

Research Article

Implementation and Benefits of Digital Accounting for the Development of Creative Industry MSMEs in Surakarta City

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Abstract: This study aims to analyze the effect of digital accounting implementation on the development of micro, small, and medium enterprises (MSMEs) in the creative industry sector in Surakarta City. A quantitative approach with a cross-sectional survey design was employed. Data were collected through a closed-ended questionnaire administered to 120 MSME actors who had implemented digital accounting applications, and were analyzed using the Structural Equation Modeling–Partial Least Square (SEM-PLS) method. The findings indicate that digital accounting implementation has a significant effect on MSME development. The use of digital accounting systems has been proven to improve the efficiency of financial recording, support data-driven decision-making, and enhance both managerial capacity and market expansion. The path coefficient shows a strong positive relationship between the two variables, with a contribution of 46.8% to the variance in MSME development. These findings highlight the importance of digitalization in MSME financial governance, particularly in the innovation-driven and dynamic creative industry sector. Digital accounting serves not only as an administrative tool but also as a strategic instrument to strengthen business competitiveness and sustainability. Therefore, synergy among business actors, local government, and technology providers must be strengthened to create an inclusive and sustainable digital ecosystem.

Keywords: Creative Industry; Digital Accounting; Digital Transformation; MSMEs; SEM-PLS.

1. Introduction

The rapid development of information technology over the past two decades has driven digital transformation across various sectors, including the management of micro, small, and medium enterprises (MSMEs). Digital transformation in MSMEs, through improved financial literacy and the utilization of e-commerce, has been proven to significantly impact business performance, sustainability, and the increase of national income (Setiawan, 2023; Octavina & Rita, 2021).

In today's digital economy, implementing technology-based accounting systems has become an essential need no longer optional particularly to support transparency, efficiency, and financial accountability. This is especially relevant as MSMEs adapt to the digital ecosystem to maintain competitiveness, notably within the creative industry sector, which heavily depends on innovation, efficiency, and managerial flexibility. Because one of the key factors determining the competitiveness of MSMEs is the managerial ability of the owners or managers to adapt to and implement technological innovations amid the disruptions of the Industrial Revolution 4.0, which has fundamentally transformed the way MSMEs operate, innovate, and interact with the market, making digitalization a necessity to keep up with the developments of the globalization era (Monalisa et al., 2025; Purnomo Sidi et al., 2024; Rosyady et al., 2022).

Several previous studies have demonstrated that digital accounting enhances financial performance and business process efficiency in MSMEs. For example, previous research has

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shown that the use of digital accounting applications accelerates transaction recording and real-time financial reporting (Hayati & Muzakki, 2025; Lestari & Wibowo, 2022). Similarly, a study on MSMEs in Yogyakarta revealed that integrating digital accounting technology improves financial literacy among entrepreneurs, contributing to better business decision-making (Destrin, 2024; Nurlaela et al., 2021). Another study found a positive correlation between the use of digital accounting tools and the sustainability of creative-based MSMEs (Salsabila et al., 2024; Suryaningrum & Wardhani, 2020).

However, the literature still lacks contextual studies that explore the implementation of digital accounting in specific regions such as Surakarta City, which has significant potential in the creative industry sector. Most existing research emphasizes the technical aspects of application use, without deeply examining how digital accounting systems strategically contribute to managerial development, product innovation, and market expansion in MSMEs.

Therefore, a knowledge gap remains in understanding the comprehensive impact of digital accounting as a strategic tool for MSME development—not only from the perspective of reporting but also in terms of holistic business growth. This gap becomes the critical foundation of the present study, which aims to explore the strategic contributions and practical benefits of implementing digital accounting for the development of MSMEs in the creative industry sector of Surakarta City, emphasizing productivity, financial management, and business expansion. This re-search offers a novelty in the form of a contextual regional analysis, which is rarely addressed in previous studies, as well as an integrative approach that goes beyond the technical aspects of accounting by investigating the broader strategic transformation experienced by MSMEs following the adoption of digital financial systems.

