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PERCEPTIONS OF MICRO BUSINESS ACTORS IN CIMPAEUN VILLAGE, DEPOK CITY IN ADOPTING THE USE OF DIGITAL FINANCIAL REPORTING APPLICATIONS

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ABSTRACT

The use of digital technology offers various benefits. However, the level of digital adoption among micro businesses is still relatively low, especially in using digital financial reporting applications. This can be seen from the fact that there are still many micro businesses that do not have financial reports even though there are applications that can help them. This study aims to determine the perceptions of micro business actors in Cimpaeun Village, Depok City, towards adopting digital financial reporting applications. The research method uses a qualitative approach with an exploratory type of research. Data were collected through semi-structured interviews with seven micro business informants in the area and analyzed using the content analysis method. The results showed that micro businesses have a positive perception of the ease and efficiency of the application in managing finances. Barriers such as limited digital literacy, access to technology, cost, and data security are the main challenges. This study found that to increase the adoption rate of digital financial reporting among micro businesses, training to improve digital literacy, development of user-friendly applications, technological support, and data security are needed to accelerate the adoption of digital financial reporting applications.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) are the backbone of the Indonesian economy, with around 66 million business units or around 99% of the total business units in Indonesia (Kadin, 2023). This sector contributes significantly to the Gross Domestic Product (GDP), which is 61.97%, or around IDR 9,580 trillion according to data from the Ministry of Cooperatives and SMEs in 2022. In addition, MSMEs are also the main absorber of the national workforce, employing more than 117 million people, equivalent to 97% of the total workforce in Indonesia (Kadin, 2023). This shows that MSMEs have a strategic role in driving the economy, especially in the informal sector. However, behind this huge contribution, MSMEs face serious challenges in financial management. Many MSMEs still use manual or traditional methods to record financial transactions, which tend to be prone to errors and lack transparency (Bintari et al., 2022; Suriani et al., 2024; Widjaja, 2024).

Lack of good cash flow management often leads to financial imbalances, such as expenses exceeding income or not paying obligations on time. This condition not only limits the development capabilities of MSMEs but also makes it difficult for them to access formal financing essential for business expansion (Ndifor et al., 2023; Sulaiman & Depayanti, 2024). Facing these challenges, effective financial management is a current necessity for the sustainability of MSMEs, especially in the digital era, and offers various technological solutions to overcome these problems. The use of technology such as digital financial information applications can be the answer to the financial management obstacles faced by MSMEs (Rahmah & Akbar, 2024; Suriani et al., 2024).

One important innovation in digital transformation is using digital financial reporting applications, designed to help MSME actors record and monitor the condition of their business financial statements more easily and efficiently. Digital financial applications offer key features such as automatic recording that reduces the risk of human error in recording transactions, financial reports that can be accessed in real time to provide a more accurate picture of the financial condition of the business, and transparency that allows MSMEs to monitor every cash flow in a clear and structured manner (Elmanda et al., 2022). Examples of financial reporting applications widely used by MSMEs in Indonesia include SiApik and Buku Warung(Rahmah & Akbar, 2024; Widyawan, Salman, et al., 2024).

Financial reports generated by digital financial reporting applications include various important reports that are the basis for managing business finances. Among them are income statements that provide an overview of income and expenses in a certain period, balance sheet reports that present the financial position of the business including assets, liabilities, and equity, and cash flow reports that describe the movement of cash in and out in detail. These three types of reports not only help MSME actors understand the financial condition of the business comprehensively but also become an important tool in designing more effective business strategies (Ardhianto, 2020).

The main benefits of using digital financial reporting applications for MSMEs include operational efficiency, as these applications can save time and effort in the recording and reporting process (Badria & Hasanah, 2024). In addition, these applications also help improve more precise and data-based business decision-making, such as in budget management or investment planning (Anggara & Kartikasari, 2023). Equally important, using digital financial reporting applications can facilitate MSMEs' access to formal financing, as clear and structured financial reports can increase business credibility in the eyes of financial institutions (Jiang, 2024; Susilowati et al., 2023).

Technology adoption by MSMEs in Indonesia is still relatively low, although digital transformation offers many benefits. Based on data from the Ministry of Cooperatives and SMEs, only around 25.5 million, or 38.6% of MSMEs have utilized digital technology to manage their businesses. While the rest still rely on traditional business methods (Antara, 2024). This reflects the low utilization of digital applications such as financial reporting systems, online marketing, or inventory management systems, although many applications have been developed to facilitate business operations. Research by Kholid et al. (2020) states that only 0.4% of MSMEs use mobile financial recording applications, while research shows that only 12% have used digital applications for financial recording (Widyawan, Salman, et al., 2024). These figures further emphasize the low adoption of technology in the MSME sector, which is one of the major obstacles to advancing the field in the digital era.

Some factors that are the main causes of low technology adoption by MSME actors include a limited understanding of digital technology. Many MSME actors still find it difficult to understand how digital applications work and how they can help improve their business performance (Hariyanti & Kristanti, 2024; Mardian et al., 2024; Tarutė et al., 2018). Furthermore, the reliance on traditional methods that have been used for a long time makes most MSME actors reluctant to switch to new technologies because they feel that such changes require more effort in learning and adapting (Azan et al., 2024; Tambunan, 2022). In addition, infrastructure issues are also a major challenge, especially in remote areas that still face limited internet access and stable telecommunications networks, making it difficult for MSMEs to make the most of digital technology (Azan et al., 2024; Eller et al., 2020; Hariyanti & Kristanti, 2024; Paradizsa & Rahayu, 2022). An example of an area experiencing these challenges is the MSME sector in Cimpaeun Village, Depok City.

MSME actors in Cimpaeun Village mostly manage micro and small businesses, which in their operations tend to rely on family or individual labor without formal education or special training in business management. This condition is one of the main obstacles in developing their businesses, especially in facing competition in the digital era. A report by the Depok City Cooperative and MSME Agency also revealed that MSME actors, especially micro businesses, in the region often face limitations in terms of trained human resources. The inability to manage finances well and lack of understanding about digital marketing are significant barriers that slow down the growth and adoption of technology among businesses (Dinas Koperasi dan UMKM Kota Depok, 2020).

Perceptions play an important role in the decisions of MSME actors to adopt technology, including digital applications to support business activities. According to the Technology Acceptance Model (TAM) developed by Davis et al. (1989), the decision to accept or use technology is strongly influenced by two main factors: perceived usefulness and perceived ease of use. If MSME actors believe that digital applications can provide real benefits, such as increasing operational efficiency or simplifying financial management, they are more likely to adopt the technology. This perception is also influenced by previous experience, education, and socialization from relevant parties, such as application providers, universities, or the government.

