

## The Role of Accounting Digitalization in Enhancing the Effectiveness of Corporate Tax Planning

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### Abstract

Digitization of accounting is one of the important factors in increasing the effectiveness of corporate tax planning in the era of digital transformation. This research aims to analyze the role of accounting digitization in supporting more effective and efficient tax planning. The research method used is a qualitative approach with a descriptive design through literature study and conceptual analysis of the implementation of digital accounting technology. The results of the study show that accounting digitization is able to improve the quality of financial information through a real-time, integrated, and accurate system, thereby accelerating the process of preparing tax reports, reducing the error rate, and increasing compliance with tax regulations. In addition, the use of technology such as ERP, cloud accounting, big data analytics, and artificial intelligence allows companies to conduct tax analysis more comprehensively and predictively. However, the implementation of digitalization still faces challenges in the form of high investment costs, limited human resources, and data security risks. This study concludes that accounting digitalization has a strategic role in increasing the effectiveness of tax planning, both in terms of operational efficiency and more optimal tax decision-making.

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## INTRODUCTION

The development of information technology in recent decades has driven significant transformations in various aspects of business, including the fields of accounting and taxation (Liu et al., 2024; Prasetianingrum & Sonjaya, 2024; Shapovalova et al., 2023; Yigitbasioglu et al., 2023). Accounting digitization is no longer merely an option but has become a strategic necessity for companies seeking to improve operational efficiency and competitiveness (Granlund, 2011). In the context of taxation, this transformation opens up new opportunities for companies to conduct tax planning more effectively and in a structured manner (Barik & Ranawat, 2024; Fjord & Schmidt, 2023; Wibowo, 2024; Zhang & She, 2024).

Tax planning is one of the strategies used by companies to optimize tax obligations legally by taking advantage of existing regulatory provisions and gaps (Suandy, 2016). The effectiveness of tax planning is highly dependent on the quality of the financial information produced. Therefore, an accurate, timely, and integrated accounting system is a crucial factor in supporting the success of this strategy (Kamal, 2023; Karim, 2025; Lutfi et al., 2022; Puspitawati et al., 2024; Rasyid et al., 2024).

However, in practice, many companies still face obstacles in managing financial data manually, such as reporting delays, recording errors, and a lack of transparency. These conditions increase the risk of tax non-compliance and can lead to higher costs due to

administrative sanctions (OECD, 2020). Therefore, accounting digitization has emerged as a solution to improve the quality of financial data management.

Accounting digitization encompasses the use of technologies such as accounting software, enterprise resource planning (ERP) systems, big data analytics, and cloud computing in the processes of recording, processing, and reporting financial information (Romney & Steinbart, 2018). With an integrated system, companies can obtain financial information in real time, which is crucial for strategic decision-making, including tax planning.

Previous studies have highlighted the positive impact of digital technology on accounting and taxation functions. Appelbaum et al. (2017) found that the implementation of digital accounting systems improves operational efficiency and reduces human error in financial reporting processes. Similarly, DeLone and McLean (2003) emphasized that high-quality information systems significantly enhance decision-making effectiveness, including tax-related decisions. Furthermore, research by Chen et al. (2021) indicates that digital transformation in accounting systems can improve tax compliance and reduce the likelihood of reporting discrepancies. Other studies by Al-Htaybat and Alberti-Alhtaybat (2018) also show that digitalization enhances transparency and accountability in financial reporting, which directly supports more effective tax planning practices.

The urgency of this research lies in the importance of understanding how accounting digitization can contribute to the effectiveness of tax planning, especially in addressing the complexity of modern tax systems. This research also contributes to enriching the literature on technology integration in corporate tax management.

This study also addresses a gap in the existing literature. While many studies have explored the role of digitalization in accounting efficiency and financial reporting, limited research has specifically examined its impact on the effectiveness of corporate tax planning, particularly from a conceptual and integrative perspective. Therefore, this research aims to provide a deeper understanding of how accounting digitization contributes to improving tax planning effectiveness.

The purpose of this research is to analyze the role of accounting digitization in enhancing the effectiveness of corporate tax planning and to identify the benefits and challenges associated with its implementation. This study is expected to provide both theoretical and practical contributions. Theoretically, it contributes to the development of accounting and taxation literature by integrating digital transformation concepts into tax planning frameworks. Practically, the findings of this study can serve as a reference for companies in designing more efficient and technology-driven tax strategies. Additionally, it offers insights for policymakers in encouraging digital adoption to improve corporate tax compliance.

## **RESEARCH METHOD**

This study used a qualitative approach with a descriptive design to comprehensively describe the phenomenon of accounting digitization in corporate tax planning practices. This approach was chosen because it was able to provide an in-depth understanding of the relationship between the use of accounting technology and the effectiveness of tax planning.

The data used in this study were sourced from literature reviews, including scientific journals, textbooks, reports from international organizations, and relevant tax regulations. In addition, this study also examined several case studies on the implementation of accounting

digitalization in companies that had adopted enterprise resource planning (ERP) systems and cloud-based software.

