

Digital Tax Avoidance in the Era of Core Tax Administration: Exploring Technical Loopholes and the Illusion of Compliance in Indonesia

Hartono¹, Yusuf²

Fakultas Ekonomi dan Bisnis, Universitas Pamulang. Jl. Surya Kencana No.1, Pamulang Barat, Kecamatan Pamulang, Kota Tangerang Selatan, Banten 15417

Email: dosen02919@unpam.ac.id¹, dosen02546@unpam.ac.id²

The digital transformation of tax administration is expected to improve administrative efficiency, transparency, and voluntary taxpayer compliance. Nevertheless, the implementation of Indonesia's Core Tax Administration System (CoreTax) has also introduced technological vulnerabilities that may create new opportunities for tax avoidance. This study aims to identify the technical loopholes emerging during CoreTax implementation and examine how these vulnerabilities influence taxpayer behavior in the digital tax environment. An instrumental qualitative case study approach was employed, using semi-structured interviews with 17 participants comprising tax officials, tax consultants, corporate taxpayers, and taxation academics, complemented by document analysis. The findings reveal four major technical loopholes: data migration gaps, validation delays, algorithmic blind spots, and authentication weaknesses. These vulnerabilities encourage three adaptive tax avoidance strategies, data omission, timing exploitation, and transaction shifting, while simultaneously fostering an illusion of compliance, whereby taxpayers perceive successful system validation as evidence of substantive compliance. Based on these findings, this study proposes the concept of Digital Tax Avoidance, extending Tax Compliance Theory and Information Asymmetry Theory by incorporating technological vulnerabilities into taxpayer behavior. The study concludes that digital tax transformation should be accompanied by continuous system refinement, stronger real-time validation, enhanced authentication mechanisms, and adaptive risk-based monitoring to minimize digital tax avoidance and strengthen the integrity of modern tax administration.

Keywords: Digital Tax Administration, CoreTax, Digital Tax Avoidance, Technical Loopholes, Illusion of Compliance, Tax Compliance.

This is an open access article under the [CC BY-NC](#) license



Corresponding Author:

Hartono

Fakultas Ekonomi dan Bisnis, Universitas Pamulang.

Jl. Surya Kencana No.1, Pamulang Barat, Kecamatan Pamulang, Kota Tangerang Selatan, Banten 15417

dosen02919@unpam.ac.id

1. Introduction

Digital transformation has fundamentally reshaped public administration worldwide, including tax administration systems that increasingly rely on integrated digital technologies to improve efficiency, transparency, and voluntary tax compliance. Governments across developed and developing countries have invested heavily in digital tax infrastructures, recognizing that advanced information systems can reduce administrative burdens, improve taxpayer services, strengthen risk-based audits, and minimize opportunities for tax evasion and fraud[1]. The transition toward digital tax administration is also closely associated with the broader agenda of fiscal modernization, where real-time data integration, automation, and artificial intelligence are expected to enhance the effectiveness of tax collection while reducing compliance costs for taxpayers[2][3].

Indonesia has joined this global movement through the implementation of the Core Tax Administration System (CoreTax), one of the largest digital transformation projects ever undertaken by the Directorate General of Taxes[4]. The CoreTax system is designed to integrate previously fragmented tax administration

processes, including taxpayer registration, tax return filing, payment processing, auditing, objection handling, and collection, into a single digital platform[5]. This modernization initiative is expected to improve data quality, strengthen compliance monitoring, enhance taxpayer services, and ultimately increase tax revenue performance. The implementation of CoreTax also represents a strategic milestone in supporting Indonesia's fiscal reform agenda following the enactment of the tax harmonization framework under the 2021 Tax Harmonization Law[6].

Despite these expected benefits, the implementation of digital tax administration has generated substantial operational challenges during its transition period[7]. Several reports have documented system instability, data migration issues, synchronization failures, delayed validation processes, and user adaptation difficulties following the early implementation of CoreTax. These technical disruptions have raised concerns among tax practitioners, business communities, and policymakers regarding the effectiveness of digital tax governance during the transitional phase. Rather than eliminating opportunities for aggressive tax behavior, technological transformation may unintentionally generate new vulnerabilities that can be strategically exploited by taxpayers. As digital systems become increasingly complex, tax avoidance no longer depends solely on regulatory loopholes but may also exploit weaknesses embedded within digital infrastructures themselves[8].

Tax avoidance has traditionally been defined as the legal arrangement of transactions to minimize tax liabilities while remaining formally within existing tax regulations[9]. Previous studies have generally emphasized regulatory arbitrage, financial engineering, transfer pricing, treaty shopping, and earnings management as dominant mechanisms of tax avoidance[10]. However, the rapid digitalization of tax administration introduces a fundamentally different dimension. Instead of exploiting legal ambiguities alone, taxpayers may increasingly utilize technical loopholes arising from system architecture, algorithmic limitations, data migration inconsistencies, authentication weaknesses, or validation delays. Consequently, digital transformation creates an entirely new landscape where technological vulnerabilities become complementary instruments for strategic tax avoidance.