The main objective of this study is to analyze the process of digital accounting implementation among MSMEs in the creative industry sector of Surakarta City and evaluate the tangible benefits perceived by business actors in terms of operations, decision-making, and competitiveness. It is hoped that the findings of this study can offer applicable recommendations for MSMEs, policymakers, and accounting technology providers in supporting more inclusive and sustainable digital transformation. Scientifically, this study contributes to expanding the literature on MSME digitalization in Indonesia and provides empirical evidence of the relationship between technology adoption and the development of the creative economy sector at the local level.

2. Material and Method

2.1 Research Method

This study employs a quantitative explanatory approach with a cross-sectional survey design, in which data are collected at a single point in time to provide a comprehensive picture of the implementation and benefits of digital accounting for the development of creative industry MSMEs in Surakarta City (Rachman et al., 2024; Kurniawati & Rindrayani, 2025). This design was chosen because it is suitable for explaining the relationships between variables and testing hypotheses formulated based on theoretical frameworks.

2.2 Population and Sample

The research population refers to all objects or individuals that have similar or relevant characteristics to the problem being studied (Susanto et al., 2024). Meanwhile, according to Swarjana (2022), understanding the population is crucial in research activities because the sample taken must represent that population. The population of this study consists of all MSME actors operating in the creative industry sector and domiciled or actively conducting business in the Surakarta City area.

The sampling technique used is purposive sampling. The purposive sampling technique is a method of selecting research subjects based on specific criteria or characteristics predetermined by the researcher (Kumara, 2022). The sample in this study has the following criteria:

- a. MSMEs that have used digital accounting applications for at least six months;
- b. Legally registered enterprises;
- c. Willing to complete the questionnaire in full.

The sample size was determined using Slovin's formula with a 5% margin of error or by following the minimum requirements for SEM-PLS modeling, which suggests 5–10

observations per indicator (Hair et al., 2017). Based on these considerations, a total of 120 MSME respondents were selected.

2.3 Data Collection Techniques and Instruments

Primary data were collected using a closed-ended questionnaire based on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). The Likert scale is a measurement tool used to assess a person's attitude, opinion, or perception toward a particular object or statement. Respondents are asked to indicate their level of agreement or disagreement with the given statement (Ningsih, 2019; Sugiyono, 2017).

The research instrument was developed by adapting indicators from relevant previous studies, such as digital accounting implementation indicators from Nurlaela et al. (2021) and MSME development indicators from Suryaningrum and Wardhani (2020).

The validity test results showed that all instrument items had loading factor values greater than 0.70, indicating that convergent validity was achieved. Reliability tests using Cronbach's Alpha and Composite Reliability also produced values greater than 0.70, confirming good internal consistency (Hair et al., 2017).

2.4 Data Analysis Tool

Data were analyzed using Partial Least Squares - Structural Equation Modeling (PLS-SEM) with the SmartPLS software. SEM-PLS was selected due to its suitability for exploratory research with small to medium sample sizes and non-normally distributed data (Ghozali & Latan, 2015).

The model testing involved the following stages:

- a. Measurement model (outer model) testing: to assess indicator validity and reliability;
- b. Structural model (inner model) testing: to assess the relationships among latent variables;
- c. Significance testing was conducted using the T-statistics and p-values through the bootstrapping method.

2.5 Research Model

This study's model includes two main constructs:

- a. Digital Accounting Implementation (DAI) as the independent variable, measured through dimensions such as application usage, financial record efficiency, and system integration.
- b. MSME Development (MD) as the dependent variable, represented by dimensions of managerial capacity improvement, market expansion, and business sustainability.

Conceptually, the model assumes that the higher the level of digital accounting implementation by MSME actors, the greater the development experienced by the enterprise. The relationship between variables is illustrated through causal paths tested statistically.

