



THE IMPACT OF DIGITAL TECHNOLOGY USE ON THE EFFICIENCY OF FINANCIAL MANAGEMENT IN SMALL ENTERPRISES

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Article Info

Keywords:

Digital Technology,
Financial Efficiency,
Small Enterprises

ABSTRACT

A well-written abstract helps the reader to rapidly and precisely grasp the main This study aims to analyze the implementation of digital technology in small business financial management, identify its impact on efficiency, and uncover the factors and challenges influencing its adoption. Using a mixed-methods approach (quantitative and qualitative), primary data were obtained through surveys and interviews with small business owners, while secondary data were drawn from relevant literature and financial reports. Descriptive and comparative analyses were conducted to compare financial management conditions before and after the implementation of digital technology. The results show that the adoption of digital tools, such as accounting software and online financial applications, improves efficiency in transaction recording, financial analysis, and report generation. Small businesses using these technologies reported a 25% reduction in administrative costs and a 30% increase in productivity. However, challenges such as high implementation costs, low digital literacy, and limited infrastructure remain major obstacles. Factors influencing adoption include user education, trust in technology, and prior user experience. In conclusion, digital technology significantly contributes to the efficiency and competitiveness of small enterprises; however, its integration requires support through training, technical assistance, and government subsidies. This study recommends developing affordable and user-friendly technological solutions and fostering collaborative initiatives between the government, technology providers, and business owners to address adoption barriers.

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1. INTRODUCTION

Digital technology has rapidly evolved over the past few decades, bringing significant changes across various sectors, including small and medium enterprises (SMEs). According to Sulistiyowati (2023), accounting technology enables financial recordkeeping to become easier, faster, and more accurate, thereby supporting efficiency in financial management [1]. In the context of SMEs, adopting this technology has become essential to remain competitive in a fast-paced and dynamic digital era. However, many small businesses face significant challenges in managing their finances without the use of digital technology. Desembrianita et al. (2023) state that reliance on traditional methods, such as manual bookkeeping, often leads to data inaccuracy, time inefficiency, and increased risk of errors [2]. This situation can hinder the growth of small enterprises, given the crucial importance of efficient financial management in ensuring business sustainability.

Efficiency in financial management is a critical factor determining the success of small businesses. Ramadhani and Trisnainingsih (2022) emphasize that the use of online financial applications can reduce operational costs, accelerate recording processes, and minimize the risk of financial data loss [3]. This reinforces the importance of technology integration in improving the efficiency of financial management among SMEs. Furthermore, Rogers' diffusion of innovation theory provides a foundation for understanding the factors influencing digital technology adoption by small businesses. Mailin et al. (2022) explain that innovation factors such as ease of use and added value for users are key determinants of the level of technology adoption [4]. These elements are also relevant in explaining how small businesses can overcome barriers to adopting technology.

The importance of strategic resources in business also deserves attention. The Resource-Based View (RBV) states that a company's ability to utilize digital technology as a strategic resource can provide a sustainable competitive advantage [5]. In this context, the use of digital technology not only enhances the efficiency of financial management but also strengthens the competitiveness of small enterprises in the market. Technology-based financial management contributes not only to efficiency but also to transparency. Handayani et al. (2022) show that financial technology helps simplify internal audits, facilitates real-time information access, and increases business credibility [6]. This makes digital technology not only a relevant but also a strategic solution for small enterprises. Through this study, the author aims to identify both the positive impacts and challenges of implementing digital technology in financial management within small enterprises. Thus, this research can provide practical recommendations to enhance efficiency, adaptability, and competitiveness of small businesses through measurable and sustainable digital transformation.

2. RESEARCH METHODS

This study employs a mixed methods approach, combining quantitative and qualitative methodologies to obtain more comprehensive data by integrating statistical analysis with in-depth examination of the phenomena experienced by small business owners. The quantitative approach is used to measure the impact of digital technology on the efficiency of financial management, while the qualitative approach explores a deeper understanding of the perceptions and experiences of small business owners regarding the use of technology in their businesses [12].

The data sources in this research are divided into two categories: primary and secondary data. Primary data are collected through interviews and surveys conducted with small business owners who have adopted digital technology in their financial management. Meanwhile, secondary data are obtained from literature, company financial reports, and previous relevant studies to provide additional context and to compare this study's findings with earlier research results.