Conversely, negative perceptions can be a major barrier to technology adoption, despite its proven benefits. The distrust of technology, the notion that digital applications are difficult to use, or a lack of understanding of how technology can support business often deter MSME actors from switching from traditional methods. In this context, low perceived ease of use can lead to resistance to app use, despite high perceived usefulness (Anwar et al., 2024; Ludeña-Poma et al., 2024). Therefore, to increase technology adoption, stakeholders should focus on enhancing the perceptions of MSME actors through better training, education, and usage experience so that they can experience the benefits and convenience of the technology firsthand.

Understanding how negative and positive perceptions are formed among MSME actors is very relevant in supporting the adoption of digital transformation in MSMEs. These perceptions play a key role in their decision to use digital applications, especially in supporting business activities. Previous studies related to digital transformation adoption tend to focus on the functional benefits of digital applications, such as increasing business efficiency or identifying factors that encourage and hinder technology adoption (Badria & Hasanah, 2024; Eller et al., 2020; Hariyanti & Kristanti, 2024; Huda, 2023; Sjahruddin et al., 2024; Tambunan, 2022; Tarutė et al., 2018). Additionally, research conducted by Wahyono (2024) highlights the importance of including variables such as acceptance of the impact of technological change to better understand MSME responses to digitalization. However, in-depth studies of the perceptions of MSME actors, especially micro-business actors, towards digital financial reporting applications are still rarely carried out. Therefore, this study aims to fill the gap, provide a deeper understanding of micro-entrepreneur's perceptions, and explain how these perceptions affect the level of technology adoption among micro-entrepreneurs. This research also seeks to answer the general question, "How do micro businesses perceive digital financial reporting applications as tools to support their business activities?" and specific questions as follows, a) What are the main reasons micro businesses have not used digital financial reporting applications to produce financial reports?; b) How do micro businesses perceive the relevance of digital financial reporting applications to their business needs?; c) What are the specific concerns or barriers that make micro businesses reluctant to use digital financial reporting applications?; d) How do micro businesses perceive the difficulty in learning and adopting a digital financial reporting application?; e) Do micro businesses feel there is a need for training or mentoring before using a digital financial reporting application, and what form is this expected to take?; and f) What factors do micro businesses think could dispel their doubts and encourage them to optimize the use of digital financial reporting applications?

LITERATURE REVIEW

Micro, Small, and Medium Enterprises (MSMEs)

Micro, Small, and Medium Enterprises (MSMEs) are a strategic sector in the economy of a country, particularly in creating employment opportunities and driving economic growth (Sri & Ahmad, 2017). Conceptually, MSMEs are defined based on certain criteria, such as the number of employees, annual revenue, and asset value. In Indonesia, the definition of MSMEs refers to Law No. 20 of 2008, which classifies MSMEs into three categories: micro enterprises with assets of up to IDR 50 million and annual revenue up to IDR 300 million, small enterprises with assets between IDR 50 million and IDR 500 million and annual revenue between IDR 300 million and IDR 2.5 billion, and medium enterprises with assets between IDR 500 million and IDR 10 billion and annual revenue between IDR 2.5 billion and IDR 50 billion.

MSMEs play a crucial role in Indonesia's economy, serving as a key driver of economic growth, job creation, and local economic development (Hapsari et al., 2024). With their significant contribution to the Gross Domestic Product (GDP), MSMEs form the backbone of the national economy, particularly by absorbing a large workforce and reducing unemployment rates (Putri & Satrianto, 2024). Additionally, MSMEs help improve community welfare by creating business opportunities for various groups, including women and people in remote areas (Audina et al., 2024). Their flexibility and adaptability to market changes make MSMEs a resilient sector, especially in times of economic crisis (Wahyudi et al., 2024). The Indonesian government continues to support MSME development through various policies, such as access to financing, entrepreneurship training, and business digitalization, to enhance their competitiveness in the global era.

Digitalization

Digitalization refers to the process of integrating digital technologies into various aspects of business and organizational operations (Rane et al., 2024). Unlike digitization, which simply involves converting analog information into digital formats, digitalization encompasses a more comprehensive transformation (Cazoni et al., 2024). It involves using digital technologies not only to automate processes but also to innovate business models, improve efficiency, and create new opportunities for growth (Jarzębowski et al., 2024). Through digitalization, businesses can enhance their operational effectiveness, offer new products and services, and improve customer experiences (Kothapalli, 2022). Digitalization is driven by the adoption of technologies such as cloud computing, artificial intelligence, big data, and the Internet of Things (IoT), which enable businesses to process information more efficiently and make data-driven decisions (Rane et al., 2024).

The impact of digitalization is far-reaching, affecting all areas of business, from marketing and sales to supply chain management and customer service (Xiao, 2023). By embracing digital tools, organizations can streamline workflows, reduce costs, and improve collaboration across teams. Moreover, digitalization empowers businesses to stay competitive in a rapidly evolving market, where technological advancements and customer expectations are continuously changing (Wongso et al., 2024). As companies increasingly rely on digital technologies, digitalization has become a key factor in ensuring their long-term sustainability and success in the modern business landscape.

Digital Financial App

Digital financial applications have revolutionized financial management by offering efficient, accurate, and easily accessible solutions for both individuals and businesses (Sudirman, 2025). These applications enable users to perform various financial tasks, including managing transactions, tracking expenses, generating reports, and accessing banking services such as loans and investments, all through digital platforms (Annisa et al., 2024). For MSMEs, digital financial applications play a crucial role in streamlining accounting processes, minimizing human errors, and improving financial transparency (Mulyadi et al., 2024). The integration of features like automated bookkeeping, real-time financial monitoring, and cloud-based data storage enhances operational efficiency and supports informed decision-making. Additionally, the rise of digital payment systems allows businesses to conduct transactions seamlessly, reducing reliance on cash-based operations and expanding their market reach (Chatterjee, 2024).

Despite their advantages, the adoption of digital financial applications still faces several challenges. Limited digital literacy among business owners, concerns over data security and privacy, and resistance to transitioning from manual to digital financial management remain significant barriers (Hariyanti & Kristanti, 2024). Many MSMEs, particularly in developing regions, struggle with access to stable internet connections and affordable technology, further hindering their ability to adopt these solutions (Arisena et al., 2024). To address these challenges, various stakeholders, including the government, financial institutions, and technology providers, must work together to provide education, training, and financial incentives (Wahyono, 2024). Ensuring strong data protection measures and creating user-friendly applications tailored to the needs of MSMEs can also help build trust and encourage broader adoption. By overcoming these barriers, digital financial applications can significantly contribute to improving financial inclusion, increasing business sustainability, and driving overall economic growth.

