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Analysis of Accounting Digitalization Transformation on the Financial Performance of Msmes in Cirebon City

Sri Rahayu¹, Firman Hidayat²

¹Universitas Swadaya Gunung Jati, Jawa Barat, Indonesia, <u>srirahayunci971@gmail.com</u>
²Universitas Swadaya Gunung Jati, Jawa Barat, Indonesia, <u>firman.hidayat@ugj.ac.id</u>

Corresponding Author: firman.hidayat@ugj.ac.id²

Abstract: The MSME (Enterprise, Micro, Small and Medium) ecosystem in Indonesia has undergone significant changes as a result of the digital revolution period. Therefore, the financial performance of MSMEs has a very important role for the national economy, considering that this sector is the backbone of economic growth. Cirebon City as one of the centers of economic growth in West Java Province reflects positive developments in the MSME sector. This study uses a descriptive quantitative approach to analyze the relationship between accounting digitalization transformation variables and the financial performance of MSMEs through objective and systematic measurements. The population in this study includes all MSMEs registered and operating in the city of Cirebon. The results show that the implementation of digital accounting systems in MSMEs significantly improves operational efficiency, especially in terms of reducing the amount of time needed to process financial transactions and reducing the number of errors made manually, the results and implications of this study should be used taking into account the limitations of its scope and methodology. It is hoped that this limitation will be the basis for future researchers to develop quantitative and qualitative approaches, in order to produce a more comprehensive understanding of the impact of digitalization in accounting practice.

Keyword: digitalization transformation of accounting, financial performance, MSMEs, digital-based financial reporting

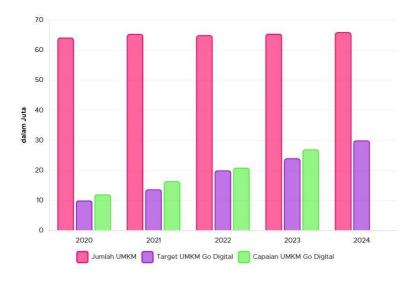
INTRODUCTION

The ecosystem of Micro, Small, and Medium Enterprises (MSMEs) in Indonesia has undergone substantial transformation, particularly driven by the rapid advancement of digital technology. This digital revolution has not only reshaped the operational dynamics of MSMEs but also enhanced their potential to contribute more effectively to national economic development. As the backbone of Indonesia's economy, MSMEs play a pivotal role in driving inclusive growth and economic resilience. According to the Ministry of Cooperatives and SMEs, there are approximately 64.2 million MSMEs in Indonesia, which contribute 61.07% or IDR 8,573.89 trillion to the country's Gross Domestic Product (GDP) (Haryo

Limanseto, 2021). Moreover, this sector is a major source of employment, absorbing nearly 97% of the national workforce and contributing 61.4% to the overall economy (Amelia, 2022).

Amidst these developments, the integration of digital finance has emerged as a more efficient and inclusive alternative to traditional financial systems, which are often criticized for being inaccessible or discriminatory towards smaller business actors (Q. Li, 2021; Zhao et al., 2024). Digital finance leverages technological innovation to overcome structural limitations in the conventional financial landscape, such as poor asset management, limited access to capital, and inefficient resource allocation. Recent studies suggest that digital financial solutions have the capacity to enhance financial transparency, facilitate more effective resource tracking, and support asset diversification, especially for MSMEs with constrained access to conventional banking services (Hossain et al., 2024). This evolution underscores the need for strategic policy and infrastructure support to strengthen the digital financial ecosystem, thereby empowering MSMEs to achieve sustainable financial performance and resilience in a dynamic economic environment.