Existing literature generally agrees that digitalization improves tax compliance through better information integration and automated monitoring[11][12]. Studies conducted in Estonia, Australia, Singapore, and several OECD countries demonstrate that digital tax administration enhances transparency, reduces compliance costs, and strengthens enforcement capabilities[13], [14]. Nevertheless, emerging research also argues that digital transformation simultaneously introduces cybersecurity risks, algorithmic bias, data governance problems, and implementation vulnerabilities that may undermine these expected benefits[15]. The effectiveness of digital tax administration therefore depends not only on technological sophistication but also on the resilience of its institutional and technical architecture.

Within the Indonesian context, most existing studies concerning CoreTax have focused primarily on system readiness, user acceptance, digital literacy, service quality, taxpayer satisfaction, or voluntary compliance. Comparatively little attention has been devoted to examining how taxpayers strategically adapt their avoidance behavior following the introduction of a fully integrated digital tax administration system. More importantly, previous research rarely investigates the existence of technical loopholes embedded within digital tax infrastructures that may facilitate new forms of tax avoidance. Consequently, current literature remains largely behavioral while overlooking the technological dimension of tax avoidance in digital environments.

Another important gap concerns the concept of the illusion of compliance. Automated tax systems may create a psychological perception among taxpayers that successful electronic submission automatically implies substantive compliance. This phenomenon potentially encourages excessive reliance on system

validation rather than genuine compliance with tax regulations. As argued by Alm[12], increasing automation may unintentionally shift taxpayer behavior from fear of tax audits toward excessive confidence in automated detection systems. Such circumstances may encourage strategic behavior in which taxpayers exploit technical limitations without perceiving themselves as engaging in unethical conduct. Despite its theoretical significance, the concept of illusion of compliance remains underexplored in digital taxation literature, particularly in emerging economies undergoing large-scale tax system modernization.

This study seeks to address these research gaps by investigating how the implementation of Indonesia's CoreTax system creates new opportunities for digital tax avoidance through technical loopholes embedded within the digital tax administration process. Unlike previous studies that emphasize taxpayer attitudes or regulatory issues, this research adopts a technological perspective by examining how data migration inconsistencies, validation delays, algorithmic blind spots, authentication weaknesses, and system transition dynamics influence taxpayer strategies. Furthermore, this study introduces the concept of Digital Tax Avoidance, a framework explaining how technological vulnerabilities interact with taxpayer behavior to produce new forms of strategic tax avoidance in digital tax environments.

The contribution of this study is threefold. First, it extends conventional tax avoidance literature by incorporating the concept of technical loopholes within digital tax administration systems. Second, it develops the concept of the illusion of compliance as a behavioral consequence of automated tax governance. Third, it provides empirical evidence from Indonesia's CoreTax implementation, thereby enriching the limited body of knowledge on digital tax administration in developing countries. These contributions are expected to advance both theoretical understanding and practical policy development regarding digital tax governance, particularly for countries currently undergoing similar tax administration reforms.

Accordingly, this study aims to explore the emergence of technical loopholes during the implementation of Indonesia's CoreTax system, examine how these vulnerabilities shape taxpayer avoidance strategies, and develop a conceptual understanding of digital tax avoidance in the era of integrated tax administration.

2. Literature Review And Problem Statement

Digital Tax Administration

Digital transformation has become one of the most significant reforms in modern tax administration. Governments increasingly adopt integrated digital tax systems to improve administrative efficiency, strengthen transparency, reduce compliance costs, and enhance tax collection performance. The Organisation for Economic Co-operation and Development defines digital tax administration as the integration of information technology, real-time data processing, artificial intelligence, and risk-based compliance management to create a more responsive and efficient tax ecosystem. Recent international evidence demonstrates that digital tax administration significantly improves service quality while enabling tax authorities to conduct more accurate compliance monitoring through automated data integration and advanced analytics[16][17].

The digitalization of tax administration extends beyond the replacement of manual procedures with electronic services. Rather, it represents a fundamental institutional transformation in which taxation increasingly relies on interconnected databases, algorithm-driven decision support, and continuous taxpayer monitoring. According to Bird and Zolt[11], digital tax administration reduces information asymmetry between tax authorities and taxpayers by facilitating real-time access to taxpayer information. Similarly, Alm[12] argues that automation strengthens enforcement capability because tax authorities can utilize integrated information systems to identify anomalies more effectively than traditional manual audits.

Digital Tax Avoidance in the Era of Core Tax Administration: Exploring Technical Loopholes and the Illusion of Compliance in Indonesia. Hartono et.al

Many countries have successfully implemented integrated tax administration systems. Estonia's e-Tax system, Australia's Digital Tax Office, Singapore's Inland Revenue Authority digital platform, and Chile's electronic tax administration have demonstrated substantial improvements in administrative efficiency and voluntary tax compliance. These experiences have encouraged many developing countries, including Indonesia, to modernize their tax administration through comprehensive digital transformation.

