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The Role of Digital Transformation in Accounting Systems for the Transparency and Accountability of MSME Financial Statements

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Keywords:

Digital Transformation, Accounting Systems, MSMEs, Transparency, Financial Statement Accountability.

ABSTRACT

This study aims to analyze the role of digital transformation in the accounting system on the transparency and accountability of financial statements in *Micro, Small, and Medium Enterprises (MSMEs)*. Digital transformation in this context includes the implementation of cloud-based record-keeping, transaction automation, and accounting software that enables real-time monitoring and accurate financial reporting. The research employed a quantitative approach using a survey method. Data were collected from 150 MSME owners and finance personnel through structured questionnaires. The validity and reliability of the instrument were tested before analysis. Structural Equation Modeling (SEM) using SmartPLS was applied to examine the relationship between digital transformation and financial transparency and accountability. The results indicate that digital transformation has a significant positive effect on transparency, with a path coefficient of 0.876, and on accountability, with a path coefficient of 0.737. The R-square values of 76.7% for transparency and 54.4% for accountability demonstrate a strong contribution of digital transformation in improving financial governance. Further analysis also reveals that the use of automated accounting applications significantly reduces errors and enhances the timely reporting of financial data. This research provides practical implications for MSMEs, highlighting that adopting digital accounting systems not only strengthens transparency and accountability but also supports strategic decision-making, compliance with regulations, and overall business sustainability.

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INTRODUCTION

Digital transformation has become a topic of discussion in the world as it affects almost all aspects of life, one of which is the economic and business sectors. Economic developments, industry dynamics, and competition affect a company's financial success (Abed et al., 2023; Xia et al., 2019; Yin, 2023). Businesses that embrace digitalization and implement it well have the potential to be better positioned to gain a competitive advantage and adapt to changing market conditions (Aljawazneh, 2024; Alkhawaldah et al., 2023; Chatchawanchanchanakij & Arphonpisan, 2021; Muneer, 2019; Pushpasiri, 2020). Therefore, the accounting system is

the main tool in presenting financial information that needs to adapt to the current conditions of the business world.

Micro, Small, and Medium Enterprises (MSMEs) have a strategic role in Indonesia's economic development. Based on data from the Coordinating Ministry for Economic Affairs of the Republic of Indonesia through a press release on January 30, 2025, it was conveyed that MSMEs have a role, namely as the backbone that contributes more than 60% of GDP (*Gross Domestic Product*) and absorbs almost 97% of the workforce. To date, the number of MSMEs has reached more than 64 million business units. One of the challenges faced by MSME business actors is weak financial recording and reporting. Many MSMEs still use manual methods or makeshift recording, resulting in reports that are less transparent and difficult to account for. This has an impact on the difficulty of accessing financing, participating in government programs, and the low level of investor or business partner confidence.

With the development of the internet and the advancement of information technology, the end of the 20th century and the beginning of the 21st century marked the beginning of a digital era that significantly changed accounting practices (Dr. S. Oviya et al., 2024). Various solutions have been developed to address these problems. Digital developments lay the foundation for information technology advances that continue to shape and redefine accounting practices in the modern era (Prasetianingrum & Sonjaya, 2024). According to Anas et al., 2023, information systems have the primary benefits of low cost of storage and delivery of information, so the implementation of a digital-based accounting system is considered a strategic solution to overcome these various problems (Lubis, 2025).

Digital transformation in the accounting system is an efficient alternative that can simplify the processes of financial recording and reporting. Cloud-based accounting applications, financial system integration, and other digital platforms are increasingly being used by MSMEs in an effort to improve their financial management. The use of information technology in the accounting process not only improves work efficiency but also encourages openness and accountability in financial reporting. Digital transformation is not only a change in work tools but also a change in culture and way of thinking in managing a business. MSME business actors who dare to carry out digital transformation are believed to be more responsive to information needs, more adaptive to market changes, and more accountable in accounting for their financial performance.