Technology Acceptance Model

The Technology Acceptance Model (TAM), developed by Davis et al. (1989), explains the factors influencing individuals' acceptance and use of technology. This model posits that the decision to adopt a technology is primarily driven by two key variables: Perceived Usefulness (PU) and Perceived Ease of Use (PEU). Perceived Usefulness refers to the extent to which an individual believes that using a technology will enhance their performance, while Perceived Ease of Use denotes how effortless the technology is perceived to be. These factors directly or indirectly influence an individual's Attitude Toward Using technology, which subsequently determines their Behavioral Intention to Use, ultimately leading to Actual System Use. TAM has been widely applied in research related to technology adoption, including the digitalization of micro, small, and medium enterprises (MSMEs)

RESEARCH METHODS

This study uses a qualitative approach with an exploratory research type to explore the perceptions of micro business actors towards digital financial reporting applications as a supporting tool for business activities. The subjects of this study were seven micro-business owners in the Cimpaeun Village area of Depok City who have not used digital applications to produce financial reports. The selection of participants was carried out using a purposive sampling technique, based on certain criteria relevant to the research objectives which are a) the same type of business and has been running for about three years; b) revenue is below one million rupiah per day; and c) has not produced financial statements (balance sheet, profit, and loss, cash flow).

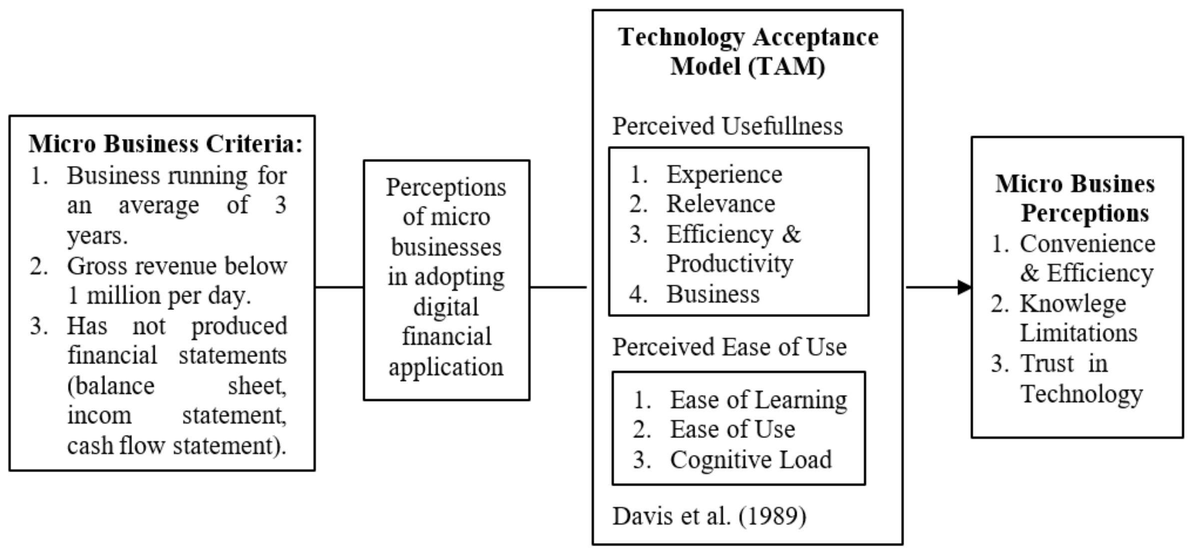

Fig 1. Research Analysis Framework

Data collection in this study was conducted through semi-structured interviews, which aimed to explore micro businesses perspective on the use of digital financial reporting applications. Each interview lasted between 30 to 60 minutes, and the questions asked focused on exploring the reasons, benefits, barriers, and challenges they face in adopting digital financial reporting applications. All interviews were recorded with the participants’ permission and then transcribed for further analysis.

In this study, data analysis was conducted using the content analysis method, which allows researchers to identify, categorize, and interpret the meaning of the collected data systematically (Ulfah et al., 2022). The analysis process began with the transcription of interview data, followed by coding relevant pieces of data based on certain categories or concepts. Next, the coded data was classified or subcategories that reflected certain patterns or trends. Once the categories are formed, the researcher analyses the relationships between categories to understand deeper meanings and uncover micro businesses' perceptions of digital financial reporting applications. The final stage in content analysis is an overall interpretation of the findings, which is then used to conclude relevant to the research objectives.

To ensure the validity of the data, this study used a triangulation approach involving source triangulation, which compares the results of interviews with data obtained through observation and documentation, to ensure consistency and validity of the information.

RESULT AND DISCUSSION

In this study, researchers divided the analysis into two main categories, namely Perceived usefulness and Perceived ease of use. The Perceived usefulness category refers to the extent to which users believe that the use of digital financial applications can improve their business performance and productivity. This aspect includes users' perceptions of time efficiency, ease of making business decisions, and tangible benefits obtained from using applications in financial management. Meanwhile, Perceived Ease of Use relates to the extent to which users feel that the application is easy to understand and operate without requiring excessive effort. This aspect includes the ease of learning the application features, comfort when using it in daily operations, and the level of cognitive load felt during the usage process. The division of these categories aims to deeply understand how user perceptions influence the adoption of digital financial applications in supporting smooth business operations.

Table 1. Content Analysis Matrix

General Category	Sub Category	Code (Frequency of Statement)
Perceived Usefullness	Experience	General knowledge of digital applications (6)
		Digital app training (3)
		Usage constraints (2)
	Relevance	Relevance of digital applications (7)
		Use of manual recording (3)
	Efficiency and Productivity	Save time (5)
		Manual record keeping is more helpful (2)
	Business Benefit	Business decision making (7)
		Increase effectiveness (4)
Perceived Ease of Use	Ease of Learning	Ease of learning (4)
		Training needs (7)
	Ease of Use	Application features (7)
		Digital adoption plan (7)
	Cognitive Load	Level of difficulty of digital adoption (7)
		Barriers to digital adoption (7)

Experience

Based on the interview results, most respondents have basic knowledge of digital financial reporting applications such as SiAPIK, Buku Warung, Griya Pos, and Akurat. Informants 1, 2, 3, 4, 6, and 7 claimed to have heard of these applications, although their usage experience was still limited. Most respondents tended to choose simpler applications, such as Buku Warung, because they were considered easier to use than SiAPIK, which was considered to have complicated features. Meanwhile, Informant 5 had never heard of a digital financial reporting application, indicating an information gap among micro-business owners.