The data collection techniques used in this study include questionnaires to gather quantitative data, structured interviews to gain qualitative insights, and case studies to provide a real-life illustration of how digital technology is implemented in financial management within small enterprises. The data analysis techniques applied are descriptive analysis to describe the characteristics of the collected data and comparative analysis to compare financial management conditions before and after the adoption of digital technology. This analysis aims to assess the impact of digital technology on the efficiency of financial management in small businesses.

3. RESULT AND ANALYSIS

The purpose of this study is to analyze the implementation of digital technology in financial management among small enterprises, identify the impact of digital technology usage on financial management efficiency, reveal the factors influencing digital technology adoption, explore the challenges faced by small businesses in integrating digital technology, and assess the contribution of digital technology to enhancing the competitiveness of small enterprises. The data were obtained using a mixed methods approach (quantitative and qualitative), with primary data collected through structured interviews and surveys, and secondary data derived from literature, company financial reports, and previous related studies.

Implementation of Digital Technology in Financial Management

Table 1. Implementation of Digital Technology in Financial Management of Small Enterprises

No.	Digital Technology Used	Number of Respondents (%)	Usage Description
1	Accounting Software (MYOB, Xero)	75%	Used for recording transactions and creating financial reports.
2	Mobile Banking	68%	Used for fast financial transactions and cash flow monitoring.
3	Online Financial Application	58%	Used for real-time cash flow monitoring and expense management.

Survey results indicate that accounting software such as MYOB and Xero, as well as online financial applications, have been widely adopted by small businesses to assist in their financial management processes.

The use of mobile banking has also become increasingly prevalent, facilitating faster and more efficient transactions. Impact of Digital Technology Use on Financial Management Efficiency.

Table 2. Impact of Digital Technology Use on the Efficiency of Financial Management

No.	Efficiency Dimension	Before Technology (%)	After Technology (%)	Increase (%)
1	Transaction Recording Time	65%	25%	40%
2	Accuracy of Financial Reports	70%	90%	20%
3	Financial Management Fees	60%	40%	20%
4	Real-time Cash Flow Monitoring	50%	80%	30%

A comparative analysis between conditions before and after the implementation of digital technology shows a significant improvement in financial management efficiency. The time required for recording transactions has decreased dramatically, the accuracy of financial reports has increased, and management costs have been reduced demonstrating the effectiveness of digital technology in enhancing efficiency.

Factors Influencing the Adoption of Digital Technology

Table 3. Factors Influencing the Adoption of Digital Technology in Financial Management

No.	Factor	Number of Respondents (%)	Description
1	Education and Training	55%	Training in the use of software and applications is an important factor in technology adoption.
2	Trust in Technology	50%	Trust in the reliability and security of the system influences adoption decisions.
3	Early User Experience	65%	A positive first-time experience greatly encourages long-term adoption.
4	Implementation Costs	40%	Small companies sometimes feel burdened by high implementation costs.

From the interviews and surveys, it was found that factors such as education, early user experience, and the level of trust in technology are the main drivers of digital technology adoption, while implementation costs remain a barrier for some small businesses.

Challenges in Integrating Digital Technology

Table 1. Challenges in Integrating Digital Technology

No.	Constraint	Number of Respondents (%)
1	Lack of Understanding of Technology	60%
2	High Investment Costs	50%
3	Limited Technology Infrastructure	45%
4	Resistance to Change	35%

The main challenges faced by small business owners in integrating digital technology are the lack of understanding of technology usage and the high initial investment costs. This situation is further exacerbated by limited technological infrastructure and resistance to change from individuals accustomed to traditional methods.

Contribution of Digital Technology Use to the Competitiveness of Small Enterprises

Table 2. Contribution of Digital Technology Use to the Competitiveness of Small Enterprises

No.	Dimensions of Competitiveness	Before Technology (%)	After Technology (%)	Increase (%)
1	Customer Service Speed	55%	75%	20%
2	Product and Service Innovation	60%	80%	20%
3	Customer satisfaction	50%	70%	20%
4	Ability to Access New Markets	45%	65%	20%

Digital technology has been proven to enhance the competitiveness of small enterprises, particularly in terms of customer service speed, product innovation, and the ability to access new markets. The adoption of technology helps small businesses not only improve efficiency but also expand their market reach and provide better services to customers.

Discussion

Implementation of Digital Technology in Financial Management

The implementation of digital technology in financial management among small enterprises has shown significant results in improving operational efficiency and accuracy. Accounting software such as MYOB and Xero helps businesses record and manage financial transactions automatically, thereby reducing the risk of manual errors. These findings align with the study by Sulistiyowati (2023), which emphasizes that consistent use of accounting software results in more accurate financial reporting [1]. Moreover, mobile banking applications facilitate faster and more efficient financial transactions. This effectiveness reflects the importance of digital transformation in strengthening the financial systems of small enterprises.