In a study conducted by Novida, 2025, it was stated that according to Kraus et al., 2021, digitalization is a process of transformation from manual or conventional systems to digital technology-based systems to improve efficiency, accuracy, and accessibility in various business and operational aspects. Digitization of accounting systems has great potential in increasing transparency and accountability through automating the recording process, reducing manual errors, and storing data securely. Digital systems provide a strong foundation for MSMEs to prepare financial statements in accordance with accounting standards. Transparency in financial statements refers to the disclosure of financial information that can be accessed by interested parties clearly and correctly.

The implementation of a digital-based accounting system has a significant positive influence on the efficiency and transparency of MSME financial management (Lubis, 2025). Research conducted by Mujahidah et al., 2025, shows that digital transformation in accountability accounting brings a variety of challenges that need to be addressed, including

skills gaps, complexity of system integration, data security issues, and organizational resistance. In Indonesia, in-depth studies on the direct impact of digital transformation on the transparency and accountability of MSMEs are still limited, especially at the micro and small scales.

With the description above, this study aims to analyze the role of digital transformation in the accounting system on the transparency and accountability of MSME financial statements. This research is expected to contribute to the scientific literature as well as provide practical implications for MSME actors, policy makers, and developers of accounting technology systems.

Digital transformation enables the preparation of reports in real time, reduction of manual recording errors, and data openness. The use of digitalization will ultimately lead to efficiency and transparency (Adhi Nugroho et al., 2024). According to research by Abbasova et al., 2022, the level of transparency of accounting information impacts various areas of the company's activities. It is believed that financial report transparency is needed by business owners, governments, and investors.

H1: Digital transformation in the accounting system has a positive effect on the transparency of MSME financial statements.

In the context of accounting, digitalization allows for the automation of transaction recording, financial system integration, and deeper data analysis for faster and data-driven decision-making (Novida, 2025). Automation improves the quality of information systems by increasing system assistance (Knauer et al., 2020). Data that is recorded automatically has a more accurate transaction history and is easy to trace so that it can be accounted for.

H2: Digital transformation in the accounting system has a positive and significant effect on the accountability of MSME financial statements.

METHOD

This study uses a quantitative approach with a survey method to collect primary data (Lubis, 2025). The quantitative method was chosen because it is based on the philosophy of positivism, researching certain populations or samples with research instruments and analyzing data statistically to test the hypotheses that have been established (Hanifah, 2020). The research design used is causal-comparative with a survey approach, aiming to examine the influence of digital transformation in accounting systems (independent variables) on transparency (Y1) and accountability of financial statements (Y2) in *MSMEs*. The data were collected through a closed questionnaire measured on a five-point Likert scale, distributed to 42 *MSME* actors who met the criteria: active for at least two years, have financial report records, and use or are adopting a digital accounting system. The research instruments include indicators of the use of accounting software, cloud-based record-keeping, and application automation for independent variables; information disclosure and transparency of financial statements for the first dependent variable; as well as accountability, timeliness of reporting, and ease of verification for the second dependent variable. The data obtained were analyzed using SmartPLS through instrument validity and reliability tests, descriptive analysis, and multiple regression analysis to determine the influence between variables (Pallant, 2020).

RESULTS AND DISCUSSION

Validity

Table 1 below shows the results of the validity test of outer loadings carried out on 3 different constructs, namely, financial statement accountability, digital transformation, and financial statement transparency. The values in the table below show the correlation between each construct and the set of indicators or measures.