The experience of attending training or socialization related to digital financial reporting applications also shows significant obstacles. Informants 1, 2, and 4 had attended training, but the training was considered less than optimal. Obstacles such as poor internet connection (Informant 1) and material that was only an introduction without hands-on practice (Informant 4) caused their understanding of the application to be not maximized. Meanwhile, Informants 3, 5, 6, and 7 have never attended training, although they expressed interest in participating if the opportunity arose. This indicates a need to expand access to more equitable and effective training.

The main reasons why respondents did not use the app despite attending the training related to the complexity of the app and the suitability of the features to their business needs. Informants 1 and 2 felt that the SiAPIK application was too complicated, so they preferred to use the simpler and more practical Buku Warung. Informant 4 stated that the application did not provide the features needed, making it less relevant to business operations. On the other hand, Informant 6 considered the use of the application not to be a priority because the number of business orders was still small, so manual recording was considered sufficient.

In general, negative experiences during the training, such as unclear material and lack of hands-on practice, contributed to the respondents' low motivation to try and adopt digital financial reporting applications (Hiswati et al., 2020; Reis et al., 2024). In addition, the perception that available applications are difficult to use and do not suit business needs is a major barrier to technology adoption (Kaluge, 2023).

Relevance

Based on the interview results, most respondents (Informants 1-7) acknowledged the high relevance of the financial reporting application to their business needs. Informants 1, 4, and 5 specifically noted that the application saves time and simplifies the process of preparing financial reports, although it is still limited to cash in and cash out reports, leading to more efficient business operations. However, Informants 2 and 6 felt that although the application was relevant, the learning process to use it was time-consuming (Informant 2) and constrained by the limited devices available (Informant 6). Meanwhile, Informant 7 considers financial reporting applications important but has not found an application that suits the business type, so it has not been implemented optimally.

In terms of the comparison between manual and digital reporting, there are different perceptions among respondents. Informants 1, 5, and 7 considered that digital financial reporting applications are more helpful in financial management because they can reduce the risk of recording errors and are more practical to use. In contrast, Informants 2, 4, and 6 prefer manual record-keeping, considering it simpler, less time-consuming, and more suitable for small-scale businesses. Informant 3 was neutral due to a lack of experience using financial reporting applications, making it difficult to compare the effectiveness of manual and digital methods.

Regarding the suitability of the application to business needs, most respondents (Informants 1, 3, 4, 5, and 7) felt that the financial reporting application was sufficient to meet business operational needs. However, Informants 2 and 6 believed that the application was less relevant due to small business revenue and a lack of perceived need to adopt the technology. Informant 7 also considers the financial reporting application relevant but currently prefers to focus on growing revenue through events in the community, which is considered more profitable than implementing the application.

Efficiency and Productivity

Based on the results of the interviews, most respondents (Informants 1, 3, 5, 6, and 7) recognized that the use of digital financial reporting applications has proven effective in saving time in the process of recording business cashflows. Digital applications allow transaction recording to be done automatically and structured so that businesses can focus more on business development (Pontoh et al., 2024). However, not all respondents experienced this benefit. Informant

2 found the application time-consuming due to the need to learn a new system, while Informant 4 perceived it as inefficient because of the requirement to perform double recording, both manually and through the application. This indicates that the application's effectiveness in saving time largely depends on its ease of use and the readiness of users to adapt to new technology.

In terms of the speed of preparing financial reports, most respondents (Informants 1, 2, 4, 5, 6, and 7) felt that preparing cash-in and cash-out reports was relatively fast. This was supported using simple applications (Informants 1 and 2) that are easy to operate and the habit of preparing reports outside working hours or on a regular basis (Informants 5, 6, and 7). Informant 3, on the other hand, felt that the report-making process was slow due to being done manually, which took more time and effort. This difference highlights that using the right application can speed up report generation, while the manual method remains an obstacle in terms of time efficiency.

Regarding perceptions about the effectiveness of apps in speeding up work, most respondents (Informants 1, 3, 5, 6, and 7) believe that financial reporting apps can speed up their work processes. They see the application as a practical solution to speed up the process of recording and processing financial data. However, Informant 2 felt that the application was not helpful due to the need to undergo a learning process, and Informant 4 was more comfortable using manual recording which was considered more familiar and practical. This reflects that the perceived effectiveness of the application is influenced by the level of ease of use and individual habits in managing financial reports.

The current financial report management strategy varied among respondents. Most respondents (Informants 2, 3, 4, and 7) continue to manage financial recordings manually after working hours, indicating a limited reliance on digital applications. Informant 1 utilizes spare time for recording reports, while Informant 5 finds the process more efficient due to the use of an application tailored to specific needs. Informant 6 opted to use Excel as a simpler alternative to other financial reporting applications. These findings suggest that although some business owners have started using apps, not all app features have been fully optimized.

Business Benefit

Most respondents (Informants 1, 2, 3, 4, 6, and 7) realized that organized financial reports facilitate their business decision-making. A well-organized financial report allows businesses to see their financial condition more clearly, so they can plan their next business steps more precisely. Meanwhile, although Informant 5 has not used the application thoroughly, there is still an understanding that more structured reports generated through appropriate applications have the potential to accelerate the business decision-making process. This finding shows that although not all respondents have fully utilized the application, there is a strong understanding of the importance of organized financial reports in supporting more optimal and effective business decision-making.

Regarding the effectiveness of financial reporting, most respondents (Informants 1, 4, 6, and 7) considered their reporting -- limited to tracking cash inflows and outflows -- sufficiently effective for monitoring their businesses' financial condition. The simple yet structured cashflow reports allow them to monitor the flow of money in and out more clearly. In contrast, Informants 2 and 3 felt that their financial reporting was less effective due to the challenge of accurately recording all transactions. This results in incomplete reports and can lead to uncertainty in decision-making. Informant 5, who has not used a full reporting application, could not provide an in-depth assessment of the effectiveness of financial reporting, but recognized the importance of using an application to create more comprehensive and effective reports.

