

Optimizing Digital Accounting to Improve MSME Performance through the Quality of Accounting Information

Erna Hendrawati^{1*}, Kholidiah², Mira Pramudianti³

^{1,2,3} Universitas Wijaya Kusuma Surabaya

*Corresponding Author: hendrawati@uwks.ac.id

Abstract - This study examines the impact of digital accounting usage on the performance of SMEs participating in the e-peken platform in Surabaya, with accounting information quality as a mediating variable. Using a quantitative method with SEM-PLS analysis, this research involved 350 SMEs as respondents. The results show that digital accounting usage positively influences accounting information quality, and accounting information quality positively affects SME performance. However, digital accounting usage does not directly influence SME performance. Accounting information quality is proven to mediate the relationship between digital accounting usage and SME performance. These findings highlight the importance of focusing on improving accounting information quality in digital technology adoption to enhance SME performance. The implications of this research include recommendations for developing comprehensive training programs and policies that support digital accounting adoption and improve financial literacy among SMEs.

Keywords: Digital accounting, Accounting information quality, SME performance, E-commerce, SEM-PLS

I. INTRODUCTION

In the rapidly evolving digital era, Micro, Small, and Medium Enterprises (MSMEs) face increasingly complex challenges and opportunities in running their business operations. One of the crucial aspects that need to be considered by MSMEs is effective and efficient financial and accounting management. Along with technological developments, digital accounting has emerged as a promising solution to improve the performance of MSMEs through improving the quality of accounting information.

MSMEs have a vital role in Indonesia's economy, including in the city of Surabaya. According to data from the Ministry of Cooperatives and SMEs (2021), MSMEs account for around 61% of Indonesia's total Gross Domestic Product (GDP) and absorb more than 97% of the national workforce. However, despite having a significant contribution, MSMEs still face various obstacles in developing their businesses, especially in terms of financial management and accounting.

One of the main challenges faced by MSMEs is the limitation in producing quality accounting information. Research conducted by Hakiki, A., Rahmawati, M., & Novriansa, A. (2020), shows that many MSMEs in Indonesia still use simple and manual financial recording methods, which are prone to errors and inaccuracies. This results in the low quality of the accounting information produced, which in turn can affect the overall performance of the business.

In this context, digital accounting offers a potential solution to overcome these problems. Digital accounting refers to the use of information and communication technology in accounting processes, including transaction recording, financial reporting, and financial data analysis. According to Ghasemi et al. (2011), the implementation of digital accounting can increase efficiency, accuracy, and transparency in the company's financial management.

Optimizing digital accounting for MSMEs is becoming increasingly relevant with the growing trend of e-commerce. E-commerce has opened up new opportunities for MSMEs to expand their market reach and increase sales. However, participation in e-commerce platforms also requires MSMEs to have a more sophisticated and integrated accounting system to manage increasingly complex online transactions.

In the city of Surabaya, the e-Peken initiative is a clear example of the local government's efforts to encourage the digitalization of MSMEs. E-peken, which is a local e-commerce platform, aims to facilitate Surabaya MSMEs in marketing their products online. However, the success of MSMEs' participation in platforms

such as e-Peken depends not only on their online marketing skills, but also on their ability to manage their finances and produce quality accounting information.

The quality of accounting information has a key role in effective business decision-making. According to Suzan, L. Sudrajat, J., & Daud, Z.M (2020), quality accounting information must meet the characteristics of relevant, reliable, complete, timely, understandable, and verifiable. In the context of MSMEs, the high quality of accounting information can help business owners make strategic decisions, manage cash flow, access financing, and increase competitiveness.

Several previous studies have shown a positive relationship between the quality of accounting information and the performance of MSMEs. For example, research conducted by Darma, J., & Sagala, G. H. (2020) on MSMEs in West Java found that the quality of accounting information has a significant effect on the performance of MSMEs. Similarly, a study by Setiyawati et al. (2019) on MSMEs in Jakarta shows that the effective use of accounting information systems can improve the quality of accounting information and ultimately have a positive impact on business performance.

However, although the benefits of digital accounting and the importance of the quality of accounting information have been recognized, the adoption of accounting technology among MSMEs is still relatively low. Research conducted by Purwati et al. (2014) identified several factors that hinder the adoption of accounting technology by MSMEs, including a lack of knowledge and skills, limited financial resources, and the perception that accounting technology is too complex for small businesses.

Therefore, optimizing digital accounting for MSMEs requires a comprehensive approach, which not only focuses on technological aspects, but also considers contextual factors such as MSME characteristics, human resource capacity, and policy support. In this context, the role of the government, educational institutions, and business associations is very important in supporting and facilitating the adoption of digital accounting by MSMEs.

On the other hand, the development of cloud computing and mobile accounting technology has opened up new opportunities to optimize digital accounting for MSMEs. Cloud-based accounting solutions, for example, offer accessibility, scalability, and cost efficiency that are perfectly suited to the needs of MSMEs. According to research by Corkern et al. (2015), the use of cloud-based accounting can improve operational efficiency, reduce IT costs, and increase collaboration in MSME financial management.

In addition, the integration of digital accounting with other technologies such as artificial intelligence (AI) and blockchain also offers promising potential to improve the quality of accounting information. AI, for example, can be used for automating accounting processes, predictive analytics, and fraud detection, while blockchain can improve the security and transparency of financial transactions.

In the context of the city of Surabaya, the optimization of digital accounting for MSMEs is in line with the city's vision to become a smart city. Surabaya has shown a strong commitment to encouraging digital transformation, including in the MSME sector. Initiatives such as E-peken are a positive first step, but they need to be supported by broader efforts to increase the capacity of MSMEs in implementing digital accounting.