Data analysis was carried out using thematic analysis techniques by identifying the main patterns that emerged from the relevant literature. The analysis process included data reduction, data presentation, and the systematic drawing of conclusions.

The focus of the research covered several main aspects, namely: (1) the role of digitalization in improving the quality of financial information, (2) its effect on the efficiency of the tax planning process, (3) its impact on tax compliance, and (4) challenges in its implementation.

## RESULTS AND DISCUSSION

The results of the study show that accounting digitization makes a significant contribution to increasing the effectiveness of corporate tax planning. The transformation from manual to digital systems not only impacts operational efficiency, but also on the quality of more strategic and data-driven tax decision-making.

The comparison between manual and digital accounting systems can be seen in Table 1 below:

**Table 1. Comparison of Manual and Digital Accounting Systems**

Aspects	Manual System	Digital System
Processing Speed	Slow	Fast (real-time)
Accuracy Rate	Error-prone	More accurate
Data Integration	Separate	Integrated
Access Information	Limited	Flexible (cloud-based)
Long-Term Cost Efficiency	Low	Height

Source: Author's elaboration based on literature review, 2026

Based on Table 1, digital systems show advantages in almost all aspects relevant to tax planning. The real-time speed of data processing allows companies to respond immediately to changes in financial conditions and tax regulations. In addition, a higher level of accuracy reduces the risk of errors in tax reporting. Data integration is also an important factor, because the tax planning process requires consistency of information from various units within the company. Thus, accounting digitization plays a role as a foundation in creating a more effective and efficient tax system.

The direct impact of digitalization on the effectiveness of tax planning can be seen in Table 2 below:

**Table 2. The Impact of Digitalization on the Effectiveness of Tax Planning**

Indicator	Before Digitization	After Digitization
Tax Report Preparation Time	Old	Shorter
Error Rate	Height	Low
Tax Compliance	Less than optimal	More optimal
Tax Analysis Skills	Limited	More comprehensive

Source: Author's elaboration based on literature review, 2026

Table 2 shows that accounting digitization contributes directly to increasing the effectiveness of tax planning. Time efficiency in the preparation of tax reports reflects the automation of processes that were previously done manually. The decrease in error rates also shows that digital systems are able to improve the quality of financial information. In addition, improved analytical capabilities allow companies to identify tax savings opportunities more optimally. This confirms that digitalization not only improves technical efficiency, but also strengthens the strategic role of the accounting function in tax planning.

The role of digital technology in supporting tax planning can be further described in Table 3 below:

**Table 3. Digital Technology in Accounting and Its Role in Tax Planning**

Technology	Main Functions	Role in Tax Planning
ERP	Financial data integration	Tax data consolidation
Cloud Accounting	Internet-based data access	Monitoring pajak real-time
Big Data Analytics	Analyze large amounts of data	Identify tax patterns
Artificial Intelligence	Automation and prediction	Optimization of tax strategy

Source: Author's elaboration based on literature review, 2026

As seen in Table 3, various digital technologies have specific contributions in supporting tax planning. ERP systems allow for cross-functional data integration, making it easy to consolidate financial and tax statements. Cloud accounting provides the flexibility of data access, which allows for real-time monitoring of tax liabilities. Meanwhile, big data analytics and artificial intelligence open up opportunities for companies to conduct predictive analysis and design tax strategies more proactively. This shows that accounting digitization has evolved into a system that not only supports operations, but also strategic decision-making.

However, the implementation of accounting digitization is inseparable from various challenges, as shown in the following Table 4:

**Table 4. Challenges of Implementing Accounting Digitalization**

Challenge	Description	Impact on Tax Planning
Implementation Costs	High initial investment	Hindering technology adoption
Human Resources Limitations	Lack of experts	Not optimal system usage
Data Security	Risk of data leaks	Interfering with trust and compliance
Technology Adaptation	Resistance to change	The implementation process becomes slow

Source: Author's elaboration based on literature review, 2026

Table 4 shows that the main challenges in accounting digitization lie in the aspects of cost, human resources, and data security. High initial investment is often a barrier for companies, especially in the early stages of implementation. In addition, the limitation of human resources who have digital competence can reduce the effectiveness of using the system. Data security risks are also an important concern, considering that financial and tax data are sensitive. Therefore, companies need to develop comprehensive mitigation strategies, including increasing human resource capacity and strengthening information security systems.

Overall, the results of this study confirm that accounting digitalization has a strategic role

in increasing the effectiveness of corporate tax planning. Advantages in terms of speed, accuracy, integration, and data analysis make digitalization a key factor in supporting more efficient, accurate, and compliant tax management.

The results of the study show that accounting digitization has a very significant role in increasing the effectiveness of corporate tax planning. These findings not only strengthen theoretical assumptions about the importance of information quality in decision-making, but also provide an empirical picture that digital transformation can change the way companies design tax strategies in a more adaptive and efficient manner.