To ensure financial reports are accurate, many respondents (Informants 1, 2, 3, 4, 6, and 7) double-check reports manually. While this is an important step, some respondents were unsure whether all data had been recorded correctly. Informant 1 felt that the report was correct as long as the value recorded matched the capital spent and there was a profit, but no more in-depth checking process was conducted. Informant 5 hoped that using the app would improve the accuracy of financial reports, although more learning was needed to master the app. This reflects that while manual checks remain common, there is an expectation that apps can improve both the accuracy and efficiency of preparing financial statements.

In terms of business performance, most respondents (Informants 1, 2, 3, 4, 5, 6, and 7) rely more on manual records to monitor financial conditions. Informant 1 uses reports from the Buku Warung application to monitor cash flow and production projections, although only the cash flow feature is utilized. Some other respondents, such as Informant 3, only estimate performance based on money out and surplus, which indicates that there is no clear picture of overall finances. Informant 5 also continues to rely on manual records, as the use of the financial reporting application has not been fully optimized. This indicates that while apps can provide more organized and faster information, micro businesses still prefer manual methods for monitoring business performance.

Ease of Learning

Based on the interview results, respondents' perceptions of the ease of learning the digital financial reporting application showed significant variation. Informant 1 found the app quite easy to learn, especially since only a basic understanding of cash flow was needed to monitor business performance. This suggests that for some, apps that do not require complex features and fulfil only basic needs are sufficient. In other words, simple apps focusing on basic functionality can be more accessible to businesses unfamiliar with technology.

However, not all respondents felt the same way. Informants 2 and 3 found the app difficult to learn, which may be due to their limited understanding of technology and confusion in following the guidelines. This experience highlights the challenges faced by some micro businesses in adapting to more technical apps. Informant 4 also found the application difficult to understand and even confusing, indicating that for some, using a financial reporting application can be a significant challenge, especially if the app has many features and is not intuitive. In contrast, Informants 5, 6, and 7 found the application easy to learn, provided there is a commitment to learning and frequent practice. This suggests that with sufficient motivation and practice, businesses can master the application, even if they are not familiar with technology.

Regarding the need for training before using the digital financial reporting application, many informants (Informants 2, 3, 4, 5, 6, and 7) felt that training was necessary. They considered training to be very helpful in understanding how to use the application properly and effectively, especially if accompanied by an easy-to-understand guide. This suggests that for more complex applications, training is essential to overcome limited technological skills and accelerate the learning process. On the other hand, Informant 1, despite feeling quite comfortable using the Buku Warung application and learning independently, is open to attending training if a better application is available, if the training does not interfere with production activities.

Ease of Use

Based on the interviews conducted, respondents' perceptions regarding the use of digital financial reporting applications in daily business operations show significant interest, although some considerations related to convenience and the need for applications that suit specific businesses were raised. Informant 1 has used the Buku Warung application and believes that using other applications is feasible if business operations are not disrupted. This suggests that applications which do not interfere with operations are more likely to be accepted by business owners, particularly those with businesses that have well-established operational processes.

Informant 2 felt it was possible to use the application but wanted to wait until business revenue grows larger. This perception suggests that digital financial reporting apps may be more relevant for growing businesses that need a more efficient system to manage finances. Informant 3 also believes that using an app is possible, even though manual record-keeping is still relied upon. This suggests that although an app has not yet been adopted, there is openness to adaptation when the operational needs of the business increase.

Meanwhile, Informants 4, 5, 6, and 7 feel that using digital financial applications is possible, if the applications are easy to use and align with business development. This shows that ease of use is a major factor to consider in the development of digital financial applications to ensure acceptance by business actors unfamiliar with sophisticated technology.

Regarding the features that should be included in a digital financial reporting application, respondents expressed various expectations. Informant 1 wanted an app with automated features, clear user guides, responsive customer service, and guaranteed data security. This shows that businesses prioritize convenience, support, and trust in the apps they use. Informant 2, who is more concerned with cost and understanding the app, prioritizes apps with easy-to-understand features and affordable prices. Meanwhile, Informant 3 also wanted an app with full features, easy-to-use guides, affordable costs, and guaranteed data security. Informant 4 emphasized ease of use, features that meet business needs, technical services, and security, while Informant 5 preferred an easy-to-use application with clear guidelines.

Informants 6 and 7 highlighted the importance of automated features, ease of use, affordable costs, and guaranteed data security. This confirms that businesses are looking for an application that is efficient in facilitating financial records, yet affordable and equipped with adequate data security. In general, the results of these interviews show that businesses want a digital financial reporting application that is simple, affordable, secure, and equipped with features that support the smooth operation of business. The success of the app will largely depend on how well it can meet the practical needs and ease of use for businesses.

Cognitive Load

Based on the interviews conducted, respondents' perceptions regarding the complexity of using digital financial applications show differences in the cognitive load felt when using these applications. Informants 1, 5, 6, and 7 felt that digital financial applications were uncomplicated and easy to use, indicating that for some users, the applications did not pose a heavy cognitive burden and could be quickly adapted. This experience shows that simple and user-friendly apps can be well received by users who may not be familiar with technology.

However, most respondents, such as Informants 2, 3, and 4, found the app quite complicated and confusing to use. They even mentioned that the time needed to learn the application felt long, indicating that high cognitive load can be a barrier for users who are not familiar with digital financial reporting technology or applications. This suggests that digital financial reporting applications need to be adapted to different levels of user ability, considering varying user experiences.

Regarding barriers that prevent users from adopting the application, most respondents identified the lack of adequate socialization and training as the main obstacle. Informants 1, 5, and 6 mentioned feeling inadequately informed about the app and noted that the available training was not long enough to understand how to use the app effectively. This highlights the importance of more intensive socialization and ongoing mentoring to ensure users feel comfortable and confident in using the application.

In addition, concerns regarding data security were also a significant issue for some respondents. Informants 4 and 7 highlighted the importance of security features in digital financial reporting applications to mitigate concerns. This suggests that to increase the adoption of digital apps, app developers need to ensure that data security systems are well-secured, so users feel safe and confident in using the app.

Based on the results of the analysis that has been carried out, the perception of micro businesses towards the use of digital financial reporting applications shows a positive trend, especially in the aspect of ease and efficiency of financial management. Majority of informants realize that digital financial applications can help reduce the burden of manual recording that has been done so far so that the financial recording and reporting process becomes neater, structured, and easily accessible. This application is considered capable of accelerating the process of managing financial reports and assisting in making more informed business decisions because the data presented is more accurate and organized. In line with the findings, the use of digital applications not only reduces the burden of accounting tasks but also improves the accessibility and structure of financial reporting, which ultimately benefits overall business efficiency (Pontoh et al., 2024).

