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The Influence of Digitalization on Financial Management: Opportunities and Challenges for Modern Companies

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Abstract
Digitalization has changed the paradigm of modern financial management, creating opportunities to improve efficiency, transparency, and data-driven decision-making. This transformation enables the automation of financial processes through technologies such as Artificial Intelligence (AI), blockchain, and big data analytics, which improve accuracy and speed in cash flow management and risk mitigation. However, on the other hand, digitalization also brings significant challenges, including cybersecurity risks, digital financial regulatory compliance, and a digital skills gap among the workforce. This study aims to analyze the impact of digitalization on the financial management of modern companies, focusing on the opportunities and challenges that arise in its implementation. The method used in this study is a literature study that reviews various previous studies on the application of digitalization in the company's financial system. Data sources come from indexed academic journals, reports from international financial institutions, as well as relevant official documents. The results show that digitalization contributes to improving operational efficiency, reducing transaction costs, and optimizing financial risk management. However, the main challenges found are the need for stricter data security policies, compliance with global regulations related to digital finance, and the readiness of human resources to adopt new technologies. Therefore, risk mitigation strategies and strengthening digital literacy are key in ensuring the success of digital transformation in financial management.

INTRODUCTION

Digitalization has transformed almost all aspects of modern business, including financial management, which is now increasingly reliant on financial technology (fintech), artificial intelligence (AI), and big data analytics in strategic decision-making (Haralambie & Haralambie, 2025). Large companies and MSMEs are starting to adopt a digital-based financial system to improve operational efficiency, speed up transaction processes, and optimize risk management (Piot-Lepetit,

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2025). With the development of technology, digital-based financial management systems not only enable real-time processing of financial data, but also provide more accurate insights into long-term financial planning (Hamdan, Hamdan, & Anasweh, 2025).

Financial Management is the process of planning, managing, controlling, and evaluating the financial resources of an organization or individual to achieve predetermined financial goals. In the context of a company, financial management includes decision-making related to investments, funding, and dividend policies that aim to maximize the company's value and ensure business sustainability (Hasanuddin, Muslim, & Rahayu, 2024). In addition, with the development of financial technology (fintech), companies are increasingly relying on digitalization in financial management, including in cash flow planning, risk analysis, and investment strategies (Firmansyah, 2024). Therefore, an understanding of financial management is essential in facing the challenges of the modern economy, especially in improving operational efficiency and business competitiveness.

In the public sector, financial management also plays a strategic role in regional asset management and sustainable fiscal policy. Recent studies show that the use of technology in regional financial management, such as digital-based financial information systems, can increase transparency and accountability in government budget management (Sunaryo et al., 2024). In addition, the planning, organizing, implementing, and controlling (POAC) approach in public finance has proven effective in reducing budget leakage and increasing state spending efficiency (Salamah, 2024). With the increasingly complex business environment and financial regulations that continue to develop, the implementation of good financial management is a key factor in achieving economic stability, both in the private sector and government.

The application of digitalization in financial management provides various strategic advantages, such as automation of accounting processes, increased transparency of financial statements, and the ability to conduct financial analysis with high precision (Prabowo, 2025). The use of cloud computing and blockchain technology in the modern financial system further improves transaction security and reduces the potential for human error in financial records (Fedirko & Grytsyshen, 2025). However, despite its many benefits, digitalization also presents new challenges, such as cybersecurity risks, reliance on technology infrastructure, as well as a digital skills gap among the workforce (Muller, Holzner, & Zurn, 2025).

One of the biggest challenges in the digitization of financial management is data security and user privacy, considering that the increasing adoption of internet-based technologies also carries the risk of leakage of sensitive financial data (Touloupou & Themistocleous, 2025). The security of the financial system has become increasingly crucial as the threat of cyberattacks on the banking system and fintech companies has increased significantly in recent years (Fedirko & Grytsyshen, 2025). Therefore, companies need to develop effective risk mitigation strategies in managing security and compliance aspects of digital financial regulations (Polishchuk et al., 2025).

