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The Mediating Role of Tax Awareness in The Relationship Between Digital Transformation and Sustainable Tax Compliance

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ABSTRACT

In the context of increasing digitalization across public sector systems, governments are investing in advanced tax technologies to enhance compliance, improve administrative efficiency, and promote fiscal sustainability. However, recent literature highlights that technological tools alone are not sufficient to induce behavioral change among taxpayers. This study explores the mediating role of tax awareness in the relationship between digital transformation and sustainable tax compliance, using a structured review of 21 academic and empirical studies published between 2020 and 2024. Findings reveal that digital systems such as e-filing, e-invoicing, and AI-powered audits facilitate tax enforcement and accessibility. However, their impact on actual compliance is significantly enhanced when taxpayers are equipped with adequate knowledge, motivation, and trust. Tax awareness acts as a behavioral enabler that transforms digital access into voluntary and informed participation in the tax system. The analysis also finds that this mediating role is context-sensitive, influenced by digital literacy, public trust, and socioeconomic conditions. To translate these insights into actionable policy, the study proposes the Integrated Digital-Tax Awareness Model a practical framework for tax authorities. The model emphasizes a dual strategy: combining digital infrastructure with targeted awareness campaigns and educational outreach. It presents a feedback loop in which taxpayer engagement reinforces system design and awareness programming, resulting in inclusive and sustainable compliance. The study concludes that building long-term tax compliance in the digital era requires innovation in technology also investment in citizen empowerment through tax literacy and engagement.

الملخص

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في سياق تزايد الرقمنة في أنظمة القطاع العام، تستثمر الحكومات في تقنيات ضريبية متقدمة لتعزيز الامتثال، وتحسين الكفاءة الإدارية، وتعزيز الاستدامة المالية. ومع ذلك، تُبرز الدراسات الحديثة أن الأدوات التكنولوجية وحدها لا تكفي لإحداث تغيير سلوكي بين دافعي الضرائب. تستكشف هذه الدراسة الدور الوسيط للوعي الضريبي في العلاقة بين التحول الرقمي والامتثال الضريبي المستدام، وذلك باستخدام مراجعة منظمة لـ 21 دراسة أكاديمية وتجريبية نُشرت بين عامي 2020 و2024. تكشف النتائج أن الأنظمة الرقمية مثل التقديم الإلكتروني، والفوترة الإلكترونية، وعمليات التدقيق المدعومة بالذكاء الاصطناعي تُسهّل إنفاذ الضرائب وإمكانية الوصول إليها. ومع ذلك، فإن تأثيرها على الامتثال الفعلي يتعزز بشكل كبير عندما يكون دافعو الضرائب مُزودين بالمعرفة الكافية والدافع والثقة. يعمل الوعي الضريبي كعامل تمكين سلوكي يحول الوصول الرقمي إلى مشاركة طوعية ومستنيرة في النظام الضريبي. كما يجد التحليل أن هذا الدور الوسيط حساس للسياق، ويتأثر بالثقافة الرقمية، وثقة الجمهور، والظروف الاجتماعية والاقتصادية. لترجمة هذه الرؤى إلى سياسات عملية، تقترح الدراسة نموذجًا متكاملًا للوعي الضريبي الرقمي، وهو إطار عمل عملي للسلطات الضريبية. يركز النموذج على استراتيجية مزدوجة: الجمع بين البنية التحتية الرقمية وحملات التوعية الموجهة والتواصل التثقيفي. ويقدم حلقة تغذية راجعة تُعزز من خلالها مشاركة دافعي الضرائب تصميم النظام وبرامج التوعية، مما يؤدي إلى امتثال شامل ومستدام. وتخلص الدراسة إلى أن بناء امتثال ضريبي طويل الأمد في العصر الرقمي يتطلب الابتكار في التكنولوجيا، بالإضافة إلى الاستثمار في تمكين المواطنين من خلال التثقيف الضريبي والمشاركة..

