ability to evaluate business performance, which in turn negatively impacts decision-making and business sustainability. However, digital accounting technology and AI offer significant solutions to address these issues by automating record-keeping, improving data accuracy, and providing predictive insights that help MSMEs make smarter and more proactive decisions. However, adoption of these technologies is not easy due to multidimensional barriers, including limited capital for initial investment, lack of knowledge about the benefits of AI, and technological infrastructure challenges in coastal areas.

### B. Research Limitations

As a qualitative research with a case study approach, this research has several limitations that need to be acknowledged. First, the limited number of informants (four) and the focus on a very specific location (MSMEs in coastal tourism in Sampang, Madura) means that the findings cannot be generalized to all MSMEs in Indonesia. The findings only reflect the experiences and perspectives of businesses in the study area, which has unique socio-economic characteristics such as strong cultural values and specific structural challenges. Therefore, the results of this study provide rich insights but are not representative of MSMEs nationwide.

C. Suggestions and Implications

Based on the findings and analysis, this study proposes several suggestions and practical implications for various related parties to support the sustainability of MSMEs:

Suggestions for MSME Actors

Improved Digital and Financial Literacy: MSME players are advised to take the initiative to join training and mentoring programs that focus on digital financial literacy and the use of simple accounting applications. This is a crucial foundation to improve their understanding and skills in modern business financial management.

Utilization of Simple Technology: There is no need to adopt sophisticated AI technology right away. MSME players can start with simple digital accounting applications that are affordable and easy to use to manage daily records and basic reports. Familiarizing yourself with the separation of personal and business finances is the most important first step. Suggestions and implication for local government and related parties

Ecosystem-based Support: Local governments, financial institutions and the private sector need to collaborate to provide an integrated ecosystem of support. This includes providing low-cost capital assistance schemes for MSMEs in coastal areas to invest in technology, as well as improving digital infrastructure such as stable and affordable internet access.

Development of Structured Mentoring Programs: Given the low level of digital literacy, an ongoing mentoring program by trusted facilitators will be much more effective than one-off training. These programs should be designed with a down-to-earth approach that respects local values, and provide long-term technical support.

Human Resource Capacity Improvement: The research results can be used as a basis for designing policies that focus on improving human resource capacity among MSME actors, which is key to improving the competitiveness of the local economy in the tourism sector.

With synergy from all parties, the application of AI-based digital accounting is no longer a luxury, but can be a transformative strategic tool to encourage the growth and sustainability of MSMEs in coastal tourism in Sampang, Madura, and contribute significantly to the regional economy.

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