In addition, changes in financial regulations due to digitalization are also a challenge for companies in adapting to digital-based fiscal policies and financial regulations (Magli & Amaduzzi, 2025). Several countries have implemented stricter regulations regarding the protection of digital financial data and transparency of electronic transactions, forcing companies to align their internal policies with international standards (Louca, 2025). Thus, the study of the influence of digitalization on modern financial management is increasingly important to identify the opportunities and challenges faced by companies in the digital economy era.

A number of studies have examined the impact of digitalization on financial management in various industrial sectors. A study by Kaddour, Boubaker, and Moualdi (2025) highlights how digitalization contributes to post-crisis financial recovery strategies, by showing that the use of financial technology can reduce the risk of moral hazard in the bailout and bail-in systems (Kaddour et al., 2025). Another study by Al-Shboul and Alfzari (2025) examines the integration of artificial intelligence (AI) in investment portfolio management, where the use of predictive analytics is proven to be able to improve efficiency in risk management and digital-based financial decision-making (Al-Shboul et al., 2025).

In addition, research conducted by Park, Kang, and Jang (2025) examined how financial digitalization affects social behavior in financial management, with the finding that digital platforms can encourage entrepreneurship and financial inclusion through technology-based financial education (Park et al., 2025). A study by Kusumaningsih, Maulina, and Purnomo (2025) also contributed to understanding the digitalization of microfinance during the COVID-19 pandemic, where this study found that the implementation of technology in microfinance can improve access to capital for MSMEs, but also faces challenges in terms of internal control and regulatory compliance (Kusumaningsih et al., 2025). While these studies have provided in-depth insights into the benefits of digitalization in the financial sector, there are still gaps in the study of organisational readiness to face the overall digital financial transformation, as well as how companies can manage growing cybersecurity threats.

The study aims to analyze the impact of digitalization on corporate financial management, including benefits such as operational efficiency and transparency, as well as challenges such as cybersecurity and regulation. By providing strategic recommendations, this research aims to help companies utilize digital technology to improve business competitiveness and sustainability.

METHOD

This study uses a qualitative approach with a library research method, which aims to analyze the influence of digitalization on modern corporate financial management, as well as identify opportunities and challenges that arise in its implementation. This method was chosen because it allows researchers to examine and interpret various relevant academic sources to gain a deeper understanding of digital financial transformation (Creswell & Creswell, 2018). Literature studies are also used to identify the latest patterns and trends in the application of financial technology, such as the use of artificial intelligence (AI), blockchain, and big data analytics in the company's financial system (Flick, 2018).

Data Source

The study used secondary data, obtained from a variety of credible scientific literature, including the indexed academic journals Scopus, Web of Science, Springer, Taylor & Francis, Elsevier, as well as reports from international financial institutions. In addition, this study also refers to official reports from the World Bank, the International Monetary Fund (IMF), and the Securities and Exchange Commission (SEC) to understand the development of regulations and policies related to digitalization in financial management (Merriam & Tisdell, 2016). The data collected includes articles discussing the implementation of digital-based financial systems, cybersecurity challenges, and the impact of digitalization on corporate financial decision-making.

Data Collection Techniques

The data collection technique in this study is carried out through the documentation method, namely by searching, collecting, and analyzing literature relevant to the research topic. The literature used was selected based on the criteria of recency (published in the last five years), the credibility of the source, and its relevance to the research problem (Bowen, 2009). This documentation process includes an analysis of articles that discuss the role of digital technology in improving financial management efficiency, digital risk mitigation strategies, and the impact of regulatory changes on the financial system of modern companies (Gherghina & Simionescu, 2025).

Data Analysis Methods

The data analysis in this study was carried out using content analysis and thematic analysis methods to identify patterns, trends, and main issues in the literature studied. Content analysis is used to explore how digitalization has changed the structure of corporate financial management as well as the challenges that arise in its implementation (Krippendorff, 2013). Meanwhile, thematic analysis is carried out by compiling various findings from literature into key themes, such as operational efficiency, data security and privacy, digital financial regulation, and organizational readiness in adopting digital transformation (Flick, 2018).

To improve the validity of the findings, this study also applies source triangulation, namely by comparing the results of various literatures to obtain more accurate information and avoid bias in the analysis (Miles, Huberman, & Saldaña, 2018). With this approach, this research not only provides a deep theoretical understanding of digitalization in financial management, but also offers a practical perspective on how companies can effectively and strategically face the challenges of digitalization.