التحول الرقمي؛ الوعي الضريبي؛ الامتثال الضريبي؛ الاستدامة المالية؛ أنظمة الضرائب الإلكترونية؛ ابتكار القطاع العام؛ الضرائب السلوكية؛ الحوكمة الرقمية.

JEL Classification: *H26, H30, H83, O33, M15, & D91.*

1. Introduction

In the contemporary digital economy, governments are increasingly compelled to modernize their tax systems to enhance revenue collection, reduce evasion, and foster compliance. Digital transformation, characterized by the deployment of technologies such as e-filing, e-invoicing, AI-based audits, and blockchain-based reporting, is at the core of this evolution (Ibrahim, 2021; Ibrahim & Alzubi, 2024). However, technology alone does not guarantee behavioral change among taxpayers. The shift from traditional to digital taxation systems demands not only technological infrastructure but also a corresponding change in the cognitive and behavioral engagement of taxpayers "what we identify as tax awareness". Tax awareness, as a concept, transcends mere knowledge of tax obligations. It encompasses a comprehensive understanding of one's responsibilities, the societal role of taxation, and the long-term benefits of compliance (Hardika & Suardani, 2023). This awareness shapes attitudes and behaviors, particularly in societies where trust in public institutions is moderate and tax morale is low. Thus, tax awareness becomes a vital mediating variable, shaping the extent to which digital transformation initiatives lead to sustainable tax compliance. The assumption that digital transformation will unilaterally improve compliance is increasingly challenged in recent literature. While tools such as automated systems and electronic records do improve transparency and

reduce manual errors, they do not inherently motivate taxpayers to comply (Zhang & She, 2024). As Bratcev and Simachkova (2021) argue, digital transformation may create a "comfortable tax environment," but without sufficient awareness, this environment can become passive rather than participatory. In fact, poorly understood technologies may even foster skepticism, particularly among individuals and MSMEs unfamiliar with digital tools (Bornman & Wassermann, 2020). Therefore, a critical question emerges: Can digital transformation truly foster sustainable tax compliance without simultaneously enhancing tax awareness?

Empirical research supports this concern. Studies such as Murnidayanti & Putranti (2023) demonstrated that while digitization of tax administration initially raised the perceived complexity and costs among MSMEs, these effects diminished (and compliance improved) once targeted awareness and support mechanisms were introduced. Similarly, Meita & Malau (2022) noted that the effectiveness of digital systems was significantly improved when accompanied by taxpayer outreach programs. These findings reinforce the proposition that digital transformation must be coupled with robust awareness initiatives to achieve compliance outcomes. This paper, therefore, builds on the premise that tax awareness mediates the relationship between digital transformation and tax compliance. It adopts a sustainability lens, recognizing that compliance is not simply about enforcing short-term obligations but ensuring long-term engagement and voluntary participation in the tax system. As Rajeswari et al. (2024) highlight, sustainable compliance emerges when digital systems are accessible, understandable, and perceived as fair—outcomes that are inextricably tied to awareness. Moreover, sustainable tax compliance involves an ongoing, dynamic interaction between institutional efforts and taxpayer behavior. Adelakun et al. (2024) emphasize the need for legal frameworks that not only embed digital procedures but also promote transparency and understanding. Likewise, Agustina et al. (2024) show that the socialization of digital systems (through campaigns, education, and community engagement) is central to increasing taxpayers' motivation to comply voluntarily. Despite the promising role of digitalization, challenges remain. Not all taxpayers adapt uniformly. Disparities in digital literacy, access to infrastructure, and perceptions of government integrity can moderate the effectiveness of digital tools (Hidayat & Defitri, 2024). This creates a twofold challenge for policymakers: ensuring that digital platforms are inclusive and simultaneously building tax awareness across diverse demographics. Septianto et al. (2023) emphasize the value of localized tax centers and educational outreach to bridge this divide. In light of these dynamics, this study aims to critically investigate how tax awareness acts as a mediating factor in the relationship between digital transformation and sustainable tax compliance in the Jordanian context. Jordan offers a compelling case, given its efforts to modernize tax administration amidst high informality and moderate compliance levels. By focusing on this mediating role, the study contributes to both the theoretical understanding of compliance behavior and the practical design of tax policies that align with principles of sustainability, equity, and technological inclusion.