This study aims to explore how digital accounting optimization can improve the performance of MSMEs through improving the quality of accounting information, with a special focus on MSMEs participating in the E-peken e-commerce platform in the city of Surabaya. Using a quantitative approach and analysis of Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method, this study will examine the relationship between the implementation of digital accounting, the quality of accounting information, and the performance of MSMEs.

The conceptual framework of this research is based on information systems theory and contingency theory. Information systems theory, developed by DeLone and McLean (2003), provides a framework for understanding how the quality of information systems (in this case, digital accounting systems) can affect the quality of information and ultimately impact organizational performance. Meanwhile, the contingency theory, which is applied in the context of accounting information systems according to Hakiki, A., Rahmawati, M., & Novriansa, A. (2020), emphasizes the importance of considering contextual factors in the implementation of accounting systems.

This research is expected to make a significant contribution both theoretically and practically. Theoretically, this research will enrich the literature on digital accounting and MSME performance, especially in the context of the digital economy and e-commerce. The results of this study can also provide new insights into the role of accounting information quality as a mediator between the implementation of digital accounting and the performance of MSMEs.

Practically, the findings of this study can be a valuable input for MSME owners in optimizing the use of digital accounting to improve their business performance. For policymakers, the results of this research can be the

basis for designing more effective programs and policies in supporting the digitalization of MSMEs, especially in the fields of accounting and finance.

Research Hypothesis

The use of digital accounting has an effect on improving the quality of accounting information in MSMEs. The implementation of a digital-based accounting system is expected to increase the accuracy, relevance, and reliability of financial information produced by MSMEs. Through the automation of the record-keeping and reporting process, digital accounting can minimize human error, speed up data processing, and produce more timely financial reports. In addition, standardizing accounting procedures through the use of software will increase the consistency and comparability of financial information between periods and between entities. The more sophisticated analytical capabilities of the digital system are also expected to produce deeper insights, supporting better decision-making for MSME owners and management. Furthermore, the integration of digital accounting with other operational systems can improve the completeness and contextuality of accounting information, making it more relevant for various MSME stakeholders. According to Phornlaphatrachakorn & Kalasindhu (2021), one of the main reasons a business is currently using digitalization is because it allows businesses to save costs. In addition, digital accounting makes it easier for entrepreneurs to present accurate and accessible information in real-time. The results of Mulyani's research (2021), explained that the adoption of accounting information systems is able to positively affect the quality of the accounting information produced.

H1: The use of digital accounting affects the quality of accounting information

The use of digital accounting has an effect on improving business performance in MSMEs. The adoption of digital-based accounting systems is expected to improve operational efficiency, improve financial management, and support more informed decision-making. Through the automation of accounting processes, MSMEs can allocate human resources and time more effectively to high-value-added activities. The accuracy and speed of financial reporting enhanced by digital systems allow MSME owners and management to monitor financial conditions in real-time, identify trends, and respond to business opportunities or challenges more quickly. The more advanced analytical capabilities of digital accounting can also aid in better financial planning, more efficient cash flow management, and cost structure optimization. In addition, compliance with accounting standards facilitated by digital systems can increase investor and creditor confidence, potentially expanding MSMEs' access to external funding sources to support business growth. According to Ismail & Zin (2009), the use of digital accounting systems will be useful to make it easier for MSME actors to provide information on business financial conditions and increase business management efficiency. With the use of digital accounting, MSME actors can find out their business conditions and make decisions appropriately and it does not take long (Wahyuni et al., 2018). MSME business performance can increase when a mobile-based accounting information system is applied to their financial management (Sinarwati et al., 2019). With the implementation of digital accounting, business administration will be more effective and financial reports can be compiled quickly and accurately. The use of accounting information systems has a positive effect on business performance (Mulyani, 2021). The adoption of information technology has a significant effect on the performance of MSMEs (Fatimah & Azlina, 2021).

H2: The use of digital accounting has a positive effect on business performance in MSMEs

The quality of accounting information has a positive and significant effect on business performance in MSMEs. High-quality accounting information, characterized by relevant, reliable, comparable, and easy-to-understand characteristics, is expected to support the improvement of overall business performance. With the availability of accurate and timely financial information, MSME owners and management can make more informative and strategic business decisions. Quality financial reports allow for a more in-depth analysis of the profitability, operational efficiency, and financial position of the business, facilitating the identification of areas that need improvement or optimization. In addition, the good quality of accounting information can increase the credibility of MSMEs in the eyes of external stakeholders, such as investors, creditors, and business partners, which in turn can open up opportunities for wider access to funding and strategic partnerships. The ability to present transparent and reliable financial information also has the potential to increase customer and supplier confidence, supporting sales growth and supply chain efficiency. The quality of financial reporting information has a significant positive effect on MSME business performance. The quality of information on good and complete financial statements will help in making the right decisions for business development in MSMEs (Al-Dmour, 2018).

H3: The quality of accounting information has a positive effect on business performance in MSMEs

The quality of accounting information significantly mediates the influence of the use of digital accounting on business performance in MSMEs. The use of digital accounting is expected to improve the quality of accounting information through increasing the accuracy, timeliness, and completeness of financial data. This high-quality accounting information, in turn, will contribute positively to improving the business performance of MSMEs. Through the implementation of digital accounting systems, MSMEs can produce more reliable and relevant financial reports, which then allows for more precise and strategic decision-making by owners and management. Improved information quality can also improve financial management, resource optimization, and more effective business planning. In addition, more transparent and reliable accounting information will increase the trust of external stakeholders, potentially opening up wider access to funding sources and strategic partnership opportunities. Thus, the quality of accounting information acts as a bridge that connects the use of digital accounting technology with the improvement of MSME business performance as a whole.