3. Results and Discussion

3.1 Results

Using the Structural Equation Modeling - Partial Least Squares (SEM-PLS) technique with the SmartPLS software, the analysis revealed that the Digital Accounting Implementation (DAI) variable significantly influences the Micro, Small, and Medium Enterprise (MSME) Development (MD) variable. The path coefficient was found to be 0.684, with a T-statistic of 9.322 and a p-value of 0.000, confirming a statistically significant relationship at the 95% confidence level. Additionally, the R-square (R^2) value for the MSME Development construct was 0.468, indicating that approximately 46.8% of the variance in MSME development is accounted for by the implementation of digital accounting systems.

Descriptively, the majority of respondents reported having used mobile or desktop-based digital accounting applications featuring automated transaction records, categorized expenditure management, and instant profit and loss reporting. Most MSME actors acknowledged improvements in efficiency and decision-making after using such systems.

3.2 Discussion

These findings support previous research which suggested that accounting digitalization positively contributes to MSME efficiency and business performance (Destrin, 2024; Nurlaela

et al., 2021). The use of digital accounting applications not only accelerates the preparation of financial reports but also simplifies the process for business actors to monitor cash flow, manage expenditures, and devise data-driven business strategies.

This aligns with the study conducted by Hayati and Muzakki (2025) as well as Lestari and Wibowo (2022), who stated that the presence of digital accounting systems can enhance MSME resilience in facing market dynamics and shifting consumer behavior. The implementation of integrated digital systems has acted as a catalyst for MSMEs to improve financial management professionalism and access broader opportunities for expansion, including collaborations with banks and investors.

In terms of MSME development, the use of digital accounting has encouraged business actors to manage daily operations more systematically. The availability of structured financial reports that can be accessed anytime provides a strong foundation for evaluation and planning processes. This is reinforced by findings from Salsabila et al. (2024) and Suryaningrum and Wardhani (2020), who revealed that MSME actors with knowledge of and access to accounting technology tend to be more adaptive and growth-oriented.

Therefore, it can be concluded that digital accounting implementation is not merely an administrative tool but a strategic instrument for strengthening the business management foundation of micro and small enterprises, especially within the creative industry sector, which demands agility in innovation and resource management.

4. Conclusion

This study demonstrates that the implementation of digital accounting has a significant effect on the development of MSMEs in the creative industry sector in Surakarta City. Quantitative analysis using the SEM-PLS approach confirms that the adoption of digital accounting systems positively contributes to managerial capacity enhancement, operational efficiency, and the ability of business actors to expand and make data-driven decisions.

In general, digital accounting not only functions as a financial administrative tool but also serves as a strategic instrument for strengthening the management foundation of micro and small enterprises. These findings affirm that the digitalization of financial systems is a crucial step in supporting MSME transformation toward a more professional, adaptive, and sustainable direction, particularly in the creative industry sector, which is highly dynamic and innovation-driven. Based on the research findings, the following recommendations are proposed:

- a. For MSME actors, it is advisable to continue utilizing digital accounting technologies to improve financial record-keeping systems and strengthen rational and measurable business decision-making.
- b. For local government agencies, particularly the Office of Cooperatives and MSMEs of Surakarta City, it is expected that continuous training and mentoring programs will be provided regarding the use of digital accounting applications and their integration into MSME business systems.
- c. For technology developers and digital accounting service providers, it is important to offer solutions that are not only user-friendly but also tailored to the specific characteristics of micro and small enterprises in terms of features, pricing, and technical support.
- d. For future researchers, it is recommended to conduct further studies by incorporating moderating or mediating variables such as digital literacy or technological readiness to provide a more comprehensive understanding of the factors influencing the effectiveness of digital accounting implementation in the MSME context.

With strong synergy between business actors, government, and technology providers, it is expected that the digitalization ecosystem for MSMEs can grow inclusively and make a tangible contribution to local and national economic development.

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