Indonesia's response to this global trend is reflected in the implementation of the Core Tax Administration System (CoreTax). CoreTax integrates taxpayer registration, tax return filing, payment processing, audit administration, objection handling, and tax collection into a unified digital platform. This modernization initiative is expected to improve taxpayer services while strengthening tax compliance through centralized data management and automated validation mechanisms. However, the implementation of such complex digital infrastructure inevitably introduces technological challenges that may influence taxpayer behavior during the transition period.

Tax Avoidance in the Digital Era

Tax avoidance refers to the legal arrangement of financial transactions designed to minimize tax liabilities while remaining within the boundaries of existing tax legislation[9][18]. Unlike tax evasion, which involves deliberate violations of tax law, tax avoidance exploits legal flexibility, regulatory ambiguity, or structural weaknesses within taxation systems[10].

Traditional tax avoidance strategies have largely focused on accounting manipulation, earnings management, transfer pricing, treaty shopping, thin capitalization, and the exploitation of differences between domestic and international tax regulations. Consequently, prior literature has predominantly examined tax avoidance from legal, financial, and accounting perspectives rather than technological ones.

The rapid digitalization of tax administration introduces a new environment in which taxpayers interact with highly automated systems rather than conventional manual procedures. This transformation changes the nature of tax avoidance itself. Instead of relying exclusively on regulatory loopholes, taxpayers may increasingly exploit weaknesses embedded within digital tax infrastructures, including data synchronization problems, system architecture limitations, delayed validation processes, authentication weaknesses, and algorithmic blind spots. Consequently, tax avoidance evolves from regulatory exploitation toward technological exploitation, creating a new phenomenon that may be described as Digital Tax Avoidance.

Recent developments in artificial intelligence and legal technology further demonstrate that complex tax regulations contain hidden technical loopholes that can be systematically identified through computational analysis. Emerging studies suggest that AI-assisted legal systems are increasingly capable of detecting weaknesses within tax regulations, illustrating that technological complexity itself may generate new forms of tax avoidance opportunities. Therefore, understanding tax avoidance in the digital era requires expanding conventional theories beyond legal interpretation to include the interaction between taxpayers and digital tax infrastructures.

Technical Loopholes in Digital Tax Administration

The effectiveness of digital tax administration depends not only on regulatory quality but also on the robustness of system architecture. While digital platforms improve transparency and automate many administrative processes, they may simultaneously create technical loopholes that were previously nonexistent in conventional tax administration.

Technical loopholes refer to vulnerabilities originating from information systems rather than tax legislation. These vulnerabilities may arise from software design limitations, incomplete system integration, migration errors, delayed synchronization, inconsistent validation algorithms, or cybersecurity weaknesses. Unlike

legal loopholes, technical loopholes emerge because digital systems cannot perfectly anticipate every taxpayer transaction or system interaction.

During large-scale digital transformation, temporary inconsistencies frequently occur between legacy databases and newly implemented systems. Data migration errors may generate missing records, duplicate information, or inconsistent taxpayer histories. Likewise, validation mechanisms may experience processing delays before information is fully synchronized across integrated databases. Algorithmic risk engines may also prioritize particular transaction categories while overlooking others, creating algorithmic blind spots that sophisticated taxpayers may exploit.

The growing complexity of digital systems has also attracted attention within legal informatics research. Recent studies argue that artificial intelligence can systematically identify hidden tax loopholes by analyzing interactions among legal rules, computational logic, and administrative procedures. These findings indicate that technological infrastructures themselves may become objects of strategic exploitation rather than merely instruments of tax enforcement. Consequently, technical loopholes should be viewed as an emerging dimension of tax avoidance research, particularly in countries undergoing rapid digital transformation of public administration.

Illusion of Compliance

One unintended consequence of digital tax administration is the emergence of what this study conceptualizes as the illusion of compliance. Automated systems may create the perception that successful electronic submission automatically indicates substantive tax compliance. Taxpayers may therefore assume that once the digital platform accepts their tax return without generating error notifications, their reporting obligations have been fully satisfied.

This perception differs fundamentally from actual compliance. Automated systems primarily verify procedural completeness rather than economic substance. Consequently, transactions that formally satisfy system requirements may still contain aggressive tax planning strategies or exploit technical limitations beyond the scope of automated validation.

Behavioral tax literature suggests that taxpayer compliance is influenced not only by enforcement but also by perceptions regarding audit probability, fairness, institutional trust, and detection capability[19][20]. As tax administration becomes increasingly automated, taxpayer perceptions gradually shift from fear of human auditors toward confidence in digital systems. This psychological transition may unintentionally reduce perceived detection risk and encourage strategic behavior whenever taxpayers believe that system limitations can be exploited without immediate consequences.

The illusion of compliance therefore represents a behavioral mechanism linking digital technology and taxpayer decision-making. Rather than increasing genuine compliance, automation may encourage procedural compliance while leaving substantive compliance vulnerable to strategic manipulation.