The use of digital accounting will improve the quality of the accounting information produced. With digital accounting, it makes it easier for entrepreneurs to present accurate and accessible information in real time. Quality accounting information can produce business decisions related to the company's performance and business continuity. The reliability of an accounting information system has a significant and positive relationship with business performance and the quality of financial reporting information is able to mediate significantly (Al-Dmour, 2018).

H4: The quality of accounting information is able to mediate the influence of the use of digital accounting on business performance in MSMEs

The Thinking Framework model of this study is seen as follows:

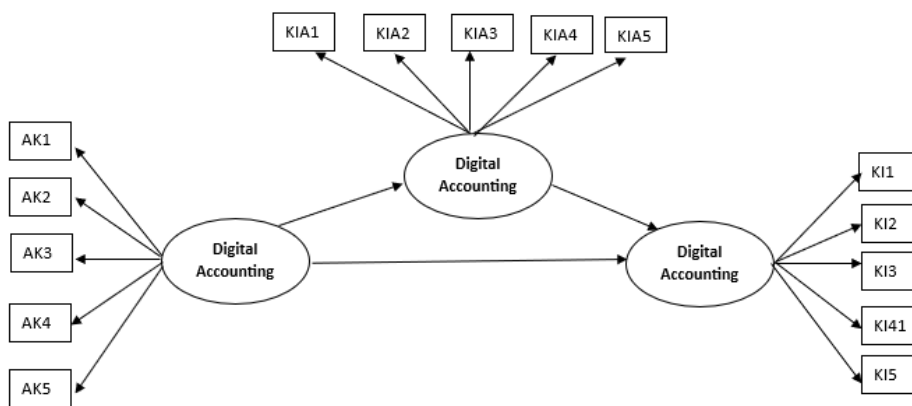


Figure 1. Research Model

II. METHOD

The population in this study is all MSMEs that are members of the E-peken e-commerce platform in the city of Surabaya. Based on data from the Surabaya City Cooperatives and SMEs Office (2023), there are around 1,500 MSMEs active on the E-peken platform. Given the relatively small size of the population and to ensure the representativeness of the sample, this study will use a saturated sampling technique, where all members of the population will be used as research respondents. It also considers the possibility of non-response and invalid data.

The respondents of the study were owners or managers of MSMEs who were members of E-peken, assuming that they had adequate knowledge of accounting practices and their business performance. The inclusion criteria for respondents include: (1) MSMEs have been registered and active on the E-peken platform for at least one year, (2) MSMEs have implemented a digital accounting system in their business operations, and (3) respondents have a decision-making role in the financial and operational aspects of MSMEs.

The research methodology used in this study is designed to produce comprehensive data and in-depth analysis. The use of quantitative methods by distributing questionnaires to MSMEs participating in the Surabaya City E-peken platform will allow data collection on a large enough scale for robust statistical analysis. The

selection of respondents from the E-peken platform is also strategic because it represents MSMEs that have taken the first step in digitizing their businesses.

Data analysis will use Structural Equation Modeling (SEM) with the Partial Least Squares (PLS) method and the help of SmartPLS software. The PLS-SEM method was selected based on its ability to handle complex models with many variables and relationships between variables, as well as its suitability for exploratory research. The analysis will include the evaluation of the outer model and the structural model, as well as the testing of the research hypothesis.

The independent variable in this study is the implementation of digital accounting. Operationally, the implementation of digital accounting is defined as the level of adoption and use of information and communication technology in the accounting process of MSMEs. This variable will be measured using a 5-point Likert scale, with indicators that include: (1) the level of use of accounting software, (2) the integration of accounting systems with e-commerce platforms, (3) the automation of the transaction recording process, (4) the use of cloud accounting, and (5) the use of data analysis for financial decision-making. These indicators are adapted from the research of Iriyadi, I., Meiryani, M., Tiara, T. A. N. P. S., Purnomo, A., & Salim, G. (2023).

The intervening variable in this study is the quality of accounting information. Operationally, the quality of accounting information is defined as the characteristics of financial information produced by the MSME accounting system that meets the needs of its users. This variable will be measured using a 5-point Likert scale, with indicators that include: (1) information relevance, (2) information reliability, (3) information completeness, (4) timeliness of information presentation, and (5) information comparability. These indicators are adapted from the model developed by Susanto (2017) and the research of Setiyawati et al. (2019).

The dependent variable in this study is the performance of MSMEs. Operationally, MSME performance is defined as the level of business success achieved by MSMEs in financial and non-financial aspects. This variable will be measured using a 5-point Likert scale, with indicators that include: (1) sales growth, (2) profitability, (3) operational efficiency, (4) customer satisfaction, and (5) product or service innovation. These indicators are adapted from the research of Amalia, M. M. (2023) and Purba, P. W., & Darmasetiawan, N. K. (2023).

III. RESULT AND DISCUSSION

A. Result

Characteristics Responden

The following table shows the respondent data from this research:

Tabel 1. Karakteristik Responden

Characteristic	Category	Sum	Percentage
Business size	Micro	210	60 %
	Small Business	105	30 %
	Medium Enterprises	35	10 %
Business Sector	Trade	158	45 %
	Service	105	30 %
	Manufactory	87	25 %
Long Usage	1-3 years	228	65 %
Digital Accounting	3-5 years	88	25 %
	>5 years	34	10 %
Total Responden		350	100%

Source : Research data

Table 1 presents the characteristics of the respondents from this study, involving a total of 350 MSMEs registered on the E-peken e-commerce platform in the city of Surabaya. The distribution of respondents by business size showed the dominance of micro businesses, which represented 60% (210 respondents) of the total sample, followed by small businesses by 30% (105 respondents), and medium businesses by 10% (35 respondents). This composition reflects the general structure of MSMEs in Indonesia, where micro enterprises are the majority. In terms of the business sector, the trade sector has the largest representation with 45% (158 respondents), followed by the service sector at 30% (105 respondents), and the manufacturing sector at 25% (87 respondents). The dominance of this trade sector is in line with the general characteristics of MSMEs in Indonesia which are mostly engaged in retail or wholesale trade. Regarding the length of use of digital accounting, the majority of respondents, namely 65% (228 respondents) have adopted this technology for 1-3 years, while 25%

(88 respondents) have used it for 3-5 years, and only 10% (34 respondents) have implemented digital accounting for more than 5 years. This pattern indicates that the adoption of digital accounting among MSMEs is still in the development stage, with most of them in the early to middle phase of adoption. This diversity of respondent characteristics provides a strong basis for a comprehensive analysis of the impact of digitalization and the use of Accounting Information Systems on the performance of MSMEs across various business sizes, sectors, and levels of experience with digital technologies.