RESULT AND DISCUSSION

The following table presents 10 selected articles from various sources that discuss the influence of digitalization on modern financial management. These articles are selected based on the relevance, credibility of the source, and contribution to the analysis of opportunities and challenges arising from digital transformation in the financial system. Each article covers different aspects, from digital-based financial efficiency, fintech, artificial intelligence in financial analysis, to regulation and digitalization risks.

Table 1. Literature Review

No	Author	Title	Findings
1	Priyadarshi & Prasad	An Analysis of Rural Consumers' Financial Behavior in the Context of Financial Inclusion through FinTech	Financial digitalization increases financial inclusion for rural communities, but there are still barriers to digital financial literacy.
2	Kaddour, Boubaker & Moualdi	Reassessing Financial Crisis Management: The Impact of Bailouts and Bail-Ins on Moral Hazard and Sustainable Recovery Strategies	Digital financial technology helps mitigate systemic risks in financial crisis management.
3	Al-Shboul & Alfzari	Predictive Analytics in Portfolio Management: A Fusion of AI and Investment Economics for Optimal Risk-Return Trade-Offs	The integration of AI in financial portfolio management improves the efficiency of investment predictions.
4	Park, Kang & Jang	A Study on the Impact of Financial Socialization and Financial Management Behavior on Start-up Intention: Mediating Effect of Entrepreneurship	Financial digitalization affects entrepreneurship through technology-based financial education.
5	Siboro & Ferdiyanto	The Role of Financial Literacy and Technology Readiness in Encouraging the	Digital financial literacy plays a role in the adoption of fintech for the younger

		Use of Fintech for Financial Planning Among Generation Z	generation of financial planning.
6	Kusumaningsih, Maulina & Purnomo	Antecedents of Micro Financing Digitization during Covid-19 Pandemic in Bank Syariah Indonesia (BRI Syariah)	The digitization of microfinance increases MSME access to capital but faces regulatory and internal control challenges.
7	Furtado, Mehndiratta & Bauhoff	Community Health Worker Payment Processes: A Qualitative Assessment of Experience in Two Indian States	Digitalization of payments improves the efficiency of the public financial system in healthcare.
8	Judijanto & Nurrohman	The Influence of the Application of Financial Technology (FinTech) on Financial Management Efficiency in Micro, Small, and Medium Enterprises (MSMEs)	The application of fintech helps the efficiency of financial management in MSMEs, but there are still obstacles in technology adoption.
9	Jha, Chandwani & Zaki	The Shift to Fast-Good Service Experience through Digitalization: Lessons from KFC	Digitalization in corporate finance improves the efficiency of payment systems and cash management.
10	Shu, Liu, Sun & Lin	Multi-scale Dynamic Correlation and Information Spillover Effects between Climate Risks and Digital Cryptocurrencies	Financial digitalization contributes to crypto stability in the face of global economic risks.

Digitalization has brought profound changes in the financial management system of modern enterprises. Based on the research that has been studied, this transformation has a diverse impact on various aspects of finance, ranging from operational efficiency, risk management, financial transparency, to the integration of technology in strategic decision-making. However, while digitalization offers various advantages, there are also major challenges that must be faced by companies, including in terms of cybersecurity, digital financial regulations, and organizational readiness to adopt technology-based systems.

Research conducted by Priyadarshi and Prasad (2025) shows that financial digitalization plays an important role in increasing financial inclusion, especially for rural communities who previously had difficulty accessing conventional financial services. The application of financial technology (fintech) allows for faster, easier, and more affordable financial transactions, thereby expanding the range of financial services. However, the study also found that digital financial literacy is still a major obstacle to fintech adoption. Many individuals still have limitations in understanding how digital-based financial systems work, which can ultimately hinder the potential for optimizing these services.