Table 1. Outer Loadings)

LK Accountability	Digital Transformation	LK Transparency
X1.2		0.860
X1.3		0.926
X1.4		0.903
X1.5		0.889
Y1.1		0.933
Y1.2		0.944
Y1.3		0.942
Y1.4		0.880
Y1.5		0.831
Y2.1	0.987	
Y2.2	0.965	
Y2.3	0.984	
Y2.4	0.982	
Y2.5	0.971	
X1.1		0.820

Based on table 1 above, it is explained that the independent variable of financial statement accountability (X1) has a loading value at X1.1 of 0.820, a loading value at X1.2 of 0.860, a loading value at X1.3 of 0.926, a loading value of X1.4 of 0.903 and an X1.5 value of 0.889, which shows that all indicators have a strong contribution to the construction of financial statement accountability. The indicator with the highest loading value is X1.3 at 0.926, while the lowest is X1.1 at 0.820.

Furthermore, in the dependent variable of financial statement transparency (Y1), it has a loading value of Y1.1 of 0.933, a loading value of Y1.2 of 0.944, a loading value of Y1.3 of 0.942, a loading value of Y1.4 of 0.880, and a value of Y1.5 of 0.831, which shows that this value is high. The highest values are found at Y1.2 (0.944) and the lowest at Y1.5 (0.831), all of which still show good construct validity.

Meanwhile, in the dependent variable of digital transformation (Y2), it has a loading value of Y2.2 of 0.965, a loading value of Y2.3 of 0.984, a loading value of Y2.4 of 0.982, and a value of Y2.5 of 0.971, which shows that the loading value is very high, This shows that these indicators are very representative of the construct of digital transformation. The highest value was found in Y2.1 at 0.987 and the lowest value at Y2.2 at 0.965, both of which are still statistically very strong.

Overall, the three variables in this study had a loading value above 0.7, which means that these indicators are valid in representing each variable. So it can be concluded that this supports the strength of the measurement model used in this study.

Reliability

Table 2 below shows the results of the reliability test conducted to evaluate the consistency and stability of 3 different constructs, namely financial statement accountability, digital transformation, and financial statement transparency. This test measures two reliability indicators, namely composite reliability and the average of extracted variants (AVE).

Table 2. Construct Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average Variance Extracted (AVE)
LK Accountability	0.989	0.989	0.991	0.957
Digital Transformation	0.929	0.954	0.945	0.775
LK Transparency	0.946	0.950	0.959	0.823

Based on the results of the reliability and validity test of the construct shown in table 2 above, it shows that the value of the entire construct is very good and meets the criteria suggested in the analysis of the measurement model. Cronbach's Alpha value for the three constructs, namely financial statement accountability is 0.989, digital transformation is 0.929, and financial statement transparency is 0.946. All three values were above the minimum threshold of 0.7 which indicates that the measurement instrument has a very high internal consistency.

Furthermore, the composite reliability values (both rho_A and rho_C) for the entire construct also showed very strong results, being above the value of 0.9. In particular, the financial statement accountability construct has a rho_A value of 0.989 and a rho_C value of and 0.991, this confirms that the indicators in this construct are very appropriate in measuring the level of data reliability.

In terms of convergent validity, shown through the Average Variance Extracted (AVE) value, all constructs show excellent validity with AVE values above 0.5. The financial statement accountability construct has the highest AVE of 0.957, followed by financial statement transparency of 0.823, and digital transformation of 0.775. This indicates that most of the variance of these construct indicators can be explained by the latent construct being measured, indicating a high degree of convergent validity.

Hypothesis Testing

The purpose of presenting this diagram is to provide a clear and concise picture of the relationships between variables.