Validity Testing

The convergent validity test measures the magnitude of the correlation between constructs and latent variables. The convergent validity test can be seen from the loading factor value for each construction indicator. The criteria for the value of the loading factor of each indicator are said to be valid if it is greater than 0.5 (Kock, 2020). The results of the convergence validity test can be seen in the following Table 2:

Table 2. Convergent Validity Results

Variable	Indicator	Loading Factor	Information
Digital Accounting	AK1	0,792	Valid
	AK2	0,882	Valid
	AK3	0,921	Valid
	AK4	0,948	Valid
	AK5	0,969	Valid
Quality Information Accountancy	KIA1	0,867	Valid
	KIA2	0,971	Valid
	KIA3	0,837	Valid
	KIA4	0,640	Valid
	KIA5	0,539	Valid
MSME Performance	K1	0,605	Valid
	K2	0,773	Valid
	K3	0,796	Valid
	K4	0,827	Valid
	K5	0,729	Valid

Source: Data processed (2024)

Ghozali (2014) explained that *discriminant validity* is declared to meet the criteria if the cross loading measure owned by each indicator shows a higher value than other constructs. The results of the discrimination validity test can be seen in the following Table 3:

Table 3. Discriminant Validity Results

Variable	Indicator	AK	KB	IS
Digital Accounting	AK1	(0,802)	0,581	0,127
	AK2	(0,882)	0,519	0,036
	AK3	(0,921)	0,611	0,051
	AK4	(0,948)	0,637	0,133
	AK5	(0,969)	0,618	0,147
Quality Information Accountancy	KIA1	0,651	(0,867)	0,189
	KIA2	0,741	(0,871)	0,004
	KIA3	0,599	(0,837)	-0,078
	KIA4	0,021	(0,540)	0,411
	KIA5	-0,086	(0,539)	0,141
MSME Performance	K1	0,125	0,066	(0,842)
	K2	0,076	0,180	(0,837)
	K3	0,036	0,175	(0,772)
	K4	0,008	0,032	(0,852)
	K5	0,161	0,179	(0,661)

Source: Data processed (2024)

Reliability Testing

The reliability test is a measurement used to determine how much the measurement value has a consistent level and a level of stability from the model's measurements. According to Sholihin and Ratmono (Sholihin & Ratmono, 2013), it is said to be reliable if the magnitude of the *cronbach alpha* value and *composite reliability* is more than 0.70. The results of the reliability test can be seen in the following Table 4:

Table 4. Reliability Test Results

Variable	Cronbach Alpha	Composite Reliability
Digital Accounting	0,921	0,939
Quality of Accounting Information	0,956	0,965
MSME Performance	0,817	0,874

Source: Data processed (2024)

Structural Model Testing

This test is commonly referred to as *the term inner model* used to describe the consistency of the relationship between latent variables which is used as a hypothesis in the research by looking at *the fit model index* and *quality index*. The results of *the fit model* and *quality indices* can be seen in the following Table 5:

Table 5. Fit Model Results and Quality Indices

Information	Value	P-value	Criterion
AK	0,328	0,001	Received pvalue < 0.05
THERE	0,549	0,001	Received pvalue < 0.05
K	0,470	0,001	Received pvalue < 0.05
AVIF	2,441	-	Accepted < 5, ideal < 3.3
AFVIF	4,664	-	Accepted < 5, ideal < 3.3
GoF	0, 652	-	Accepted: small > 0.1; Medium > 0,25; > 0.36
SPR	0,857	-	Accepted > 0.7, ideal = 1
RSCR	0,950	-	Accepted > 0.9, ideal = 1
SSR	0,857	-	Accepted > 0.7
NLBCDR	0,857	-	Accepted > 0.7

Source: Data processed (2024)

Based on the criteria contained in the *fit* and *quality indices model*, it can be seen that the P value of AK, KIA and K of 0.001 is less than 0.05 which means that the model is included in the good category (Sholihin & Ratmono, 2013). In addition, the GoF index showed a test result of 0.652 which fell into the large category so that the model was accepted. The results of AVIF were obtained with a value of 2.441 and AFVIF 4.664 were included in the ideal category, which means that there was no collinearity in the research model (Sholihin & Ratmono, 2013).

Structural Model or Inner Model

The R-square in this study based on data processing is 0.315. *The R-Square* value explained that business performance could be explained by the variables of digital accounting application and the quality of accounting information by 31.5%. While the remaining 68.5% is explained by variables that were not studied in this study.

Hypothesis Testing

The hypothesis test in this study was tested by paying attention to *the P Values*. The research hypothesis is said to be accepted when *the P Values* value < 0.05 (Ghozali & Latan, 2015). The following are the results of hypothesis testing in this study:

Table 6. Direct Influence Test Results

Hypothesis	Influence	P-value	Result
H1	Digital accounting => Quality of accounting information	0,002	Accepted
H2	Digital accounting => MSME Performance	0,720	Rejected
H3	Quality of accounting information => MSME Performance	0,000	Accepted

Source: Data processed (2024)

In the table data above, it can be explained that the second hypothesis is accepted, which has a *P-Values* < 0.5 . While the first and third hypotheses have *P-Values* > 0.5 which means the hypothesis is rejected.