Kaddour, Boubaker, and Moualdi (2025) highlight how financial digitalization plays a role in financial crisis management, especially through the implementation of a more effective bailout and bail-in system. Digital financial technology enables early detection of systemic risks and makes it easier to manage finances in emergency situations. This shows that digitalization not only provides benefits in daily transactions, but also in the management of financial stability at the macro level. These findings are further reinforced by the research of Al-Shboul and Alfzari (2025), which revealed that artificial intelligence (AI) has been integrated in investment portfolio management to improve the efficiency of risk analysis and prediction of market movements. The use of predictive analytics in financial management has been proven to help companies determine more accurate investment strategies, so that they can increase return on investment while reducing the risk of loss.

Another study conducted by Park, Kang, and Jang (2025) provides an interesting perspective on the relationship between financial digitalization and entrepreneurial behavior. The study found that access to digital financial services and technology-based financial education can encourage more individuals to start new businesses. With the existence of a digital financial system, entrepreneurs can more easily obtain capital, manage business transactions, and increase their financial accountability. However, this study also notes that not all prospective entrepreneurs have adequate digital skills to utilize this technology optimally, so more massive educational efforts are needed so that the benefits of digitalization can be felt more widely.

Challenges in the adoption of financial digitalization are also highlighted in research conducted by Siboro and Ferdiyanto (2025). They revealed that one of the main obstacles in the implementation of fintech is the financial and technological literacy gap among the younger generation. Although Gen Z is known as a generation that is familiar with technology, there are still many of them who do not understand the basic principles of financial management, which can ultimately hinder the optimal use of fintech. This study emphasizes the importance of integrating financial literacy in the education system so that the younger generation can be better prepared for the digital financial era.

From the perspective of the business sector, the research of Kusumaningsih, Maulina, and Purnomo (2025) discusses how digitalization has changed the microfinance system, especially in Bank Syariah Indonesia. They found that the adoption of digital technology in the microfinance sector has improved capital accessibility for MSMEs, allowing for a faster and more efficient lending process. However, they also noted that financial regulation is still a major challenge in the digitalization of microfinance, especially in terms of supervision and control of credit risk. In the absence of clear regulations and a strong control system, digitalization can increase the risk of bad loans and fraud in this sector.

Furtado, Mehndiratta, and Bauhoff (2025) discuss how digitalization also has a significant impact on payment systems in the public service sector. Their study found that the implementation of digital-based payments has improved the efficiency of fund distribution in the health sector in India, reduced payment waiting times for healthcare workers, and increased transparency in the use of public budgets. This shows that the benefits of digitalization are not only limited to the private sector, but can also be applied in public sector financial management to improve the efficiency of services to the community.

Judijanto and Nurrohman (2025) examine how the application of fintech in micro, small, and medium enterprises (MSMEs) helps improve financial management efficiency and encourage business growth. However, they also found that not all MSMEs are ready to fully adopt digital technology, especially those operating in areas with limited internet access and technological infrastructure. Thus, this study underscores the need for more inclusive policy development in supporting financial digitalization in the MSME sector.

A study conducted by Jha, Chandwani, and Zaki (2025) provides insight into how large companies such as KFC are using digitalization in cash management and payment systems. They found that digital transformation in the payment system allows for better cash flow management, reduces operational costs, and improves the customer experience in financial transactions. The study highlights how digitalization not only helps in the internal financial management of companies, but can also improve customer satisfaction through faster and more flexible payment systems.

Finally, research conducted by Shu, Liu, Sun, and Lin (2025) discusses how financial digitalization contributes to the stability of cryptocurrencies amid global economic risks. They found that digital-based financial platforms help increase investor confidence in digital assets, while also allowing for risk diversification in blockchain-based investment strategies. However, they also emphasized that regulations on digital currencies still need to be further developed in order to provide more protection for investors and ensure the stability of the digital financial market.

Overall, the findings of various studies show that digitalization has brought about fundamental changes in modern financial management systems. The application of technologies such as fintech, AI, blockchain, and big data analytics has increased the efficiency, transparency, and accessibility of financial services for various industry sectors. However, challenges in terms of data security, human resource readiness, and digital financial regulations are still issues that need to be overcome so that the benefits of digitalization can be felt more widely and sustainably. This research provides comprehensive insights into how companies can optimize the opportunities offered by digitalization, while also facing emerging challenges with the right mitigation strategies.