Problem Statement

Although digital tax administration has become an increasingly important research area, existing literature remains fragmented in several respects. First, previous studies primarily examine digital tax administration from the perspectives of taxpayer acceptance, service quality, digital readiness, and voluntary compliance. Comparatively little attention has been devoted to investigating how digital infrastructures themselves may generate opportunities for tax avoidance. Second, tax avoidance research continues to emphasize regulatory loopholes, accounting manipulation, earnings management, and international tax planning while largely overlooking vulnerabilities embedded within digital tax administration systems.

Third, empirical evidence regarding Indonesia's CoreTax implementation remains limited. Existing studies predominantly evaluate implementation readiness, organizational preparedness, and taxpayer perceptions, leaving the interaction between technological vulnerabilities and taxpayer strategic behavior largely unexplored. Finally, the concept of the illusion of compliance has received limited scholarly attention despite its potential importance in explaining taxpayer behavior within highly automated tax environments.

Accordingly, this study addresses the following research questions:

What technical loopholes emerge during the implementation of Indonesia's CoreTax system?

How do taxpayers adapt their tax avoidance strategies within a digital tax administration environment?

How does the illusion of compliance influence taxpayer behavior in the era of digital tax administration?

By addressing these questions, this study introduces the concept of Digital Tax Avoidance, extending conventional tax avoidance literature through the integration of technological, institutional, and behavioral perspectives. This contribution provides a more comprehensive understanding of taxpayer behavior in modern digital tax ecosystems while offering practical insights for strengthening the resilience of digital tax administration systems.

3. Method

This study employed a qualitative approach using an instrumental case study design to explore the emergence of digital tax avoidance strategies during the implementation of Indonesia's Core Tax Administration System (CoreTax). This approach was considered appropriate because the phenomenon is relatively new and requires an in-depth understanding of taxpayers' strategic behavior, institutional responses, and technological vulnerabilities that cannot be adequately explained through quantitative methods [21]. The CoreTax implementation serves as an instrumental case through which broader insights into digital tax administration and tax avoidance can be developed[22].

The research was conducted in Indonesia following the nationwide implementation of CoreTax. Participants were selected using purposive sampling to ensure they possessed relevant knowledge and practical experience regarding the system. The study involved 17 informants comprising six officials from the Directorate General of Taxes (DGT), five licensed tax consultants, four corporate taxpayers, and two taxation academics. Data collection continued until thematic saturation was achieved, where no new substantive information emerged from subsequent interviews[23].

Primary data were collected through semi-structured interviews conducted between January and June 2026. Each interview lasted approximately 60–90 minutes and explored participants' experiences with CoreTax implementation, perceived technical challenges, taxpayer adaptation strategies, and recommendations for improving digital tax administration. To enhance the credibility of the findings, interview data were complemented by document analysis, including CoreTax implementation guidelines, Directorate General of Taxes regulations, technical manuals, official reports, tax dispute decisions, and relevant academic literature. Field notes were also maintained throughout the research process to capture contextual observations and support data interpretation.

The collected data were analyzed using thematic analysis following Braun and Clarke[24]. The analytical process involved familiarization with the interview transcripts, initial coding, identification of recurring themes, refinement of thematic categories, and interpretation of findings in relation to existing theories. Four major themes emerged from the analysis: technical loopholes, strategic taxpayer adaptation, digital tax avoidance, and illusion of compliance. These themes formed the basis for explaining how technological vulnerabilities within digital tax administration influence taxpayer behavior.

To ensure the trustworthiness of the study, the research adopted the framework proposed by Lincoln and Guba[25], encompassing credibility, transferability, dependability, and confirmability. Credibility was strengthened through source and methodological triangulation by comparing evidence obtained from tax officials, consultants, taxpayers, academics, interviews, and documentary sources. Dependability and confirmability were supported through an audit trail and member checking, while transferability was enhanced by providing a comprehensive description of the Indonesian CoreTax implementation context.

Ethical principles were observed throughout the study. Participation was voluntary, informed consent was obtained from all participants before data collection, and participant anonymity was maintained through the use of identification codes. All interview records and research documents were treated confidentially and used solely for academic purposes.

4. Results and Discussion

Technical Loopholes Emerging from CoreTax Implementation

The findings reveal that although the implementation of Indonesia's Core Tax Administration System (CoreTax) represents a significant milestone in digital tax administration reform, the transition process has simultaneously generated several technical vulnerabilities that may unintentionally facilitate new forms of tax avoidance. Four major categories of technical loopholes emerged from the thematic analysis of interviews: data migration gaps, validation delays, algorithmic blind spots, and authentication weaknesses. These findings indicate that digital transformation not only changes tax administration procedures but also reshapes the strategic interaction between taxpayers and tax authorities.

The most frequently reported issue concerns the migration of historical taxpayer data from the legacy tax administration system to CoreTax. Several participants acknowledged that incomplete synchronization between the old and new databases created inconsistencies that affected taxpayer records during the transition period.