The acceleration of digitalization has been increasingly felt since the COVID-19 pandemic, which has encouraged MSMEs to adapt immediately to maintain their existence in the midst of global economic challenges (Q. Li & Zhang, 2024). Therefore, digital transformation, especially in the financial aspect, is important for MSMEs to increase competitiveness and maintain the sustainability of their businesses in the increasingly competitive digital era. Not only does it simplify the process of financial management and business decision-making, but digitalization also plays a role in creating new opportunities that encourage the expansion and growth of MSMEs (J. Li & Li, 2025). Efforts to increase integration between the digital economy and the real economy are an important agenda in building a resilient business ecosystem. This requires accelerating the development of digital infrastructure and the preparation of mechanisms that support the sustainable growth of the digital economy (S. Li & Xie, 2025). In addition, digital finance also contributes to better business governance, which ultimately strengthens the sustainability of the national economy (Morshed, 2025). To provide a comprehensive overview of the condition of MSMEs and digitalization in Indonesia, the following data shows the number of MSMEs, government targets in the MSME Go Digital program, and the achievement of targets that have been achieved so far:



Source: East Ventures (2024)
Figure 1. Number of MSMEs in Indonesia, MSME Go Digital Program Targets,
and Actual Achievements

Based on the data shown in the graph, digital transformation has had a significant impact on the growth of MSMEs in Indonesia during 2020-2024. In 2023, as many as 27 million MSMEs in Indonesia have been digitized, or around 41.57% of the total MSMEs in the country (GoodStats, 2023). This figure reflects the important role of digitalization, including in the form of digital finance, *e-commerce*, and online marketing in expanding market access, improving operational efficiency, and strengthening the competitiveness of MSMEs. For example, many MSME actors now use digital platforms such as Tokopedia, Shopee, and Instagram to reach consumers outside their traditional geographical area, even abroad. Digital finance also plays a significant role through services such as *e-wallets*, *fintech lending*, and *digital banking*, which provide faster and more inclusive access to funding than conventional financial services. This transformation not only increases productivity and business sustainability, but also encourages local and national economic growth. Therefore, the use of digital technology by MSMEs is not just an adaptation, but has become a vital strategy to survive and develop in the digital economy era.

One of the important elements of the digitalization of MSMEs is the implementation of a digital-based accounting system. Currently, many accounting system programs are available for free for use by MSME actors, these programs offer convenience and efficiency (Susilowati et al., 2023). The existence of this application is very helpful for MSMEs in improving their financial governance in a more systematic and transparent manner. In addition, inclusive digital finance also expands services to reach business actors in remote areas, who previously had difficulty accessing conventional financial services (Zhang et al., 2025). Small and medium-sized businesses often have difficulty accessing traditional financial services, but digital finance offers an alternative and provides more specific and accessible financial solutions (Mou, 2024), blockchain offers extra security and transparency in the management of digital financial transactions (X. Liu et al., 2024). Thus, digitizing accounting not only improves business efficiency, but also opens up great opportunities for financial inclusion as well as contributing to the reduction of poverty rates (Duan et al., 2024).

Cirebon City as one of the centers of economic growth in West Java Province reflects positive developments in the MSME sector. Based on data from the Cirebon City Cooperatives, SMEs, Trade, and Industry Office in 2024, there are 33,457 MSMEs spread across various sectors, including culinary (35%), fashion and textiles (25%), traditional crafts (20%), and trade (20%). Along with the increasing awareness of the importance of digitalization, around 27% or 9,033 MSMEs have adopted digital technology in their business operations. However, especially for accounting digitization, the adoption rate is still relatively low, which is around 15% or 5,018 MSMEs.

Despite showing significant developments, MSMEs in Cirebon City also still face various challenges. Some of the main obstacles include limited access to formal financing, low use of digital technology, and lack of managerial and marketing capacity. Nevertheless, the opportunity to grow is still wide open. The development of the digital economy and support from local governments through training, facilitation of online market access, and strategic partnerships with the private sector are important capital for MSMEs to carry out sustainable transformation.