Discossion

Digitalization has brought about a significant transformation in modern enterprise financial management, with impacts that include operational efficiency, increased transparency, and strengthening data-driven decision-making strategies. However, the adoption of digitalization also presents challenges such as cybersecurity, technology risks, and regulatory complexity. In this analysis, the benefits and challenges of digitalization in financial management will be discussed in depth to understand its implications for companies in the digital economy era.

Benefits of Digitalization in Financial Management

One of the most significant impacts of digitalization in financial management is the improvement of operational efficiency. The use of Enterprise Resource Planning (ERP), Artificial Intelligence (AI), and Big Data Analytics enables the automation of various financial tasks, such as transaction processing, cash management, and financial reporting in real-time. This not only reduces human error, but also increases the speed and accuracy of financial data processing. Thus, companies can allocate resources more effectively and increase operational productivity.

In addition, digitalization strengthens transparency and accountability in the company's financial management. Technologies such as blockchain and smart contracts allow for immutable ledger transactions, reducing the risk of data manipulation and fraud. With a more transparent system, companies can build greater trust with investors, shareholders, and regulators.

Digitalization also facilitates data-driven decision making. With the integration of Big Data and Machine Learning, companies can analyze financial trends, forecast cash flows, and manage risks more accurately. The use of predictive algorithms helps financial managers determine investment strategies, optimize expenses, and manage working capital more effectively.

Challenges of Digitalization in Financial Management

Although it provides many benefits, digitalization in financial management also brings a number of challenges, one of which is cybersecurity. With the increasing use of cloud-based technology and digital transactions, companies are increasingly vulnerable to cyberattacks, data theft, and ransomware threats. Data security is crucial, especially in sectors that handle sensitive financial information. Therefore, companies need to adopt strong security systems, such as data encryption, multi-factor authentication (MFA), as well as the use of AI technology for early threat detection.

In addition, another challenge faced is the complexity of regulation and legal compliance. Different countries have different regulations regarding data protection and digital financial reporting, such as the General Data Protection Regulation (GDPR) in the European Union and the Data Protection Laws in different countries. Companies must ensure that the digital systems they use are in accordance with applicable regulations, to avoid legal risks and fines due to non-compliance.

The adoption of digital technology in financial management also requires significant investment in infrastructure and human resource training. Not all companies, especially small and medium-sized enterprises (SMEs), have the financial capacity to adopt advanced digital systems. In addition, the lack of digital skills among employees can be an obstacle in the implementation of technology-based financial systems. Therefore, training and increasing digital literacy are important factors in ensuring the success of digitalization in financial management.

CONCLUSION

The results of the study show that digitalization has brought fundamental changes in the financial management system of modern companies. This transformation provides many benefits, including improved operational efficiency, reduced transaction costs, and optimized financial risk management through the use of advanced technologies such as AI, blockchain, and big data analytics. Digitalization also increases transparency and accountability in the financial system, allowing for safer and more reliable recording of transactions. In addition, companies that adopt a digital-based financial system can respond to market changes more quickly and accurately.

However, the challenges that arise cannot be ignored. Cybersecurity risks are one of the main threats that companies must face in managing a digital-based financial system. The rise in cyberattacks on the global financial system demonstrates the need for stricter security policies, such as the use of more advanced encryption technologies and AI-based threat detection systems. In addition, companies also face challenges in complying with digital financial regulations that vary from country to country. Regulatory uncertainty can slow down the adoption of digitalization and increase the cost of legal compliance.

To overcome these challenges, several strategies are needed that can be implemented by companies. First, companies need to develop stronger data security systems to protect financial information from cyber threats. Second, the adoption of digitalization in financial management must be balanced with training and increasing digital literacy for employees, so that they can be better prepared to face technological changes. Third, companies must continue to monitor and adjust their internal policies to the development of digital financial regulations, so that they can remain compliant with applicable regulations.

With the right strategy, companies can maximize the benefits of digitalization in financial management systems, while mitigating risks that may arise. Therefore, more research is needed to explore how digital financial regulation can be harmonized globally as well as how new technologies can be applied more effectively in the modern corporate financial system.

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