One tax officer explained:

"Conceptually, CoreTax is a significant improvement because it centralizes taxpayer information. However, the migration process was problematic. Some historical records were not successfully transferred, while others became inconsistent after synchronization." (T3)

This finding was supported by another DGT officer who emphasized that the migration process required extensive manual verification before taxpayer information could be fully validated.

"Several taxpayer records required manual reconciliation because the legacy database and CoreTax generated different outputs. During the transition period, this created temporary uncertainty regarding taxpayers' historical information." (T4)

From the perspective of corporate taxpayers, data inconsistency was also recognized as one of the most challenging aspects of the new system. One participant admitted that missing historical records occasionally complicated tax reporting and reconciliation processes.

"Some historical transactions simply did not appear after migration. When information is unavailable in the system, taxpayers naturally become uncertain about how those transactions should be treated." (CT2)

These findings demonstrate that data migration represents more than a technical implementation issue. Instead, it creates temporary information asymmetry between taxpayers and the tax authority, allowing taxpayers with greater technical understanding to recognize opportunities that are not immediately visible to tax administrators. This observation extends Akerlof's[26] Information Asymmetry Theory into the

context of digital tax administration, where asymmetry arises not from unequal access to economic information but from unequal understanding of digital system architecture.

A second theme identified during the interviews concerns validation delay, referring to the time gap between taxpayer submission and complete system verification. Although CoreTax is designed to perform real-time validation, several participants explained that certain verification processes continue to operate through scheduled background processing.

One tax consultant stated:

"The tax return may already show 'submitted', while the validation process is still running in the background. During that interval, taxpayers may revise or adjust information before the system completes its verification." (C3)

A DGT official confirmed that not every validation process occurs instantaneously.

"Some verification mechanisms still depend on batch processing rather than real-time validation. This delay is technically unavoidable during certain system operations." (T2)

The existence of validation delay illustrates that technological automation does not necessarily eliminate uncertainty. Instead, it introduces temporal gaps within which taxpayers may strategically modify reporting behavior. Unlike conventional tax avoidance that primarily exploits legal ambiguity, this finding suggests that digital tax avoidance may emerge from exploiting the timing characteristics of digital systems. This observation complements previous studies by Alm[12], who argued that digital transformation alters taxpayer perceptions of enforcement, while extending the discussion by demonstrating that technological timing itself may become a strategic resource.

The third technical loophole identified concerns algorithmic blind spots. Participants consistently reported that CoreTax's automated detection system prioritizes certain transaction categories while allocating less attention to others. Consequently, taxpayers gradually learn which transactions receive stronger automated scrutiny.

An academic specializing in taxation observed:

"Every automated system has priorities. CoreTax focuses heavily on high-risk transactions, but certain transaction types remain outside the primary detection algorithm." (A1)

Similarly, one experienced tax consultant explained:

"Businesses quickly learn which transaction categories trigger system verification and which receive relatively limited automated attention. This knowledge inevitably influences reporting strategies." (C4)

Rather than indicating system failure, these findings demonstrate an inherent limitation of algorithm-based administration. Every algorithm must prioritize particular indicators because computational resources cannot evaluate every possible transaction simultaneously. Consequently, taxpayers gradually adapt their reporting strategies based on perceived differences in algorithmic attention. This adaptive behavior reflects a new interaction between human decision-making and digital governance that has received limited attention in previous tax avoidance literature.

The fourth technical loophole relates to authentication and access control. Although CoreTax substantially improves digital security compared with previous systems, several participants acknowledged that identity verification mechanisms remain under continuous development.

One corporate taxpayer commented:

"Access management has improved considerably, but organizations still need stronger internal controls because multiple personnel may interact with the same taxpayer account." (CT3)

A DGT technical officer similarly explained:

"Multi-factor authentication is gradually being expanded. Strengthening digital identity verification remains an important priority for future system development." (T5)

Although authentication weaknesses were less frequently discussed than migration and validation issues, participants considered identity management an essential component of future digital tax governance. Stronger authentication mechanisms would reduce opportunities for unauthorized system access while increasing taxpayer accountability.

Collectively, these four themes indicate that digital tax administration generates a different category of vulnerability from those typically discussed in conventional tax avoidance literature. Traditional studies emphasize regulatory loopholes, accounting discretion, transfer pricing, or earnings management[10][9]. In contrast, this study demonstrates that digital transformation introduces technical loopholes originating from system architecture rather than tax legislation itself.

These findings suggest that technological modernization should not be interpreted solely as an instrument for strengthening compliance. Instead, digital transformation simultaneously creates new institutional dynamics in which taxpayers continuously adapt their behavior to evolving technological environments. Consequently, improving tax compliance requires not only stronger regulations but also continuous refinement of digital system architecture, real-time monitoring capabilities, and adaptive risk management mechanisms capable of responding to emerging technological vulnerabilities.

Digital Tax Avoidance Strategies in the CoreTax Environment

Beyond identifying technical loopholes, this study reveals that taxpayers have gradually developed adaptive strategies to respond to the changing digital tax environment. The findings indicate that tax avoidance in the CoreTax era no longer relies primarily on regulatory ambiguities or conventional accounting manipulation. Instead, taxpayers increasingly adjust their reporting behavior based on their understanding of the technological characteristics of the digital tax administration system. Three major strategies emerged from the thematic analysis: data omission, timing exploitation, and transaction shifting.