Several previous studies have shown that accounting digitization plays an important role in financial performance. Research (J. Liu et al., 2025) shows that IP protection helps companies develop digital technologies, even though funding constraints hinder such innovations. Furthermore, a study by (Mulyana et al., 2024) states that digital finance is very helpful for the company's digital transformation. Research (Budiarti & Jannah, 2022) found that financial inclusion in banking and financial technology has a significant positive effect on the growth of MSMEs. Meanwhile, a research study conducted by Jun & Ran (2024)

found that the quality of digital financial services has a significant negative effect. Although previous research has largely discussed digital transformation and financial inclusion, most have not highlighted specifically the role of accounting digitization in supporting the financial performance of MSMEs. In addition, studies with a geographical focus such as in Cirebon City are still very limited. This research provides novelty by analyzing the direct relationship between accounting digitization and the financial performance of MSMEs in Cirebon City, so that it is expected to make an empirical and practical contribution in the local context.

In this case, MSMEs in Cirebon City were chosen because business actors in the region must adapt to the dynamics of the digital economy. One way to do this is to utilize digital technology in financial performance. This study was conducted with the aim of finding out how the digitization of the accounting system can affect the financial performance of MSMEs in real terms. This study focuses on the extent to which the implementation of accounting digitalization has taken place among MSMEs, how it impacts financial efficiency and performance, as well as the various challenges and opportunities that arise during the transformation process. Therefore, this study not only emphasizes the level of technology adoption, but also examines how digitalization practices relate to the financial performance of businesses empirically.

This study is anticipated to offer valuable contributions both in theoretical development and practical application. From a theoretical perspective, the research enriches the academic discourse on digital accounting and financial management within the MSME sector, particularly in the Indonesian context where digital transformation is still evolving. It advances the body of knowledge by exploring the mechanisms through which accounting digitalization influences financial performance, while also identifying moderating factors that may strengthen or weaken this relationship. Such insights are essential for deepening our understanding of how digital technologies impact financial practices in small and medium-sized enterprises.

On the practical side, the findings of this research are expected to provide strategic value to a range of stakeholders. For MSME owners and managers, this study serves as an empirical foundation for adopting and optimizing digital accounting systems, with the goal of enhancing operational efficiency, ensuring the accuracy of financial reporting, and improving access to formal financing channels. For policymakers and local government authorities, the results can inform the design of targeted interventions, including training and mentoring programs, that facilitate broader and more effective adoption of digital accounting technologies among MSMEs. Moreover, the study can serve as a reference for financial institutions in tailoring their products and services to align with the evolving needs of digitally-oriented MSMEs, thereby fostering greater financial inclusion and business growth in the digital economy era.

METHOD

This research adopts a descriptive quantitative methodology to investigate the relationship between the transformation of accounting digitalization and the financial performance of Micro, Small, and Medium Enterprises (MSMEs). By utilizing this approach, the study aims to provide a systematic, objective, and empirical analysis based on quantifiable data, allowing for the identification of patterns and correlations that can be generalized to a broader population. The use of numerical indicators facilitates the assessment of how digital accounting tools—such as cloud-based accounting systems, automated bookkeeping applications, and financial analytics platforms—contribute to improvements in financial outcomes, including profitability, efficiency, and access to financing.

The research population comprises MSMEs that are officially registered and actively operating in Cirebon City, as reported by the Central Statistics Agency (BPS, 2024), which records a total of 2,203 business units. This study specifically concentrates on MSMEs engaged in the food and beverage industry and related service sectors, as these areas have demonstrated a higher rate of digital technology adoption in recent years. By focusing on this segment, the research aims to capture relevant insights into how the implementation of digital accounting systems impacts business performance in sectors with dynamic market demands and operational complexities. The findings are expected to inform both academic inquiry and practical decision-making in efforts to support digital transformation within Indonesia's MSME ecosystem.