Table 7. Indirect influence test results

Hypothesis	Influence	P-value	Result
H4	Digital accounting => Quality of accounting information => MSME Performance	0,000	Accepted

Source: Data processed (2024)

The results of the indirect influence test on the influence of digital accounting on business performance through the quality of accounting information showed a *P-Value* of 0.664 which means that the fourth hypothesis was rejected. This explains that the variable of accounting information quality is not able to significantly mediate the relationship between digital accounting and business performance.

B. Discussion

The results of the H1 test were accepted, namely that digital accounting optimization has an effect on the quality of accounting information. Digital accounting allows for the automation of the transaction recording process, reducing the manual errors that often occur in traditional record-keeping. For MSMEs in E-peken, this means that online sales transactions can be directly integrated into the accounting system, improving the accuracy of recording. This is in line with the findings of Meiryani et al. (2020) which show that the implementation of digital accounting improves the accuracy and reliability of MSME financial information. Up-to-date information: e-commerce platforms such as E-peken generate real-time transaction data. Digital accounting allows MSMEs to process this data into up-to-date accounting information. This supports the findings of Purwati and Suparlinah (2021) who stated that the use of cloud-based accounting applications improves the timeliness of MSME financial reporting. Data integration: digital accounting facilitates the integration of data from various sources, including e-commerce platforms, banking, and inventory systems. For MSMEs in E-peken, this means more comprehensive and coherent accounting information. This finding is consistent with the research of Feranita et al. (2020) which found that the integration of e-commerce systems with accounting improves the quality of MSME financial information. Reporting standardization: digital accounting systems are generally designed in accordance with applicable accounting standards. This helps MSMEs in E-peken to produce financial reports that are more in line with standards, increasing information comparability. This supports the findings of Setiyawati et al. (2019) on improving the quality of financial reporting through the implementation of a standardized accounting system. Better Data Analysis: Digital accounting provides more advanced analysis tools, allowing MSMEs to generate more relevant accounting information for decision-making. This is in line with the research of Ridho, W. F. (2023), which shows the potential use of AI in MSME accounting practices for predictive analysis. Information accessibility: digital accounting systems, especially cloud-based ones, improve the accessibility of accounting information. MSMEs in E-peken can access their financial information anytime and anywhere, improving the quality of decision-making. This supports the findings of Lutfi et al. (2016) on the accessibility benefits of technology-based accounting information systems. Improved internal controls: digital accounting provides better control and audit trail features, increasing the reliability of accounting information. For MSMEs in E-peken, this means improving the integrity of financial data. This finding is consistent with Susanto's (2017) research on the role of accounting information systems in improving the quality of accounting information through strengthening internal controls.

Nonetheless, it should be noted that several previous studies have also identified challenges in the implementation of digital accounting by MSMEs. For example, Mite, E. D. Y., Dince, M. N., & Lamawitak, P. L. (2023), found that factors such as technology readiness and perception of ease of use can affect the effectiveness of new technology adoption by MSMEs. This suggests that while digital accounting has the potential to improve the quality of accounting information, its effectiveness can be affected by contextual factors Hendrawati, E. (2017).

Hypothesis 2 : The results of the study show that digital accounting has no effect on the performance of MSMEs that join e-peken Surabaya is an interesting finding and needs to be studied further. This finding is contrary to several previous studies which generally show a positive influence of the adoption of accounting technology on the performance of MSMEs.

Several factors may explain this result. First, there may be a gap in the implementation of digital accounting among Surabaya e-peken MSMEs. Research by Sani and Wardani (2021) shows that the effectiveness of the adoption of accounting technology is highly dependent on the readiness of human resources and supporting infrastructure. If MSMEs do not have trained staff or adequate infrastructure, the benefits of digital accounting may not be fully realized. Second, the specific context of the Surabaya e-peken may have unique characteristics that affect the results of the study. A study by Pratama et al. (2022) found that factors such as business size, industry type, and level of competition can moderate the relationship between technology adoption and MSME performance. Perhaps MSMEs in e-peken Surabaya have special needs or challenges that are not fully accommodated by existing digital accounting solutions. On the other hand, these findings are also supported by several recent studies. For example, a study by Dewi and Firdaus (2023) on MSMEs in the e-commerce sector found that the adoption of accounting technology is not always directly correlated with improved financial performance. They highlighted the importance of factors such as marketing strategy and product quality as the main determinants of MSME performance in the e-commerce environment. Furthermore, the research of Nugroho et al. (2024) underlines that the benefits of digital accounting may not be immediately visible in the short term. They found that it takes time to adapt and learn before MSMEs can fully utilize the potential of accounting technology to improve their performance. Nonetheless, it's important not to overlook the long-term potential of digital accounting. A longitudinal study by Kurniawati and Setiawan (2020) shows that while the short-term impact may not be significant, the consistent use of digital accounting over a longer period can result in substantial improvements in MSME operational efficiency and strategic decision-making.

The results of hypothesis 3 testing show that the quality of accounting information has an effect on the performance of MSMEs. In the era of increasingly rapid digital transformation, the role of accounting has undergone significant changes. Digital accounting, which includes the use of information technology and automation, has impacted the way MSMEs (Micro, Small, and Medium Enterprises) manage their financial information. The main impetus behind accounting transformation is technological advancement. MSMEs that have joined the Surabaya e-peken platform, such as online trading platforms, cloud-based financial applications, and social media, are increasingly adopting technology to manage their financial data. Positive impact of digital accounting transformation: accounting processes that used to be manual can now be automated, the use of AI in financial data analysis is becoming more and more common. AI helps identify trends, predict market behavior, and provide valuable insights for decision-making.