Data Omission

The first strategy identified is data omission, whereby taxpayers intentionally exclude historical transactions or fiscal adjustments that are not immediately visible within the CoreTax environment. Unlike traditional concealment, this strategy does not necessarily involve falsifying financial information but rather takes advantage of inconsistencies generated during the migration from the legacy tax administration system.

One tax consultant explained:

"Several clients realized that some historical fiscal corrections were no longer visible after migration. Since those records were absent from the system, they assumed that reporting them was no longer necessary." (C1)

A corporate taxpayer similarly acknowledged that incomplete historical records occasionally influenced reporting decisions.

"When historical transactions are missing from the system, companies face uncertainty regarding whether those records should be reported again. Some taxpayers interpret the absence of data as an indication that additional reporting is unnecessary." (CT2)

From the perspective of the tax authority, however, missing digital records do not eliminate taxpayers' legal obligations.

One DGT official emphasized:

"Tax obligations are determined by tax regulations rather than by what appears in the system. Nevertheless, incomplete migration complicates verification because officers must reconcile information from multiple databases." (T4)

These findings demonstrate that data omission is not merely a consequence of taxpayer opportunism but also reflects the interaction between technological transition and taxpayer decision-making. During periods of digital transformation, incomplete information may unintentionally encourage strategic interpretations of reporting obligations. This finding extends Information Asymmetry Theory (Akerlof, 1970) by suggesting that digital asymmetry emerges when taxpayers possess greater operational knowledge of system limitations than tax authorities can immediately address.

Timing Exploitation

The second strategy identified is timing exploitation, referring to taxpayers' strategic use of the interval between electronic submission and final system validation. Participants explained that while CoreTax automatically receives submitted tax returns, complete verification may occur after additional processing stages.

One tax consultant described this practice:

"Some taxpayers understand that submission and validation are two different processes. During that interval, they monitor the system carefully and, if necessary, submit revisions before final verification is completed." (C5)

This observation was confirmed by a DGT officer.

"Certain validation procedures still require background processing. Although every modification is recorded in the audit trail, the existence of processing intervals creates operational challenges during the verification stage." (T2)

Unlike conventional tax planning, timing exploitation does not alter the substance of transactions but instead exploits the temporal characteristics of digital administration. The strategy illustrates how taxpayers increasingly recognize that automated systems operate according to computational processes rather than continuous human supervision.

This finding complements the work of Alm[12], who argued that digitalization changes taxpayers' perceptions of enforcement. However, the present study further demonstrates that taxpayers actively adapt their reporting behavior to the timing mechanisms embedded within digital systems, thereby transforming technological processes into strategic opportunities.

Transaction Shifting

The third strategy emerging from the interviews is transaction shifting, whereby taxpayers restructure or reclassify transactions into categories perceived to receive less automated scrutiny.

One experienced tax consultant explained:

"Businesses continuously observe how the system responds to different transaction categories. Once they understand which transactions receive stronger validation, they naturally adjust their reporting strategies." (C4)

An academic participant also highlighted the selective nature of automated monitoring.

"Risk-based algorithms cannot examine every transaction with the same intensity. Consequently, taxpayers gradually learn where the system concentrates its analytical resources." (A1)

Corporate taxpayers similarly recognized that reporting behavior has become increasingly influenced by digital system characteristics.

"Companies today are more concerned about how transactions appear within the digital platform than under the previous manual procedures." (CT1)

These findings indicate that taxpayers increasingly optimize reporting behavior based on perceived algorithmic priorities rather than purely legal considerations. Instead of exploiting statutory loopholes, they adapt to the architecture of digital governance itself.

Such adaptive behavior illustrates the emergence of what this study conceptualizes as Digital Tax Avoidance, in which technological knowledge becomes an important resource for strategic tax planning. Unlike traditional tax avoidance, which depends primarily on legal interpretation, digital tax avoidance reflects taxpayers' capacity to understand and respond to computational logic embedded within digital tax administration systems.

Discussion

The three adaptive strategies identified in this study—data omission, timing exploitation, and transaction shifting—demonstrate a fundamental transformation in taxpayer behavior during the digitalization of tax administration. Rather than replacing conventional tax avoidance practices, digital technologies create additional strategic opportunities by enabling taxpayers to exploit technological vulnerabilities embedded within digital tax administration systems. These findings indicate that tax avoidance in the digital era extends beyond regulatory interpretation and increasingly involves taxpayers' ability to understand and respond to the operational characteristics of digital platforms.