However, despite positive perceptions, micro-businesses still face significant barriers in adopting digital financial reporting applications. One of the main obstacles is limited digital literacy, where some businesses find it difficult to understand how the app works and its features, especially those who are less familiar with the technology. This lack of understanding causes businesses to hesitate to start adopting digital applications and even feel burdened by the learning process which is considered complicated and requires more time (Kallmuenzer et al., 2025; Kaluge, 2023). This hesitation is intensified by the lack of simple and easy-to-understand application usage guides (Jannah et al., 2023).

In addition, technological accessibility is also an obstacle. Not all micro business owners have adequate devices, such as smartphones with appropriate specifications, or a stable internet connection. This condition makes the use of digital financial applications not optimal or even not possible at all. On the other hand, for entrepreneurs who are just starting or have a small business scale, application subscription fees are often considered an additional burden (Widyawan, Barlian, et al., 2024). They feel that spending on apps is less urgent than other operational needs. This is an important consideration in the decision to adopt new technology.

Trust in data security is also a major barrier to the use of digital financial applications. Concerns about leakage of personal data and financial information make some businesses hesitate to entrust their business financial records to digital applications (Babu et al., 2024). They want strong data security guarantees so that business information remains protected. In addition, the old habit of doing manual records is a challenge. Many micro business owners feel comfortable and are used to traditional methods that they consider effective enough to manage business finances (Febriyanti & Dzakiyah, 2019). Changes to digital systems are often considered troublesome, especially if you must leave the old ways that have been running for a long time and feel safe (Munandar, 2023).

Given these barriers, an appropriate strategy is needed to overcome the barriers to the adoption of digital financial applications by micro businesses. One of the main steps is to improve digital literacy through training or workshops specifically designed for micro businesses. The training should use simple and easy-to-understand language, be tailored to the background of the participants, and be equipped with simulations or hands-on practice to make it more effective. This increased understanding needs to be supported by the provision of user-friendly and intuitive applications. App developers should ensure a simple interface and provide step-by-step guides or tutorials in various formats, such as videos or images so that users can easily understand how to operate the app. In addition, the development of offline versions of apps is an important solution for businesses that face internet access constraints, allowing them to continue managing their finances without network barriers.

Equally important, financial support and access to technology should be strengthened through collaboration between app developers, the government, financial institutions, and non-profit organizations. This support can take the form of subsidies or assistance with technology devices, such as smartphones, as well as providing free versions of apps with basic features to make them more affordable for businesses with limited capital. Education on data security is also a crucial aspect of building user trust. App developers need to transparently explain the data protection systems implemented, such as encryption and double authentication so that businesses feel safe in using the app. This information can be conveyed through various media and in-app features to strengthen users' understanding of the importance of maintaining data security.

In addition to education, continuous assistance is key to ensure that users do not find it difficult to use the application. Providing responsive and easily accessible customer service, either through a help center, live chat, or hotline, is very important to help businesses overcome technical problems. On the other hand, the formation of app user communities on social media or discussion forums can serve as a forum for sharing experiences, solutions, and motivation among users, thus creating a mutually supportive ecosystem. Finally, digital financial applications should be integrated with the specific needs of micro-businesses. Features such as simple cash flow recording, stock management, bill reminders, and easy-to-understand financial reports should be provided to make the app more relevant and useful. Tailoring features to the scale and characteristics of micro businesses will increase the effectiveness of app usage and encourage businesses to switch to digital solutions. With the implementation of this comprehensive strategy, it is hoped that micro businesses can more easily adopt digital financial applications to improve the efficiency and sustainability of their business.

CONCLUSION

Based on the discussion that has been described, it can be concluded that the use of digital financial reporting applications has great potential to improve the efficiency and effectiveness of financial management for micro businesses. This application can provide more accurate and structured data, thus supporting more informed business decision-making. However, optimizing its use is still constrained by various factors, such as low digital literacy, limited access to technology, concerns about data security, and resistance to change from manual recording to digital systems. These barriers point to the need for a more comprehensive approach to encouraging technology adoption among micro-enterprises. Efforts to increase the adoption of digital financial applications should focus on improving digital literacy through relevant training, such as those conducted by universities in collaboration with the city government. These initiatives not only provide a better understanding of technology but also open up access to wider resources and networks for micro-enterprises. In addition, the development of user-friendly applications, support for access to technology and finance, and transparent data security guarantees are also important steps in building business confidence. Continuous mentoring involving various parties will ensure that micro businesses not only understand the benefits of digital technology but are also able to use it effectively. With an integrated and sustainable strategy, micro businesses are expected to be able to more easily adapt to digital technology and utilize it optimally to support business growth and sustainability.

Furthermore, based on the findings of this study, addressing the issue requires a multifaceted approach involving various stakeholders. The implementation of evidence-based policies is essential to promoting sustainable development and economic resilience. Enhancing regulatory frameworks through stronger regulations will ensure compliance and effectiveness in mitigating adverse impacts. Investment in infrastructure and innovation remains crucial to supporting research and technological advancements that can improve efficiency and sustainability. Encouraging public-private partnerships will foster collaboration between government and private sectors, maximizing resource allocation and policy implementation. Education and awareness through programs that emphasize best practices and policy adherence will play a vital role in ensuring smooth transitions to digital financial reporting. Regularly monitoring and evaluating policies supported by mechanisms to assess policy outcomes and make necessary adjustments for continuous improvement will help create a more robust and adaptable system. These strategic measures will effectively address the challenges identified in this study while strengthening the long-term growth and resilience of micro-enterprises.

REFERENCES

Anggara, J., & Kartikasari, N. (2023). Digitalization of financial reporting from msme perspective in mataram city. *Journal of Finance, Economics and Business*, *2*(2), 109–115.

Annisa, D. T., Soma, A. M., & Sitorus, P. M. (2024). The Influence of Financial Literacy, Digital Literacy, and Social Capital on Digital Bank Financial Inclusion through Ease of Use an Intervening Variable. *International Journal of Social Science and Human Research.*, *7*(11).

Antara. (2024, October 16). *Jumlah UMKM Go Digital 2024*. Antarafoto.

Anwar, M., Astuti, W., & Sugit, P. (2024). Perceived Ease of Use and Perceived Usefulness, Intention to Use Digital Banks and the Role of Trust as Mediating Variables. *8 Th International Conference on Sustainability: Sustainable Economics*, 95–108.