The quality of accounting information has an important role in effective business decision-making. For MSMEs in e-peken Surabaya, quality accounting information can provide a clear picture of the financial condition of the business, help in planning and control, and support the right decision-making. When MSMEs have access to accurate, relevant, and timely accounting information, they can better manage financial resources, optimize operations, and increase profitability.

Research by Narsa, N. P. D. R. H., Prananjaya, K. P., & Narsa, I. M. (2021), supports these findings, showing that the use of accounting information has a positive effect on the success of MSMEs in Surabaya. They found that MSMEs that regularly use accounting information in decision-making tend to have better performance compared to those that do not. This is in line with the logic that MSMEs in e-peken Surabaya that utilize quality accounting information can be more effective in managing their finances, identifying growth opportunities, and overcoming business challenges.

Furthermore, in the context of e-peken Surabaya as a digital platform, the quality of accounting information is becoming increasingly crucial. MSMEs operating in a digital environment need to have a good understanding of their financial performance to compete effectively. Research by Aryanto, A., Hanum, N., & Syaefudin, R. (2023), regarding MSMEs in the digital era, supports this argument, showing that the adoption of accounting information technology is positively correlated with improving the performance of MSMEs.

The quality of accounting information also plays an important role in building trust with stakeholders, including customers, suppliers, and financial institutions. For MSMEs in e-peken Surabaya, the ability to present

accurate and transparent financial information can increase their credibility, which in turn can open up access to new resources and opportunities. This is supported by the research of Silvia, B., & Azmi, F. (2019), which found that the quality of financial reporting has a positive effect on MSMEs' access to external financing.

However, it is important to consider the challenges faced by MSMEs in implementing a quality accounting information system. Research by Purwati et al. (2014) identified several obstacles, including limited resources, lack of accounting knowledge, and the perception that formal accounting systems are too complex for MSMEs. In the context of Surabaya's e-peken, these challenges may still be relevant, especially for MSMEs that are just entering the digital market.

However, digital platforms such as e-peken Surabaya can offer solutions to overcome some of these challenges. For example, by providing tools and training that make it easier for MSMEs to manage their accounting information. Research by Rudiantoro and Siregar (2012) shows that accounting training can improve the understanding and use of accounting information among MSMEs, which in turn has a positive impact on their performance.

Another aspect that needs to be considered is how the quality of accounting information interacts with other factors in influencing the performance of MSMEs. Research by Amalia, M. M. (2023), Dew shows that the influence of accounting information quality on MSME performance is mediated by strategic decision-making. This underscores the importance of not only having quality information, but also the ability to interpret and use it effectively in a business context.

In the Surabaya e-peken environment, where MSMEs operate in a digital ecosystem, the quality of accounting information can have a wider impact. For example, it can help MSMEs in optimizing pricing strategies, managing inventory efficiently, and responding quickly to changing market trends. Research by Idwar, I., Del Rosa, Y., Sari, M. N., & Nesa, N. (2024). supports this argument, showing that the effective use of accounting information can increase the competitiveness of MSMEs in a competitive market.

However, it should be noted that some studies also show different results. For example, a study by Abdulkarim, R., & Christiaan, P. (2021), found that the influence of accounting information quality on the performance of MSMEs is not always significant, especially when other factors such as innovation and entrepreneurial orientation are taken into account. This reminds us that while the quality of accounting information is important, it is not the only factor that determines the performance of MSMEs.

Hypothesis 4, the results of the study that show that the quality of accounting information can mediate the influence of the use of digital accounting on business performance in MSMEs that join e-peken Surabaya is an interesting finding and is in line with several recent studies in the accounting and management literature of MSMEs.

These findings underscore the important role of accounting information quality as a bridge between technology adoption and business performance improvement. This is consistent with research by Wijaya and Nugroho (2020) which found that the implementation of digital-based accounting information systems for MSMEs in Central Java improves the quality of financial information, which in turn has a positive impact on decision-making and business performance.

Furthermore, a study by Pratiwi et al. (2021) on MSMEs in the retail sector in Surabaya shows that the use of digital accounting improves the accuracy and timeliness of financial reporting, which then allows business owners to make better strategic decisions, especially in inventory management and cash flow planning.

However, it is important to note that the effectiveness of this mediation can be affected by a variety of contextual factors. Research by Sari and Harto (2022) on MSMEs in the service sector found that the level of digital literacy of business owners moderates the relationship between the use of digital accounting and the quality of the information produced. This highlights the importance of training and mentoring in the implementation of accounting technology in MSMEs.

On the other hand, a case study by Rahma et al. (2023) on MSMEs participating in the government's e-commerce program in East Java shows that although digital accounting improves information quality, its influence on business performance is not always linear. They found that factors such as digital marketing strategy and product quality also play a crucial role in determining the success of MSMEs on e-commerce platforms.

Furthermore, a longitudinal study by Kusuma and Dewi (2024) on MSMEs in various sectors in Indonesia confirms the role of mediating the quality of accounting information, but also reveals that its impact on business performance tends to increase over time. This shows that there is a learning curve in the use of high-quality accounting information for business decision-making.

IV. CONCLUSION

This study examines the influence of the use of digital accounting on the performance of MSMEs that are members of the e-peken platform in Surabaya, with the quality of accounting information as a mediating variable. The results show that the use of digital accounting has a positive effect on the quality of accounting information, and the quality of accounting information has a positive effect on the performance of MSMEs. However, the use of digital accounting does not have a direct effect on the performance of MSMEs. The quality of accounting information has been proven to mediate the relationship between the use of digital accounting and the performance of MSMEs. These findings emphasize the importance of not only adopting digital accounting technology, but also ensuring that it produces quality information that can be used effectively to improve business performance. For policymakers and MSME support institutions, these findings highlight the importance of training programs that not only focus on the technical aspects of using digital accounting, but also on improving the ability to interpret and utilize financial information for strategic decision-making.