The findings challenge the widely held assumption that digitalization automatically strengthens tax compliance. Previous international studies have consistently reported that digital tax administration improves administrative efficiency, transparency, and compliance by integrating taxpayer information and enhancing risk-based monitoring[14]. Similar evidence has been reported in countries such as Estonia, where the e-Tax system significantly reduced compliance costs through highly integrated digital services, Australia, where digital reporting improved audit effectiveness and real-time compliance monitoring, and Singapore, where extensive automation strengthened taxpayer services and voluntary compliance. However, unlike these studies, the present research demonstrates that during the early implementation of an integrated digital tax system, technological vulnerabilities—including validation delays, data migration inconsistencies, algorithmic blind spots, and authentication weaknesses—may create new opportunities for strategic taxpayer behavior. This finding suggests that the effectiveness of digital tax administration depends not only on technological sophistication but also on the resilience and continuous refinement of the underlying digital infrastructure.

From a theoretical perspective, the findings extend Tax Compliance Theory[19]. Conventional tax compliance models emphasize institutional trust, perceived fairness, audit probability, and sanction mechanisms as the primary determinants of taxpayer compliance. The present study suggests that compliance decisions in digital environments are also influenced by taxpayers' perceptions of technological capability. As taxpayers become increasingly familiar with automated tax systems, they evaluate not only legal obligations but also the strengths and limitations of digital enforcement mechanisms. Accordingly, technological capability should be considered an additional dimension influencing taxpayer compliance in increasingly digitalized tax administrations.

The findings also broaden Information Asymmetry Theory[26]. Traditionally, information asymmetry refers to unequal access to economic information between two parties. In the context of digital tax administration, however, this study identifies a new form of technological information asymmetry, whereby taxpayers possess superior operational knowledge of system behavior, validation processes, and algorithmic limitations compared with tax administrators during the transition phase of system implementation. This conceptual extension highlights that information asymmetry in digital governance may originate not only from economic information but also from unequal understanding of technological infrastructures.

Based on these findings, this study proposes Digital Tax Avoidance as a distinct conceptual phenomenon characterized by taxpayers' strategic adaptation to technological vulnerabilities within digital tax administration systems rather than merely exploiting legal loopholes. This concept contributes to the development of tax avoidance literature by integrating technological, institutional, and behavioral perspectives into a single analytical framework. Consequently, the study broadens current understanding of taxpayer behavior in digital fiscal ecosystems and provides a foundation for future research examining technology-driven tax avoidance in other jurisdictions.

From a practical perspective, the findings suggest that successful digital tax transformation requires more than system digitalization alone. Tax authorities should continuously strengthen real-time validation mechanisms, improve data migration accuracy, enhance authentication and cybersecurity protocols, and develop adaptive AI-based risk monitoring systems capable of identifying emerging patterns of Digital Tax Avoidance. Such measures will help ensure that technological innovation not only improves administrative efficiency but also strengthens substantive taxpayer compliance and the long-term integrity of digital tax administration.

5. Conclusion

This study explored the emergence of Digital Tax Avoidance during the implementation of Indonesia's Core Tax Administration System (CoreTax). The findings demonstrate that although digital tax administration significantly improves administrative efficiency, transparency, and data integration, it also creates new technological vulnerabilities that may be strategically exploited by taxpayers. Four major technical loopholes were identified—data migration gaps, validation delays, algorithmic blind spots, and authentication weaknesses—which facilitate three adaptive tax avoidance strategies: data omission, timing exploitation, and transaction shifting. These findings indicate that taxpayer behavior evolves in response to technological transformation, highlighting that digitalization introduces not only greater administrative capability but also new compliance risks.

This study contributes to the literature by introducing the concept of Digital Tax Avoidance, which explains how taxpayers strategically exploit technological characteristics of digital tax administration rather than relying solely on conventional legal loopholes. In addition, the concept of the illusion of compliance extends Tax Compliance Theory and Information Asymmetry Theory by demonstrating that taxpayer behavior in digital environments is increasingly shaped by perceptions of technological capability and by asymmetries in knowledge regarding digital system operations.

From a policy perspective, the findings suggest that the successful implementation of CoreTax requires continuous refinement of both technological infrastructure and governance mechanisms. The Directorate General of Taxes should prioritize strengthening real-time validation processes, improving data migration accuracy, enhancing multi-factor authentication and cybersecurity measures, expanding AI-driven risk detection and predictive analytics, and implementing continuous monitoring to identify emerging forms of Digital Tax Avoidance. These measures are essential to ensure that digital transformation enhances not only administrative efficiency but also substantive taxpayer compliance and public trust in the tax system.

This study is limited to the Indonesian context and a relatively small qualitative sample; therefore, the findings should be interpreted within these boundaries. Future research is encouraged to examine the Digital Tax Avoidance framework across different institutional and regulatory environments, compare digital tax administration systems across countries, and investigate various taxpayer groups, including individual taxpayers, small and medium-sized enterprises, multinational corporations, and digital platform businesses. Employing quantitative, mixed-method, or longitudinal research designs would also enable

broader validation of the proposed framework and enhance the generalizability of findings regarding taxpayer behavior in increasingly digitalized tax ecosystems.