Ardhianto, W. N. (2020). *Buku sakti pengantar akuntansi*. Anak Hebat Indonesia.

Arisena, S., Hendrawan, Chatra, A., Iman, N., Hidayatullah, S., & Degdo, S. (2024). Digital Transformation in MSMEs: Challenges and Opportunities in Technology Management. *Jurnal Informasi Dan Teknologi*, *6*(2), 141–149.

Audina, M., Yunus, R., Parinding, K. A., & Nasruddin, M. A. (2024). The Role of Micro, Small, and Medium Enterprises in Improving Community Welfare. *Golden Ratio of Data in Summary, 4(1), 81-89.*, *4*(1), 81–89.

Azan, F. Z., Notolegowo, H. K., Nurfahmiyati, & Nurhayati, N. (2024). The adoption of business digitalization by SMEs: A case study in Bandung. *Jurnal Manajemen Dan Bisnis Performa, 21(2), 154–160.*, *21*(2), 154–160.

Babu, P. V, Agrawal, G., Mohideen, A. S., & Anand, B. (2024). Users' Perceived Risks and Challenges of FinTech Adoption in India: An Empirical Investigation. *Journal of Informatics Education and Research*, *4*(1).

Badria, N., & Hasanah, N. (2024). The Role of Digital Accounting for SMEs in Facing Business Challenges in the Digital Era. *Accounting and Finance Studies*, *4*(4).

Bintari, V. I., Mufreni, A. N., Ramadhani, I., & Ramadhan, R. N. (2022). Umkm naik kelas dengan si apik. *Jurnal Pengabdian Kepada Masyarakat*, *5*(1), 60–66.

Cazoni, C., Ciocoiu, C. N., Pîrcălăboiu, A., Giuleșteanu, A., & Ceaușescu, E. C. (2024). Digital Transformation of Management Processes: A Comprehensive Review of Key Factors. *Proceedings of the International Conference on Business Excellence*, 3387–3420.

Chatterjee, P. (2024). The Rise of Mobile Payment Systems: How Information Technology Shapes the Fintech Ecosystem. *International Journal of Engineering and Computer Science*, *12*(8), 25801–25815.

Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). Technology acceptance model. *Journal of Management and Science*, *35*(8), 982–1003.

Dinas Koperasi dan UMKM Kota Depok. (2020). *Laporan pengembangan dan pemberdayaan UMKM*.

Eller, R., Alford, P., Kallmünzer, A., & Peters, M. (2020). Antecedents, consequences, and challenges of small and medium-sized enterprise digitalization. *Journal of Business Research*, *112*(1), 119–127.

Elmanda, F. A., Merdikawati, G. G., & Wahyuni, R. (2022). The application of financial recording applications towards financial report for micro, small and medium enterprises. *International Journal of Research and Applied Technology*, *2*(1), 196–203.

Febriyanti, N., & Dzakiyah, K. (2019). Analisis pengelolaan keuangan islam pada pelaku usaha kecil bisnis online anggota himpunan pengusaha muda indonesia perguruan tinggi Universitas Islam Negeri Sunan Ampel Surabaya. *Journal of Islamic Economics and Business*, *9*(2), 102–115.

Hapsari, Y. A., Apriyanti, P., Hermiyanto, A., & Rozi, F. (2024). Analisa Peran UMKM Terhadap Perkembangan Ekonomi di Indonesia. *Jurnal Manajemen Dan Ekonomi Kreatif*, *2*(4), 53–62.

Hariyanti, & Kristanti, D. (2024). Digital transformation in MSMEs: An overview of challenges and opportunities in adopting digital technology. *Jurnal Manajemen Bisnis, Akuntansi Dan Keuangan*, *3*(1), 37–46.

Hiswati, M. E., Sapariyah, S., Sudiyatmi, S., & Lestariningsih, L. (2020). Pelatihan Pengelolaan Keuangan Berbasis Komputer Dalam Peningkatan Tertib Administrasi Pada Kader Kesehatan Di Giwangan Umbulharjo Yogyakarta. *Jurnal Pengabdian Dharma Bakti*, *3*(1), 15–20.

Huda, B. (2023). Mendorong pertumbuhan umkm melalui platform digital. *Jurnal Buana Pengabdian*, *5*(2), 86–91.

Jannah, N., Rahmawati, R., Mardiah, S., Tirtajaya, M. D., & Widyananto, A. (2023). Pembukuan keuangan berbasis digital menggunakan aplikasi buku kas. *Journal of Community Development in Islamic Studies*, *2*(1), 33–45.

Jarzębowski, S., Bozhenko, V., Didorenko, K., Tkachenko, O., Blyznyukov, A., Melnyk, M., & Cieslik, J. (2024). The Impact of Digitalisation on the Competitiveness of European Countries. *SocioEconomic Challenges (SEC)*, *8*(3).

Jiang, J. (2024). A Study on the Digital Transformation Trends in Financial Management for Small and Micro Enterprises. *International Journal of Global Economics and Management*, *3*(1), 355–363.

Kadin. (2023). *UMKM Indonesia*.

Kallmuenzer, A., Mikhaylov, A., Chelaru, M., & Czakon, W. (2025). Adoption and performance outcome of digitalization in small and medium-sized enterprises. *Review of Managerial Science*, 1–28.

Kaluge, D. (2023). Challenges Faced by SMEs and Cooperatives in Implementing Digital Technology: A Literature Review. In *Digital Transformation and Inclusive Economic Development in Indonesia* (pp. 1–42). Future Science Press.

Kholid, M. N., Alvian, S., & Tumewang, Y. K. (2020). Determinants of Mobile Accounting App Adoption by Micro, Small, and Medium Enterprise in Indonesia. *Journal of Accounting and Strategic Finance*, *3*(1), 52–70.

Kothapalli, K. R. V. (2022). Exploring the Impact of Digital Transformation on Business Operations and Customer Experience. *Global Disclosure of Economics and Business*, *11*(2), 103–114.

Ludeña-Poma, J., Rojas-Gallegos, S., Solano-Ortiz, L., Castro-Chavez, Y., Chahua-Borda, D., & Ludeña-Poma, J. (2024). Influence of resistance to use, perceived ease of use, perceived usefulness, and facilitating conditions in the intention to use telemedicine in Peru. *Pharmacia*, *71*, 1–11.

Mardian, V., Yakin, H., Azzahra, W., Nuraini, & Nabil, Z. F. (2024). Sociopreneur in digital marketing: Empowering the micro, small and medium enterprises (MSMEs) in Bojongpicung villages. *Jurnal Layanan Masyarakat*, *8*(3), 366–380.