A saturated sampling technique was used to determine the research sample, resulting in 100 MSMEs that met the inclusion criteria. The primary data was collected through structured questionnaires distributed to MSME owners or managers as key informants. The instrument was designed using a five-point Likert scale, ranging from "strongly disagree" to "strongly agree," to capture respondents' perceptions regarding the extent of digital accounting adoption and its perceived impact on financial performance indicators such as revenue growth, cost efficiency, and cash flow stability.

To ensure the validity and reliability of the instrument, a pre-test was conducted involving 30 respondents from the same population prior to the main data collection phase. Feedback from the pre-test was analyzed to refine question clarity, remove ambiguous items, and improve scale reliability. After finalizing the questionnaire, it was disseminated to the full sample of selected respondents. The systematic procedure of data collection and analysis underscores the study's commitment to methodological rigor, enhancing the credibility and applicability of its findings in supporting the digital transformation agenda among Indonesian MSMEs.

RESULT AND DISCUSSION

1. Test Instruments

a. Validity Test

The validity test in this study used the Pearson correlation test. The decision making requirements for this test are, if the r-count value \geq r-table, the data is declared valid.

| Variable | Number of Items | r- Count Range | r- Table | Information |
|------------------------------------|--------------------|-------------------|-------------|---------------------|
| Digitalization of Accounting (X) | 7 | 0.231 - 0.637 | 0.196 | All items are valid |
| Financial Performance of MSMEs (Y) | 7 | 0.297 - 0.592 | 0.196 | All items are valid |

Referring to the summarized table above, it can be concluded that all statement items used to measure the variables of accounting digitalization and financial performance of Micro, Small, and Medium Enterprises (MSMEs) demonstrate *r-count* values greater than the *r-table* value of 0.196. This indicates that each item has a statistically significant correlation with the total score of its respective variable, thereby fulfilling the criteria for construct validity. In other words, all indicators used in the research instrument are deemed valid and appropriate for measuring the intended concepts. The validity of these items strengthens the reliability of the measurement model and ensures that the collected data accurately reflect the actual conditions of accounting digitalization and financial performance within the MSME sector. This step is essential in quantitative research to ensure that subsequent analyses, such as hypothesis testing and model interpretation, are based on sound and credible measurements.

b. Reliability Test

The reliability test in this study used the cronbach alpha test. The decision making requirement for this test is, if the Cronbach alpha' value > 0.60, then the data is declared reliable.

| Variable | Cronbach' Alpha | Information | |
|--|-----------------|-------------|--|
| Transformation Digitization Accounting (X) | 0,714 | Reliable | |
| Financial Management (Y) | 0,887 | Reliable | |

Based on the reliability test results presented in the table above, it is evident that the variables of digitalization, accounting, and financial performance of Micro, Small, and Medium Enterprises (MSMEs) each exhibit a Cronbach's Alpha value greater than 0.60. This threshold is commonly accepted in social science research as the minimum standard for internal consistency, indicating that the items within each variable are reliably measuring the same underlying construct. Consequently, all statement items used to assess these variables are considered reliable. High reliability implies that the measurement instrument produces consistent and stable results across different observations and samples. This ensures that the data obtained from respondents can be trusted for further statistical analysis and model testing. The strong internal consistency of these constructs enhances the overall credibility of the research findings and supports the validity of conclusions drawn regarding the relationship between digital accounting practices and MSME financial performance.

2. Basic Assumption Test

a. Normality Test

In this study, the assessment of data normality was conducted using the Kolmogorov-Smirnov (K-S) test, a widely recognized non-parametric statistical method for evaluating whether a dataset follows a normal distribution. This test is particularly suitable for small to medium-sized samples and is frequently applied in social science research to verify one of the key assumptions underlying parametric analyses. The decision rule for interpreting the Kolmogorov-Smirnov test results is based on the significance (p) value: if the p-value exceeds 0.05, the null hypothesis—stating that the data is normally distributed—is accepted. This indicates that the distribution of the observed data does not significantly deviate from a normal distribution. Ensuring normality is a critical step in data analysis, as it supports the validity of subsequent inferential statistical tests, such as regression or correlation analyses, which often assume that the data follow a normal distribution. By applying the K-S test, this study aims to confirm that the dataset meets the normality assumption, thereby strengthening the robustness and accuracy of the overall research findings.