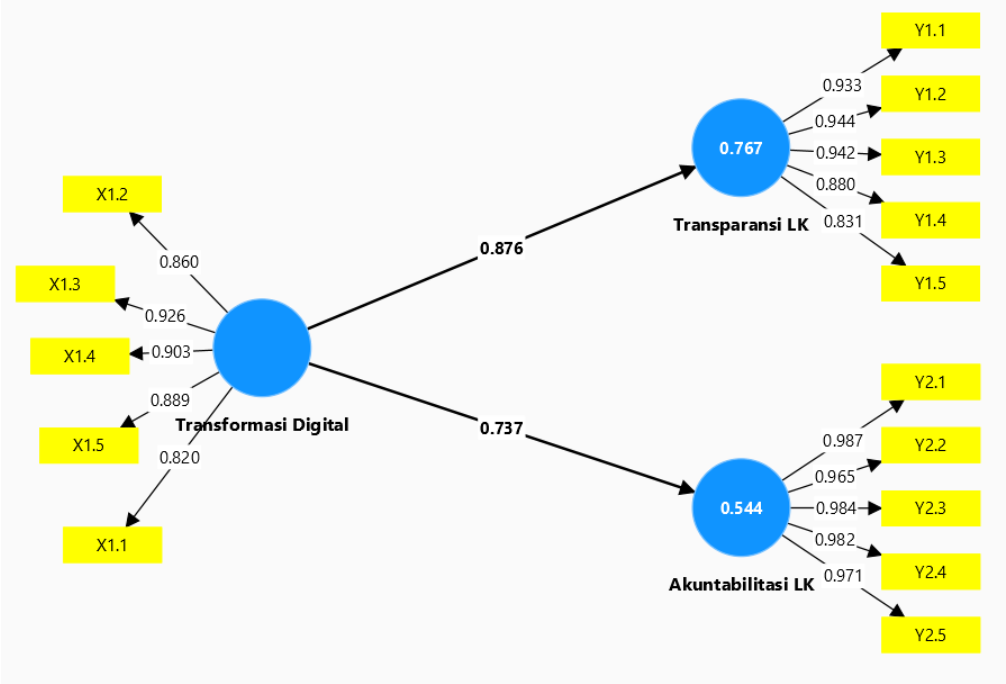


Figure 1. Relationships Between Variables

Figure 1 above is the result of Structural Equation Modeling (SEM) based on Partial Least Squares (PLS) model data, which shows the relationship between three variables, namely digital transformation, financial report transparency, and financial report accountability.

Digital transformation plays a role as an independent variable that affects two dependent variables, namely the transparency of financial statements and the accountability of financial statements.

Based on the image above, it shows the relationship between digital transformation and financial statement transparency of 0.876, which means that there is a positive influence between digital transformation and financial statement transparency. Furthermore, the image above shows the relationship between digital transformation and financial statement accountability of 0.737 which means that there is a positive influence between digital transformation and financial statement accountability.

Overall, the picture shows that digitalization plays a major role in increasing the transparency and accountability of financial statements. This is in line with research conducted by Huy & Phuc, 2025 and Adhi Nugroho et al., 2024 which states that the application of digital information in an organization's accounting information system for efficient and effective decision-making and the use of digitalization will ultimately lead to efficiency and transparency.

R-Square

The R-Square table below is a table used in regression analysis to show how well the regression model explains the variation of dependent variables based on their independent variables.

Tabel 3. R-Square

	R-square	Adjusted R-square
LK Accountability	0.544	0.539
LK Transparency	0.767	0.764

Based on the table above, the value of R-square and Adjusted R-square gives an idea of how much independent variables are able to explain dependent variables. For the dependent variable of financial statement accountability, the R-square value of 0.544 indicates that 54.4% of the variation in financial statement accountability can be explained by the model used, while the remaining 45.6% is explained by factors other than the model. The Adjusted R-square value of 0.539 is slightly lower, which reflects the adjustment to the number of free variables in the model, and shows that the model remains fairly stable and does not overfit the data.

In the dependent variable of financial statement transparency, the R-square value obtained of 0.767 indicates that the model is able to explain 76.7% of the variation in the transparency of financial statements, which means that the model has a fairly high clarity power over the variable. The Adjusted R-square value of 0.764 reinforces this interpretation, which suggests that despite the adjustment to the number of predictors in the model, the model's predictive capabilities remain excellent. Overall, the regression model has a stronger performance in explaining the transparency of financial statements than the accountability of financial statements, based on higher R-square and Adjusted R-square values.