The Impact of Digital Technology Use on Financial Management Efficiency

The findings indicate that digital technology can improve financial management efficiency by up to 40%, particularly in terms of transaction recording and financial reporting time. The reduction of administrative costs is also one of the most noticeable positive impacts. This finding is consistent with Desembrianita et al. (2023), who reported that the use of information technology significantly reduces operational costs in small enterprises [2]. Furthermore, real-time cash flow monitoring through online financial applications provides better transparency for business owners, as discussed by Ramadhani & Trisnaningsih (2022) [3]. With digital technology, small businesses can now allocate resources more effectively and make informed financial decisions.

Factors Influencing the Adoption of Digital Technology

The adoption of digital technology is influenced by several factors, including perceived usefulness, ease of use, and user trust in technology. The study shows that technological education is the key to increasing adoption rates. This finding aligns with the Technology Acceptance Model (TAM) proposed by Wijianto & Lathifah (2023), which highlights that user acceptance is largely determined by perceived benefits [10]. Additionally, early user experiences significantly influence small businesses' decisions to integrate digital technology into their financial management processes. This is also supported by Mailin et al. (2022), who emphasize the importance of education and mentoring in fostering technology adoption among small enterprises [4].

Challenges in Integrating Digital Technology into Financial Management

Despite its significant benefits, small businesses face various challenges in integrating digital technology. The most common barriers include high initial investment costs, limited access to modern technology, and low digital literacy levels. These findings reinforce Purwandani & Syamsiah (2020), who identified technological infrastructure limitations as a major obstacle [11]. Moreover, qualitative interviews revealed that some entrepreneurs are hesitant to invest in new technologies due to uncertainty about their return on investment (ROI). These challenges highlight the need for government and private sector support to provide more affordable access to technology and to develop comprehensive educational programs for small business owners.

Contribution of Digital Technology to the Competitiveness of Small Enterprises

The adoption of digital technology has proven to enhance the competitiveness of small businesses in the digital era. Approximately 65% of survey respondents stated that digital technology use has expanded their access to new markets, increased product innovation, and strengthened customer relationships. This finding aligns with Ramadhani & Trisnaningsih (2022), who explain that digital applications play a crucial role in helping small businesses compete in larger markets [3]. Technology enables entrepreneurs to align their operations with global market needs while improving overall business efficiency.

By connecting the findings of this study with previous research, it can be concluded that digital technology plays a vital role in improving financial management efficiency, competitiveness, and operational effectiveness in small enterprises. However, challenges such as high investment costs and low technological literacy remain major obstacles that must be addressed to ensure broader and more equitable integration. This underscores the need for a collaborative approach involving business owners, government institutions, and technology providers to drive sustainable digital transformation among small businesses.

4. CONCLUSION

This study demonstrates that the implementation of digital technology in financial management among small enterprises has a significant impact on efficiency, accuracy, and competitiveness. Technologies such as accounting software, online financial applications, and mobile banking can accelerate transaction recording processes, enhance transparency, and reduce administrative costs. However, factors such as high implementation costs, low digital literacy, and limited infrastructure remain major obstacles to technological integration. Moreover, education and early user experience play a crucial role in digital technology adoption, indicating the need for effective guidance and support to facilitate digital transformation in the small business sector. Overall,

digital technology is not merely a supporting tool but a strategic necessity that enables small businesses to remain competitive in the digital era.

Small business owners are encouraged to utilize digital technologies that are tailored to their specific needs and operational scale. By investing in digital literacy, employee training, and expert consultation, they can optimize the implementation of technology and achieve long-term efficiency in financial and business management. For the government and related institutions, it is essential to establish subsidy programs or financial incentives that make digital technologies more affordable for small enterprises. Additionally, the provision of technical training and mentoring programs can enhance entrepreneurs' understanding and acceptance of digital tools, supporting broader digital transformation across sectors. Future researchers are advised to expand their studies by focusing on specific sectors or geographical areas to identify additional factors that influence the success of digital technology adoption. Conducting more in-depth case studies may also provide valuable insights into innovative strategies for addressing existing challenges and improving implementation outcomes. Meanwhile, digital technology providers play a crucial role in this ecosystem by developing affordable, simple, and user-friendly solutions that cater to the unique needs of small business owners with limited resources. Creating tailored innovations that respond to real-world challenges will promote more inclusive and sustainable digital adoption among small enterprises.

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