Mulyadi, M., Hendratni, T. W., & Wulandjani, H. (2024). Analysis of the effect of financial literacy and financial behavior on the performance of MSMEs Setu Babakan with digital competency as a moderating variable. *Edelweiss Applied Science and Technology*, *8*(6), 5310–5328.

Munandar, G. M. (2023). Perubahan Sistem Konvensional Menjadi Sistem Digitalisasi Bagi UMKM Kebumen di Bidang Konveksi (Studi Kasus Tonight Sablon). *Jurnal Sistem Dan Teknik Industri*, *3*(4), 451–458.

Ndifor, C. N., Musonda, N., & Rizkallahi, S. (2023). The Effect of Cashflow Visibility on the Willingness of Financial Institutions to Finance SMEs in Cameroon. *International Journal of Management and Accounting*, *5*(5), 89–98.

Paradizsa, I., & Rahayu, E. (2022). Potential and challenges for private sector to lead warung digitalization in Indonesia. *Journal of Society and Empowerment*, *2*(1), 35–48.

Pontoh, N. M. A., Gamaliel, H., & Kapojos, P. M. (2024). Penerapan aplikasi digital dalam penyusunan laporan keuangan pada usaha mikro: Studi kasus pada 7W Coffee. *Manajemen Bisnis Dan Keuangan Korporat*, *2*(2), 67–74.

Putri, U. K. U. M., & Satrianto, A. (2024). MSME lending and its impact on the unemployment rate: Evidence from Indonesia. *Jurnal Ekonomi Dan Pembangunan*, *14*(1), 1–9.

Rahmah, T. A., & Akbar, F. S. (2024). Analysis of The Effectiveness of the BukuWarung Application as a Financial Management Tool for MSMEs. *International Journal of Management Research and Economics*, *2*(4), 124–137.

Rane, J., Kaya, O., Mallick, S. K., & Rane, N. L. (2024). Influence of digitalization on business and management: A review on artificial intelligence, blockchain, big data analytics, cloud computing, and internet of things. In *Generative Artificial Intelligence in Agriculture, Education, and Business* (pp. 1–26).

Reis, G. P. B. dos, Filho, G. C. da S., Fonseca, M. P., Moçambite, V. da S. C. N., Cunha, E. L. da, Silva, A. M. da, & Alegre, R. S. (2024). Accounting evolution: From tradition to digital innovation in micro enterprises in humaita/am. *Journal Arace*, *6*(3), 4803–4818.

Sjahruddin, H., Chatra, A., Ernawati, E., Saefudin, A., & Launtu, A. (2024). Digitalization and Business Transformation: Young MSME Practitioners' Perspectives on Current Economic Changes. *Journal The Winners*, *25*(1), 25–33.

Sri, M., & Ahmad, Y. (2017). Peluang dan tantangan pengembangan usaha mikro kecil menengah (UMKM) dari berbagai aspek ekonomi. *Jurnal Ilmiah Manajemen Dan Bisnis*, *2*(1), 181–197.

Sudirman, N. (2025). Digital Entrepreneurship and Business Innovation: Strategies for Indonesian SMEs in the Era of Industry 4.0. *Journal of Indonesian Scholars for Social Research*, *5*(1), 24–34.

Sulaiman, H. J., & Depayanti, L. (2024). Emerging trends of funding sources smes with bibliometric analysis. *Motivasi: Jurnal Ekonomi Dan Bisnis*, *9*(2), 127–137.

Suriani, S., Yunus, K., Setiawan, L., & Faridah. (2024). Financial Management Based on Economic Digitalization and Information Technology Utilization Applications in Industry SMEs in Barru Regency, Indonesia. *Prosiding Seminar Nasional Forum Manajemen Indonesia*.

Susilowati, E., Permadi, A., Hariyanti, S., Munir, , M., & Wahyudi. (2023). Analysis of the implementation of digitalization of financial statements in micro, small, and medium enterprises. *Open Access Indonesia Journal of Social Sciences, 6*(4), 1048–1054.

Tambunan, T. T. (2022). Digital transformation in Mses: A story from Indonesia. *Journal of Economics, Finance and Management Studies*, *5*(7), 1869–1885.

Tarutė, A., Duobienė, J., Klovienė, L., Vitkauskaitė, E., & Varaniūtė, V. (2018). Identifying factors affecting digital transformation of SMEs. *Proceedings of the 18th International Conference on Electronic Business*, 373–381.

Ulfah, A. K., Razali, R., Rahman, H., Ghofur, A., Bukhory, U., Wahyuningrum, S. R., Inderawati, R., & Muqoddam, F. (2022). *Ragam Analisis Data Penelitian (Sastra, Riset dan Pengembangan)*. IAIN Madura Press.

Wahyono, T. (2024). Digital Transformation in MSMEs in Indonesia: The Importance of Commitment to Change. *International Journal of Social Service and Research*, *4*(1), 378–384.

Wahyudi, A. S. , . , & . (2024). ., Yulivan, I., & Rahman, A. (2024). The Role of Micro, Small, and Medium Enterprises (MSMEs) in Supporting Indonesia's Economic Resilience. *Jurnal Pertahanan*, *10*(2), 297–307.

Widjaja, W. (2024). Unlocking financial reliability: AIS contributions to financial statement quality in Indonesian Retail Context. *Jurnal Akuntansi Dan Sistem Informasi*, *9*(2).

Widyawan, B., Barlian, A., Haryanto, J., & Bayhaqi, M. H. (2024). Exploring the Benefits and Barriers of QRIS Adoption Among Micro Businesses in North Bogor. *Journal of Accounting and Finance Management*, *5*(4), 636–643.

Widyawan, B., Salman, D., Maesarini, I. W., Faturahman, M. I. A., Astika, Y., Adia, V. R., & Bandi, A. A. (2024). Penyusunan laporan keuangan menggunakan siapik bagi pelaku umkm di Kelurahan Abadijaya Kota Depok. *Jurnal Abdimas Sangkabira*, *5*(1), 91–102.

Wongso, F., Sasmita, J., Hendriani, S., & . K. (2024). Digitalization of solutions to improve the performance of MSMEs in Pekanbaru City. *International Journal of Religion*, *5*(11), 2484–2494. https://doi.org/10.61707/qty1gn15

Xiao, C. (2023). How Has the Digital Transformation Affected the Organization and Operation of a Business. *Law and Economy*, *2*(10), 41–48.