Path Analysis

Table 4 Specific Indirect Impacts

	Path coefficient
Digital Transformation -> LK Accountability	0.737
Digital Transformation -> LK Transparency	0.876

Based on the table above, it is explained about the relationship between digital transformation and two dependent variables in financial statement management, namely financial statement accountability and financial report transparency, showing a high path coefficient, which is 0.737 and 0.876, respectively. The results of this study show that digital transformation has a positive effect on the accountability and transparency of financial statements. In agency theory, it is explained that the relationship between management (agent) and owner (principal) often experiences problems in obtaining information that causes conflicts of interest. Digital transformation plays a role in reducing these information disparities through the provision of an accurate, real-time, and auditable financial reporting system. The path coefficient of 0.737, indicates that digitalization contributes to increasing the accountability of agents in accounting for resource management to principals, in accordance with the principles of transparency and integrity.

Meanwhile, from the perspective of stakeholder theory, organizations have responsibilities not only to capital owners, but also to various interested parties such as employees, creditors, the government, and the community. Digital transformation, which resulted in higher transparency of 0.876, shows that information technology is able to meet the information needs of stakeholders in a more transparent manner so as to strengthen public trust in organizations and support the achievement of sustainable goals. Thus, the

implementation of digital transformation in the accounting system not only meets the demands of efficiency, but also supports the principles of good corporate governance as emphasized by the two theories and this is in line with research conducted by Paula Monteiro et al., 2022 and Anas et al., 2023

CONCLUSION

Based on the results of this study, it can be concluded that digital transformation in the accounting system plays a significant role in enhancing the transparency and accountability of financial statements in *MSMEs*. The implementation of digital technologies such as cloud-based record-keeping, transaction automation, and accounting applications has been proven to simplify the recording process, minimize errors, and enable real-time, more accountable financial reporting. The analysis shows that digital transformation has a positive effect, with a coefficient of 0.876 on financial statement transparency and 0.737 on accountability, with R-square values of 76.7% for transparency and 54.4% for accountability, demonstrating a strong contribution of digital transformation to both variables. These findings emphasize the importance of adopting digital technologies in *MSMEs* to adhere to good governance principles, increase stakeholder trust, and strengthen market competitiveness. However, this study has limitations, including the small number of respondents (42 *MSME* business actors), the quantitative survey approach that may be influenced by perception bias, and the focus solely on transparency and accountability without considering other mediating or moderating variables such as digital literacy, technological capacity, or organizational culture. Therefore, the findings should be interpreted with caution and can serve as a foundation for further research with a broader scope and more in-depth analysis.

REFERENCES

Abbasova, S., Aliyeva, M., & Huseynova, L. (2022). Accounting information transparency and business performance: A case of G7 construction companies. *Problems and Perspectives in Management, 20*(4), 518–531. https://doi.org/10.21511/ppm.20(4).2022.39

Abed, R. A., Kareem, A. H., Jabbar, A. K., Zwaid, J. G., & Hasan, H. F. (2023). The implementation of accounting information systems on the stock return and financial performance based on information technology (IT). *Eastern-European Journal of Enterprise Technologies, 5*(13(125)). https://doi.org/10.15587/1729-4061.2023.289424

Adhi Nugroho, M., Dian Kusumawati, F., & Putri Malinda Buchori, W. (2024). Peran digitalisasi akuntansi dalam efisiensi dan transparansi. *Yudishtira Journal: Indonesian Journal of Finance and Strategy Inside.* https://doi.org/10.53363/yud.v4i1.86

Aljawazneh, B. E. (2024). The mediating role of supply chain digitization in the relationship between supply chain agility and operational performance. *Uncertain Supply Chain Management, 12*(2). https://doi.org/10.5267/j.uscm.2024.1.017