| One-Sample | Kolmogorov-Smi | rnov Test |
|--------------------------|----------------|-------------------------|
| | | Unstandardized Residual |
| N | | 100 |
| Normal Parameters, b | Mean | 0E-7 |
| | Std. Deviation | .86417208 |
| | Absolute | .346 |
| Most Extreme Differences | Positive | .290 |
| | Negative | 346 |
| Kolmogorov-Smirnov Z | 1 | 2.447 |

| Asymp. Sig. (2-tailed) | .200 |
|---------------------------------|------|
| a. Test distribution is Normal. | |
| b. Calculated from data. | |

Based on the table above, it shows that the significance value in this study is 0.200 > 0.05, this means that the data in this study has been distributed normally.

b. Linearity Test

The decision making requirement on this test is if the deviation from linearity sig value > 0.05, then the data is said to be the relationship between linear variables.

| | | ANOVA | Table | | | | |
|------------------------------|-------------------|-----------------------------|-------------------|----|----------------|--------|------|
| | | | Sum of Squares | Df | Mean Square | F | Sig. |
| Financial | D. | (Combined) | 180.386 | 8 | 22.548 | 12.316 | .000 |
| Performance of MSMEs* | Between Groups | Linearity | 141.193 | 1 | 141.193 | 77.120 | .000 |
| Digitalization of Accounting | | Deviation from Linearity | 39.192 | 7 | 5.599 | 3.058 | .106 |
| | Within Grou | ips | 166.604 | 91 | 1.831 | | |
| | Total | | 346.990 | 99 | | | |

Based on the table above, it shows that the value of deviation from linearity of the transformation variable of digitalization, accounting, and financial performance of MSMEs is 0.106 > 0.05. This means that the variables of accounting digitalization transformation and MSME financial performance in this study have a linear relationship

3. Simple Linear Regression Analysis

| | | (| Coefficient | | | |
|--------|---|--------------------------------|-------------|------------------------------|-------|------|
| | Туре | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | В | Std. Error | Beta | | |
| | (Constant) | .663 | 1.855 | | .358 | .000 |
| 1 | Digitalization Transformation Accountancy | .256 | .026 | .822 | 9.993 | .000 |
| ı. Dep | endent Variable: MS | ME Financial | Performance | | | |

Based on the table above, the simple linear regression equation in this study is as follows.

$$Y = 0.663 + 0.256 X$$

a. The constant value obtained is 0.663, this value shows that if the transformation variable of accounting digitization is constant or unchanged, then the value of the MSME financial performance variable is 0.663.

The variable of accounting digitization transformation (X) shows a coefficient value of 0.256. This means that if there is an increase in the value of the accounting digitalization transformation variable by 1%, the value of the financial performance variable of MSMEs will also increase by 0.256.

1. Coefficient of Determination Test (R2)

| | | Mode | l Summary | | | | |
|----------|-------------|-------------------|-----------------|--------|--------|-------|-----|
| Туре | R | R Square | Adjusted | Std. | Error | of | the |
| | | | R Šquare | Estin | nate | | |
| 1 | .822a | .675 | .669 | | .873 | | |
| a. Predi | ctors: (Con | stant), Digitaliz | zation Transfor | mation | Accoun | tancy | 7 |

Based on the table above, it shows that the value of the determination coefficient expressed by the r-square value in this study is 0.675 or 67.5%, this means that the financial performance variable of MSMEs can be explained by the accounting digitalization transformation variable of 67.5%, while the remaining 32.5% is explained by the variable that is not studied in this study.