2. Literature Review

The intersection of digital transformation, tax awareness, and tax compliance is significant for understanding how modern tax systems are adapting to digital advancements. Within this framework, tax awareness serves as a crucial mediating factor in improving tax compliance through enhanced efficiency and transparency in tax administration as facilitated by digital tools. Digital transformation in tax systems has been shown to influence tax compliance behaviors significantly. The integration of technologies such as e-invoicing and blockchain improves compliance by enhancing information accuracy and transparency, which reduces opportunities for tax evasion (Bellon et al., 2022; Hidayat & Defitri, 2024). For instance, Murnidayanti and Putranti Murnidayanti & Putranti (2023) noted that digitizing tax administration significantly lowered the compliance costs for micro, small, and medium enterprises (MSMEs) in Indonesia, suggesting that such transformations can strengthen compliance motivation. Furthermore, Hidayat and

Defitri Hidayat & Defitri (2024) emphasized that innovations resulting from digital transformation can enhance tax non-compliance detection and risk management, indicating that efficient digital systems promote compliance by raising the perception of risks associated with non-compliance.

Tax awareness, defined as the understanding of one's tax obligations and the importance of compliance, plays a vital mediating role in the relationship between digital transformation and tax compliance. Hardika and Suardani (Hardika & Suardani, 2023; demonstrated that taxpayer awareness positively influences compliance, indicating that as digital platforms simplify tax processes, they also require a corresponding enhancement in taxpayer awareness. This aligns with findings from Agustina et al. (Agustina et al., 2024), who argued that digital socialization and the digitalization of tax administration enhance compliance by increasing motivation among cooperative taxpayers. Moreover, the connection between digital transformation and tax compliance is further strengthened through educational initiatives and awareness campaigns. Existing literature posits that improved access to tax information via digital platforms leads to greater understanding, fostering voluntary compliance (Adelakun et al., 2024). Additionally, the role of tax socialization, efforts to educate and engage taxpayers, was identified as a factor that enhances the link between digitalization and taxpayer compliance, demonstrating that both technological advances and awareness initiatives are imperative (Hardika & Suardani, 2023; , Meita & Malau, 2022). However, challenges persist in ensuring that all segments of the population effectively adapt to these digital transformations. The complexity of the digital economy necessitates a nuanced understanding of tax obligations and rights, which can be daunting for many taxpayers (Bornman & Wassermann, 2020). Consequently, policymakers must prioritize fostering tax literacy through outreach and education to improve compliance levels alongside efforts in digital transformation. The intersection of digital transformation, tax awareness, and sustainable tax compliance presents a multifaceted area of study that has garnered increasing attention in recent years. Digital transformation involves the adoption of advanced technologies by tax authorities and taxpayers alike, aiming to enhance the efficiency and effectiveness of tax administration. This shift not only seeks to streamline compliance processes but also to foster a more transparent and accountable environment for tax obligations.