Suggestion:

Based on the findings of the study, several suggestions can be put forward:

1. MSMEs need to focus on improving the quality of accounting information generated from the digital system, not only on the adoption of technology.
2. Training programs for MSMEs should include technical aspects of the use of digital accounting and improving the ability to interpret and utilize financial information.
3. The government and MSME supporting institutions need to design policies that encourage the adoption of digital accounting while increasing the financial literacy of MSME actors.
4. Further research is needed to examine contextual factors that affect the effectiveness of digital accounting in improving the performance of MSMEs.

REFERENCES

- Abdulkarim, R., & Christiaan, P. (2021). Pengaruh Sistem Informasi Akuntansi Dan Kualitas Informasi Terhadap Kepuasan Klien Pengguna Jasa Akuntan (Studi Empiris Pada Kantor Jasa Akuntan Terampil Di Kota Gorontalo). *AkMen JURNAL ILMIAH*, 18(2), 177-187.
- Al-Dmour, A. (2018). the Impact of the Reliability of the Accounting Information System Upon the Business Performance Via the Mediating Role of the Quality of Financial Reporting. *The International Journal of Accounting and Business Society*, 26(1), 78–111. <https://doi.org/10.21776/ub.ijabs.2018.26.1.5>
- Amalia, M. M. (2023). Pengaruh Sistem Informasi Akuntansi, Kualitas Laporan Keuangan, Efektivitas Pengambilan Keputusan terhadap Kinerja UMKM Di Jakarta. *Jurnal Akuntansi dan Keuangan West Science*, 2(02), 97-107.
- Amalia, M. M. (2023). Pengaruh Sistem Informasi Akuntansi, Kualitas Laporan Keuangan, Efektivitas Pengambilan Keputusan terhadap Kinerja UMKM Di Jakarta. *Jurnal Akuntansi dan Keuangan West Science*, 2(02), 97-107.
- Aryanto, A., Hanum, N., & Syaefudin, R. (2023). Faktor Teknologi, Organisasi, dan Lingkungan pada Penerapan Akuntansi Digital serta Dampaknya Terhadap Kinerja UMKM. *Owner: Riset Dan Jurnal Akuntansi*, 7(1), 632-643.
- Corkern, S. M., Kimmel, S. B., & Morehead, B. (2015). Accountants need to be prepared for the big question: Should I move to the cloud?. *International Journal of Management & Information Systems (Online)*, 19(1), 13.
- Darma, J., & Sagala, G. H. (2020). Pengaruh Kualitas Sistem Informasi Akuntansi Terhadap Kualitas Informasi Akuntansi. *Jurnal Ilmiah Manajemen, Ekonomi, & Akuntansi (MEA)*, 4(1), 227-237.
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: a ten-year update. *Journal of management information systems*, 19(4), 9-30.
- Dewi, N. P. S., & Firdaus, M. R. (2023). Digital accounting in e-commerce: Does it really improve SME financial performance? *Asian Journal of Business and Accounting*, 16(1), 167-190.
- Fatimah, S., & Azlina, N. (2021). Pengaruh Teknologi Informasi dan Inovasi Terhadap Kinerja Usaha Kecil dan Menengah (UKM). *Jurnal Riset Akuntansi Dan Perbankan*, 15, 1.
- Ghozali, I. (2008). *Structural equation modeling: Metode alternatif dengan partial least square (pls)*. Badan Penerbit Universitas Diponegoro.
- Hakiki, A., Rahmawati, M., & Novriansa, A. (2020). Penggunaan Sistem Informasi Akuntansi untuk Usaha Mikro Kecil dan Menengah (UMKM) di Desa Kota Daro, Kabupaten Ogan Ilir. *Sriwijaya Community Services*, 1(1), 55-62.