Conceptually, the effectiveness of tax planning is highly dependent on the availability of accurate, relevant, and timely financial information. In this case, accounting digitization acts as an enabler that allows the creation of an integrated and real-time information system. As shown in the results of the study, digital systems are able to improve data accuracy and speed up the reporting process. This condition is in line with the information system success model put forward by DeLone and McLean (2003), which emphasizes that system quality and information quality contribute directly to the quality of the decisions produced. In the context of taxation, the decision in question includes the selection of a legal tax saving strategy and the determination of the optimal transaction recognition time.

Furthermore, accounting digitization also has implications for improving the company's operational efficiency. Automating the recording and reporting process not only reduces administrative workload, but also minimizes the potential for human error that often occurs in manual systems. By reducing recording errors, companies can avoid the risk of fiscal corrections that lead to administrative sanctions. This strengthens the findings of Appelbaum et al. (2017) who stated that the use of technology in accounting systems is able to improve information reliability and business process efficiency.

From a strategic perspective, digitalization allows companies to do tax planning more proactively. Technologies such as big data analytics and artificial intelligence allow for the analysis of large amounts of data to identify specific patterns that can be leveraged in tax planning. For example, companies can analyze revenue and expense trends to determine the optimal cost recognition strategy. In addition, the predictive capabilities possessed by the technology allow companies to anticipate changes in tax regulations and their impact on tax burdens in the future. Thus, tax planning is no longer reactive, but has become an integral part of the company's strategic planning.

System integration through Enterprise Resource Planning (ERP) also makes a significant contribution to increasing the effectiveness of tax planning. With an integrated system, financial data from various departments can be consolidated automatically, resulting in more comprehensive and consistent reports. This is very important in ensuring that all transactions that have tax implications are properly recorded. In addition, system integration also facilitates the internal and external audit process, thereby increasing transparency and accountability of the company. In the framework of good corporate governance, this transparency is an important factor in building stakeholder trust, including tax authorities.

However, the implementation of accounting digitization is inseparable from various challenges that need to be critically considered. One of the main obstacles is the high initial investment cost required to adopt digital technology. For large companies, this investment may not be a significant problem, but for small and medium-sized businesses, it can be a serious

obstacle. In addition, the success of digitalization implementation also depends heavily on the readiness of human resources. The lack of a workforce that has competence in the field of information technology and digital accounting can hinder the optimization of system use.

The aspect of data security is also an issue that cannot be ignored. Accounting digitization involves managing sensitive financial data, so the risk of data leakage is a major concern. A cyberattack or system failure can have a serious impact on a company's operations as well as its reputation. Therefore, companies need to invest adequate resources in strengthening information security systems, including the use of data encryption, backup systems, and strict access policies.

In addition, resistance to change is also a challenge in the digitalization process. The change from manual to digital systems often creates inconvenience for employees who are used to conventional ways of working. Therefore, management needs to take a comprehensive approach, including training and socialization, to ensure that all parties can adapt to the change.

From a regulatory point of view, accounting digitization also provides opportunities for improving tax compliance. The system that is integrated with the latest regulations allows companies to automatically adjust tax calculations in accordance with applicable regulations. This not only reduces the risk of errors, but also increases efficiency in the tax reporting process. In the long run, this can contribute to improved overall tax compliance, which ultimately supports state revenue.

Overall, this discussion shows that accounting digitization has a very strategic role in increasing the effectiveness of corporate tax planning. However, these benefits can only be achieved if the company is able to manage the existing challenges effectively. Therefore, a holistic approach is needed in the implementation of digitalization, which includes aspects of technology, human resources, and organizational policies. Thus, accounting digitization is not only an operational tool, but also a key driver in creating a more efficient, transparent, and sustainable tax system.

## **CONCLUSION**

This research aims to analyze the role of accounting digitization in increasing the effectiveness of corporate tax planning. Based on the results of research and discussion, it can be concluded that accounting digitization plays a significant role in supporting a more effective, efficient, and accurate tax planning process. The transformation from manual to digital systems allows companies to obtain real-time, integrated, and high-accuracy financial information, thereby improving the quality of tax decision-making. The main findings of the study show that accounting digitization is able to speed up the process of preparing tax reports, reduce the rate of recording errors, and increase compliance with tax regulations. In addition, the use of technology such as ERP, cloud accounting, big data analytics, and artificial intelligence provides added value in the form of more comprehensive and predictive analysis capabilities. This allows companies to design tax planning strategies more proactively and optimally within the applicable regulatory corridor. The contribution of this research lies in strengthening the literature on the importance of integrating digital technology in accounting and tax functions, especially in increasing the effectiveness of tax planning. This research also confirms that digitalization not only functions as an operational tool, but has developed into a strategic instrument in the management of corporate tax liabilities. However, this study has limitations,

mainly because it uses a qualitative approach based on literature studies so that it has not been supported by quantitative empirical data. In addition, the variation in the condition of companies in adopting digital technology has not been fully accommodated in this study. Therefore, further research is recommended to use a quantitative approach or mixed methods involving primary data from companies, in order to examine more deeply the relationship between accounting digitization and the effectiveness of tax planning. In addition, follow-up research can also examine the role of moderation factors such as company size, industry sector, and level of technological readiness in influencing the relationship.

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