Research indicates that digital tax administration systems, when implemented effectively, can significantly increase tax compliance among various business sectors, particularly micro, small, and medium enterprises (MSMEs). Murnidayanti and Putranti highlight that the application of digital tools like e-fraktur in Indonesia initially raised compliance costs but subsequently reduced them substantially after proper implementation, underscoring the long-term benefits of digital transformation in tax compliance (Murnidayanti & Putranti, 2023). Similarly, Hidayat and Defitri emphasize that innovations such as blockchain and artificial intelligence hold promise for improving non-compliance detection, thereby enhancing overall tax compliance (Hidayat & Defitri, 2024). However, the mere introduction of technology is not enough. Tax awareness plays a critical mediating role in this dynamic. Hardika and Suardani assert that increased taxpayer awareness of tax obligations and the benefits of compliance directly correlates with improved compliance rates (Hardika & Suardani, 2023). Awareness creates a foundational understanding of the importance of tax payments, which, when cultivated through effective tax socialization and education initiatives, drives greater compliance among taxpayers (Septianto et al., 2023). Furthermore, research by Bratcev and Simachkova suggests that while digitalization facilitates a comfortable tax environment, it also introduces potential risks, highlighting the need for taxpayer awareness to navigate these complexities (Bratcev & Simachkova, 2021). Moreover, the potential for digital transformation to mitigate tax avoidance also supports the case for enhanced tax compliance. Zhang and She present contrasting views on the impact of digital transformation on tax practices. Some studies indicate it may discourage tax avoidance through increased transparency and accountability, while others suggest it may inadvertently exacerbate corporate tax avoidance by increasing related-party transactions (Zhang & She, 2024). This is echoed by Meita and Malau's findings that digital transformation directly influences compliance behavior among taxpayers by

improving their perceptions of the tax system (Meita & Malau, 2023). Notably, the empirical linkage between tax awareness and compliance is reinforced by the work of Rajeswari et al. (2024) who demonstrate that the quality and efficiency of digitalized tax services correlate positively with taxpayer compliance, suggesting that as digital services become more accessible and comprehensible, taxpayer compliance improves correspondingly (Rajeswari et al., 2024). Through engaging taxpayers and providing them with the necessary knowledge and tools to comply with tax obligations, tax authorities can facilitate a culture of compliance that ultimately leads to sustainable tax practices. Thus, the interplay between digital transformation and tax awareness is pivotal in fostering sustainable tax compliance. The evidence suggests that a digitally inclusive environment, coupled with heightened awareness and understanding among taxpayers, facilitates not only compliance but also enhances the overall efficacy of tax administration systems. Efforts must prioritize educational initiatives that raise awareness and demystify digital tax processes for comprehensive benefits in tax compliance outcomes.

3. Methodology

This study adopts a qualitative, integrative literature review methodology, focusing on analyzing and synthesizing current academic and empirical studies on the mediating role of tax awareness in the relationship between digital transformation and sustainable tax compliance. Given the dynamic and multidisciplinary nature of the topic—which intersects public policy, behavioral economics, digital governance, and fiscal sustainability—this method is best suited to critically evaluate existing scholarly contributions and highlight conceptual, practical, and empirical gaps.

The review process followed the structured literature review (SLR) framework, drawing from peer-reviewed journals, open-access academic repositories, and specialized policy reports. The reviewed literature includes studies published between 2020 and 2024, with a few foundational works from earlier years where relevant theories were first established. Databases used for sourcing materials included Scopus, Web of Science, Google Scholar, ScienceDirect, and DOAJ, using keywords such as *digital tax transformation, tax awareness, taxpayer behavior, fiscal compliance, e-tax systems*, and *sustainable taxation*. Preference was given to articles with DOIs and those indexed in reputable journals in public administration, finance, and information systems.

A total of 21 studies were identified, analyzed, and categorized based on thematic relevance. These studies were assessed based on their theoretical grounding, methodological rigor, context of application (with emphasis on developing economies and MSMEs), and their findings on the interrelationships among digitalization, awareness, and compliance behavior. Notable contributions from Hardika & Suardani (2023), Murnidayanti & Putranti (2023), Hidayat & Defitri (2024), and Agustina et al. (2024) were discussed in detail in the literature review section and form the empirical and theoretical foundation of the current study. The approach to analysis involved critical synthesis and thematic coding, where studies were clustered around three core themes:

Digital Transformation in Tax Administration
Tax Awareness and Literacy
Determinants and Sustainability of Tax Compliance