6. References

- [1] B. Amina and M. Sara, "Tax evasion and its effects on development: A systematic review of current issues and future solutions," *Int. tax J.*, vol. 51, no. 6, pp. 231–239, 2024.
- [2] J. Martinez-Vazquez, E. Sanz-Arcega, and J. M. T. Martín, "Tax revenue management and reform in the digital era in developing and developed countries," in *Research handbook on public financial management*, Edward Elgar Publishing, 2023, pp. 202–225.
- [3] A. Bestani and M. Benata, "Digital Tax Reforms: Learning from Global Experiences," *مجاميع المعرفة*, vol. 12, no. 1, pp. 316–328, 2026.
- [4] A. K. W. Hidayat and I. Inayati, "Implementation of the Core Tax System: Impacts and Challenges on Tax Revenue in Indonesia," *J. Transnatl. Univers. Stud.*, vol. 3, no. 6, pp. 1–8, 2025.
- [5] F. Arianty, "Implementation challenges and opportunities Coretax administration system on the efficiency of tax administration," *J. Vokasi Indones.*, vol. 12, no. 2, p. 98, 2024.
- [6] R. Ananda, "Comparison of Coretax with Digital Tax Systems in ASEAN Countries: Policy and Implementation Study," *J. Strateg. Behav. Account.*, vol. 1, no. 01, 2025.
- [7] F. Faraka and F. A. Kurniawan, "The Unease Between Tax Administration Innovation And Compliance: A Qualitative Study Of Taxpayers At Bangkalan Tax Office In The 2025 Transition Period," *Int. J. Account. Bus. Soc.*, vol. 33, no. 3, 2025.
- [8] O. Sanni, "Digital Taxation and Cybersecurity: Opportunities and Threats," 2025.
- [9] J. Slemrod and S. Yitzhaki, "Tax avoidance, evasion, and administration," in *Handbook of public economics*, vol. 3, Elsevier, 2002, pp. 1423–1470.
- [10] M. Hanlon and S. Heitzman, "A review of tax research," *J. Account. Econ.*, vol. 50, no. 2–3, pp. 127–178, 2010.
- [11] R. M. Bird and E. M. Zolt, "Technology and taxation in developing countries: From hand to mouse," *Natl. Tax J.*, vol. 61, no. 4, pp. 791–821, 2008.
- [12] J. Alm, "What motivates tax compliance?," *J. Econ. Surv.*, vol. 33, no. 2, pp. 353–388, 2019.
- [13] M. Umbet, D. Askarov, K. Rudžionienė, Č. Christauskas, and L. Alikulova, "Evaluating the implementation of information technology audit systems within tax administration: a risk governance perspective for enhancing digital fiscal integrity," *J. Risk Financ. Manag.*, vol. 18, no. 8, p. 422, 2025.
- [14] S. B. Dhaliwal, D. Sohail, S. A. Keeley Hafer, and B. Hafer, "Digitalization of tax administration: A review of the organization for economic co-operation and development (OECD) guidelines," *Account. Tax.*, vol. 15, no. 1, 2023.
- [15] A. Okello, *Managing income tax compliance through self-assessment*. International Monetary Fund, 2014.
- [16] M. H. Sajid, A. Ali, and A. K. Jadoon, "Smart Tax Systems and Artificial Intelligence: Transforming Compliance and Enforcement in the Digital Era," 2025.
- [17] E. Ezeife, E. Kokogho, P. E. Odio, and M. O. Adeyanju, "The future of tax technology in the United States: A conceptual framework for AI-driven tax transformation," *Future*, vol. 2, no. 1, p. 101203, 2021.
- [18] D. P. Arda and Y. Yusuf, "Determinants of taxpayer ethical behavior in tax avoidance and evasion: Strategies for mitigation," *J. Ilm. Akunt. dan Bisnis*, vol. 19, no. 2, pp. 264–277, 2024.
- [19] E. Kirchler, *The economic psychology of tax behaviour*. Cambridge University Press, 2007.
- [20] E. F. P. Luttmer and M. Singhal, "Tax morale," *J. Econ. Perspect.*, vol. 28, no. 4, pp. 149–168, 2014.

Digital Tax Avoidance in the Era of Core Tax Administration: Exploring Technical Loopholes and the Illusion of Compliance in Indonesia. Hartono et.al

- [21] R. K. Yin, "Case study research and applications: Design and methods. 2017," *Sage Publ. ISBN-13*, vol. 9781506, p. 336169, 2018.
- [22] R. E. Stake, *The art of case study research*. sage, 1995.
- [23] M. Q. Patton, "Qualitative research & evaluation methods: Integrating theory and practice," (*No Title*), 2015.
- [24] V. Braun and V. Clarke, "Using thematic analysis in psychology," *Qual. Res. Psychol.*, vol. 3, no. 2, pp. 77–101, 2006.
- [25] Y. S. Lincoln and E. G. Guba, "Naturalistic Inquiry." Sage Publications: Newbury Park, 1985.
- [26] G. A. Akerlof, "The market for 'lemons': Quality uncertainty and the market mechanism," in *Uncertainty in economics*, Elsevier, 1978, pp. 235–251.