2. Partial Test (t-test)

The decision making requirement for this test is that if the significance value is < 0.5 and the t-value is calculated > t-table, then the hypothesis is accepted.

| | Туре | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
|---|---|--------------------------------|------------|------------------------------|-------|------|
| | | В | Std. Error | Beta | | |
| | (Constant) | .663 | 1.855 | | .358 | .000 |
| 1 | Transformation Digitization of Accounting | .256 | .026 | .822 | 9.993 | .000 |

Based on the table above, it is shown that the variable of accounting digitization transformation has a regression coefficient value of 0.256 which has a positive value, has a t-calculation value of 9.993 > t-table 1.984, and has a significance value of 0.000 < 0.05. This means that the variable of accounting digitalization transformation has a positive and significant effect on the financial performance of MSMEs in Cirebon City.

R-Table How to determine the r-table value on the validity test

- 1. Looking at the standard error of 5% (0.05), in the two-way test, because the hypothesis formulated is not yet known whether it leads positively or negatively.
- 2. Determining the DF value df = Number of samples 2
- = 100 2
- = 98

So that the value of the r-table = 0.196

T-Table

How to determine the value of the t-table on a partial test

- 1. Looking at the standard error of 5% (0.05), in the two-way test, because the hypothesis formulated is not yet known whether it leads positively or negatively.
- 2. Determining the DF value
- 3. Df = Number of samples independent variable 1 = 100 – 1 – 1 = 98 So the value of the t-table = 1.984

CONCLUSION

Based on the in-depth analysis that has been carried out in this study, it can be concluded that accounting digitization improves the financial performance of MSMEs in Cirebo City. The results show that the implementation of digital accounting systems in MSMEs significantly improves operational efficiency, especially in terms of reducing the amount of time needed to process financial transactions and reducing the number of errors made manually. The adoption of digital technology in accounting practices has been shown to improve the accuracy of financial reporting, this can help with better business planning and strategic decision-making. In the era of digital economy, digital transformation is not only changing the way businesses manage their finances, but also opening up new opportunities to improve the competitiveness and sustainability of their businesses.

In addition, this study found several challenges faced by MSMEs in the digital transformation process, including limited human resources with technological capabilities, financial constraints for digital infrastructure investment, and resistance to changes from traditional systems. However, the results of the analysis show that the long-term benefits of using accounting digitization far outweigh the initial investment required. MSMEs that have successfully overcome this problem show consistent improvement in financial performance, with indicators of increased turnover, profit margins, and cash flow stability.

These findings make a practical contribution to the development of MSMEs in Cirebon City by providing empirical evidence on the positive impact of accounting digitization on financial performance. Meanwhile, from a theoretical point of view, this research is in line with the

Resource Based View (RBV), which places digital capabilities as a strategic resource that can provide a competitive advantage. Digitization of accounting is not only a substitution of manual tools, but part of a systematic restructuring that strengthens the financial foundation of MSMEs. These findings can be the basis for local governments to make policies that support the digital transformation of MSMEs, especially through training programs and technology subsidies. The results of this research can be a strategic consideration in adopting digital technology to increase business competitiveness and sustainability.

Although this study shows a significant relationship between the transformation of accounting digitalization and the improvement of the financial performance of MSMEs in Cirebon City, there are several limitations that need to be considered. First, this study uses a quantitative approach through the dissemination of questionnaires, this scientifically limits the analysis to subjective, contextual, and socio-cultural variables that may affect the application of accounting digitization. Second, the scope of the research is limited to the Cirebon City area, so the results cannot be generalized to all regions of Indonesia. This is because digital infrastructure, the characteristics of business actors, and the level of technological literacy vary in each region. Therefore, the results and implications of this study should be used taking into account the limitations of its scope and methodology. It is

hoped that this limitation will be the basis for future researchers to develop quantitative and qualitative approaches, in order to produce a more comprehensive understanding of the impact of digitalization in accounting practice.

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