- Hakiki, A., Rahmawati, M., & Novriansa, A. (2020). Penggunaan Sistem Informasi Akuntansi untuk Usaha Mikro Kecil dan Menengah (UMKM) di Desa Kota Daro, Kabupaten Ogan Ilir. *Sricommerce: Journal of Sriwijaya Community Services*, 1(1), 55-62.
- Hendrawati, E. (2017). Analisis Faktor-Faktor Yang Mempengaruhi Penggunaan Informasi Akuntansi Pada Usaha Mikro, Kecil Dan Menengah (UMKM). *MAGISTRA: Journal of Management*, 1(2), 43-65.
- Idris, K. M., & Mohamad, R. (2016). The influence of technological, organizational and environmental factors on accounting information system usage among Jordanian small and medium-sized enterprises. *International Journal of Economics and Financial Issues*, 6(7), 240-248.
- Idwar, I., Del Rosa, Y., Sari, M. N., & Nesa, N. (2024). Intensi Penggunaan QRIS Berdasarkan Technology Acceptancy Model Pada UMKM Kuliner Kota Padang Provinsi Sumatera Barat. *Jurnal Ekonomika Dan Bisnis*, 4(4), 429-438.
- Iriyadi, I., Meiryani, M., Tiara, T.A.N.P.S., Purnomo, A., & Salim, G. (2023). Blockchain utilization in actions to empower digitalization of accounting information systems for small and medium-sized entities in Indonesia. *Journal of Theoretical and Applied Information Technology*.
- Ismail, N. A., & Mat Zin, R. (2009). Usage of accounting information among Malaysian Bumiputra small and medium non-manufacturing firms. *Journal of Enterprise Resource Planning Studies*.
- Kementerian Koperasi dan UKM. (2021). Data UMKM.
- Kock, N. (2017). *WarpPLS user manual: Version 6.0*. ScriptWarp Systems: Laredo, TX, USA, 141, 47-60.
- Kurniawati, E., & Setiawan, A. (2020). Long-term impact of digital accounting adoption on SME performance: A 5-year longitudinal study. *International Journal of Accounting & Information Management*, 28(2), 237-255.
- Kusuma, I. C., & Dewi, F. G. (2024). The mediating role of accounting information quality on digital accounting adoption and SME performance: A longitudinal study. *International Journal of Accounting & Information Management*, 32(1), 149-170.
- Mite, E. D. Y., Dince, M. N., & Lamawitak, P. L. (2023). Pengaruh Penggunaan Informasi Akuntansi Terhadap Keberhasilan Usaha Mikro Kecil Menengah (Studi Pada UMKM di Kecamatan Alok Kabupaten Sikka). *Jurnal Riset Akuntansi*, 1(4), 99-112.
- Mulyani, F. (2021). Quality and efficiency of accounting information systems. *Praxis Latinoamericana*, 26(2), 323– 336. <https://www.redalyc.org/journal/279/27966514027/27966514027.pdf>
- Narsa, N. P. D. R. H., Prananjaya, K. P., & Narsa, I. M. (2021). Studi Deskriptif Awareness dan Persepsi pada Pelaku UMKM dan Koperasi Mengenai SAK EMKM: Sebuah Update. *Wahana Riset Akuntansi*, 9(2), 163-175.
- Nugroho, A. H., Susilowati, C., & Pudjianto, B. W. (2024). Time lag in digital accounting benefits: A longitudinal study of Indonesian SMEs. *Journal of Small Business Strategy*, 34(1), 28-45.
- Phornlaphatrachakorn, K., & Kalasindhu, K. N. (2021). Digital Accounting, Financial Reporting Quality and Digital Transformation : Evidence from Thai Listed Firms. *Journal of Asian Finance*, 8(8), 409–0419. <https://doi.org/10.13106/jafeb.2021.v018.no8.0409>
- Pratama, B. C., Innayah, M. N., & Pramono, J. (2022). The impact of digital accounting adoption on SME performance: The moderating role of business characteristics. *International Journal of Economics and Business Administration*, 10(2), 42-57.
- Pratiwi, R., Sutrisno, T., & Purnomosidhi, B. (2021). Digital accounting and financial reporting quality: Evidence from retail SMEs in Surabaya. *International Journal of Economics and Management*, 15(2), 267-281.
- Purba, P. W., & Darmasetiawan, N. K. (2023). The Influence Of Quality Of Work-Life And Staying Intention Through Job Satisfaction On Milenial Workers In The Banking Sector In Surabaya. *Jurnal Ekonomi*, 10(2), 1524-1531.
- Purwati, A. S., Suparlinah, I., & Putri, N. K. (2014). The Use of Accounting Information in the Business Decision Making Process on Small and Medium Enterprises in Banyumas Region, Indonesia. *Economy Transdisciplinarity Cognition*, 17(2).
- Rahma, A., Sulistiyo, A. B., & Roziq, A. (2023). Digital accounting in e-commerce: A case study of SMEs in East Java's government e-commerce program. *Journal of Accounting and Investment*, 24(1), 1-20.
- Ridho, W. F. (2023). An examination of the opportunities and challenges of conversational artificial intelligence in small and medium enterprises. *Review of Business and Economics Studies*, 11(3), 6-17.
- Rudiantoro, R., & Siregar, S. V. (2012). Kualitas laporan keuangan umkm serta prospek implementasi SAK ETAP. *Jurnal Akuntansi dan Keuangan Indonesia*, 9(1), 1.

- Sani, A., & Wardani, M. K. (2021). Factors affecting the adoption of digital accounting technology in SMEs. *Journal of Indonesian Economy and Business*, 36(1), 1-16.
- Sari, D. P., & Harto, P. (2022). The role of digital literacy in moderating the relationship between digital accounting use and information quality in service sector SMEs. *Asian Journal of Accounting Research*, 7(1), 63-78.
- Setiyawati, H., Iskandar, D., & Basar, Y. S. (2018). The quality of financial reporting through increasing the competence of internal accountants and accrual basis. *International Journal of Economics, Business and Management Studies*, 5(1), 31-40.
- Sholihin, M., & Ratmono, D. (2021). Analisis SEM-PLS dengan WarpPLS 7.0 untuk hubungan nonlinier dalam penelitian sosial dan bisnis. Penerbit Andi.
- Silvia, B., & Azmi, F. (2019). analisis faktor-faktor yang mempengaruhi persepsi pengusaha UMKM terhadap laporan keuangan berbasis SAK EMKM. *Jurnal Analisis Bisnis Ekonomi*, 17(1), 57-73.
- Sinarwati, N. K., Sujana, E., & Herawati, N. T. (2019). Peran Sistem Informasi Akuntansi Berbasis Mobile Bagi Peningkatan Kinerja Umkm. *License Jurnal KRISNA: Kumpulan Riset Akuntansi*, 11(1), 26–32.
- Susanto, A. (2016). The effect of internal control on accounting information system. *International Business Management*, 10(23), 5523-5529.
- Suzan, L., Sudrajat, J., & Daud, Z.M. (2020). Accounting information systems as a critical success factor for increased quality of accounting information. *Revista Espacios*, 41(15).
- Wahyuni, T., Marsdenia, M., & Soenarto, I. (2018). Analisis Pengaruh Penerapan Sistem Informasi Akuntansi Terhadap Pengukuran Kinerja UMKM di Wilayah Depok. *Jurnal Vokasi Indonesia*, 4(2). <https://doi.org/10.7454/jvi.v4i2.97>
- Wijaya, S. V., & Nugroho, P. I. (2020). Digital accounting adoption and its impact on SMEs' performance: A study of Central Java. *Journal of Indonesian Economy and Business*, 35(1), 1-16.