Alkhawaldah, R. A., Alshalabi, F. S., Alshawabkeh, Z. A. E., Alsha'ar, H. Y. S., Alzoubi, M. Y., Alshawabkeh, R. O., & Al Dweiri, M. A. M. (2023). The mediating role of organizational capabilities on the relationship between lean supply chain and operational performance. *Uncertain Supply Chain Management, 11*(1). https://doi.org/10.5267/j.uscm.2022.12.005

Anas, M., Forijati, R., & Muchson, M. (2023). Analyzing information system quality and financial information quality: An evidence of local government organizations in Indonesia. *Qubahan Academic Journal, 3*(4), 262–276. https://doi.org/10.58429/qaj.v3n4a179

Chatchawanchanchanakij, P., & Arphonpisan, P. (2021). The mediating role of absorptive capacity in the relationship between the supply chain agility and firm performance. *Psychology and Education, 58*(2).

Huy, P. Q., & Phuc, V. K. (2025). Does effectiveness of digital accounting system intensify sustainable business model innovation with mediating role of digital business ecosystem? *Journal of Innovation and Entrepreneurship, 14*(1), 3. https://doi.org/10.1186/s13731-024-00444-x

Knauer, T., Nikiforow, N., & Wagener, S. (2020). Determinants of information system quality and data quality in management accounting. *Journal of Management Control, 31*(1–2), 97–121. https://doi.org/10.1007/s00187-020-00296-y

Lubis, N. (2025). Pengaruh penerapan sistem akuntansi berbasis digital terhadap efisiensi dan transparansi pengelolaan keuangan UMKM di Kota Langsa. *Journal, 6.* https://doi.org/10.32696/jaapi.v6i1.4122

Mujahidah, N., Raudhah, P. N., Gusman, R. R. A., & Nurullah, A. (2025). Responsibility accounting di era digital: Tantangan dan peluang dalam manajemen modern. *Jurnal Semesta Ilmu Manajemen dan Ekonomi, 1*(4), 672–689. https://doi.org/10.71417/j-sime.v1i4.410

Muneer, S. (2019). The mediating role of supply chain agility in the relationship between absorptive capacity and financial performance. *Pacific Business Review International, 12*(2).

Novida, D. R. (2025). Evolusi sistem informasi akuntansi dalam era digital: Tinjauan literatur tentang tren, tantangan, dan peluang. *Jurnal Minfo Polgan, 14*(1), 77–85. https://doi.org/10.33395/jmp.v14i1.14628

Oviya, S., Sharadha, N., Bhuvaneswari, E., & Vijayalakshmi, S. (2024). The impact of automation and AI in revolutionising traditional accounting methods. *Journal of Informatics Education and Research.* https://doi.org/10.52783/jier.v4i2.1001

Pallant, J. (2020). *SPSS survival manual: A step by step guide to data analysis using IBM SPSS.* Routledge.

Paula Monteiro, A., Vale, J., Leite, E., Lis, M., & Kurowska-Pysz, J. (2022). The impact of information systems and non-financial information on company success. *International Journal of Accounting Information Systems, 45,* 100557. https://doi.org/10.1016/j.accinf.2022.100557

Prasetianingrum, S., & Sonjaya, Y. (2024). The evolution of digital accounting and accounting information systems in the modern business landscape. *Advances in Applied Accounting Research, 2*(1), 39–53. https://doi.org/10.60079/aaar.v2i1.165

Pushpasiri, G. T. T. K. (2020). IT capabilities on supply chain performance: Mediating role of supply chain agility. *International Conference on Business Research, University of Moratuwa.*

Xia, B. S., Liitiäinen, E., & De Beelde, I. (2019). Accounting conservatism, financial reporting and stock returns. *Journal of Accounting and Management Information Systems, 18*(1). https://doi.org/10.24818/jamis.2019.01001

Yin, F. (2023). Design and implementation of financial accounting system based on cloud computing technology. *Proceedings - 2023 Asia-Europe Conference on Electronics, Data Processing and Informatics, ACEDPI 2023.* https://doi.org/10.1109/ACEDPI58926.2023.00018