Each theme was examined to identify common findings, contradictions, mediating or moderating variables, and policy implications. Special attention was paid to studies that explored the mediating effect of awareness and the enabling or limiting factors in developing countries, such as digital divides, tax morale, and institutional trust. This review does not include primary data collection; rather, it contributes by mapping the scholarly discourse, evaluating theoretical coherence, and identifying areas that require further empirical validation. *Figure (1)* outlines the step-by-step methodology used to critically examine previous studies addressing the relationships among digital transformation, tax awareness, and sustainable tax compliance. It

begins with the identification of the research focus, then proceeds to the selection of relevant literature published between 2020 and 2025, particularly those exploring tax digitalization and behavioral dimensions of taxpayer compliance. The process continues with the thematic categorization of the literature into three major domains: (1) digital transformation in tax administration, (2) taxpayer awareness and literacy, and (3) determinants of tax compliance. Each cluster was then subjected to in-depth critical analysis to identify patterns, theoretical contributions, and methodological approaches. Finally, a cross-thematic synthesis was conducted to explore how tax awareness functions as a mediating variable in the digital compliance framework. This culminated in the development of a conceptual framework, which forms the basis for the theoretical contribution of the study. Thus, Figure (1) serves as a visual roadmap of how the literature was systematically reviewed, interpreted, and integrated to support the study's central thesis.

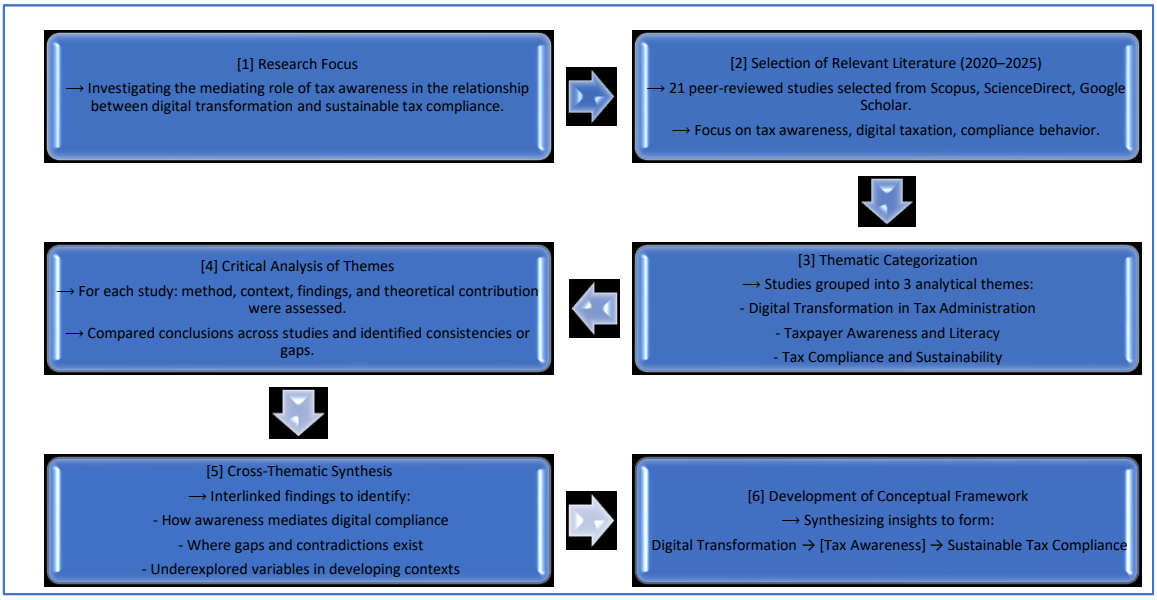


Figure 1: Methodological Framework of the Literature Review Process

Methodological framework illustrating the structured process of literature review and analysis used in this study. The diagram presents the sequential stages followed: from defining the research focus, selecting relevant studies (2020–2025), thematic categorization, critical analysis, and cross-thematic synthesis, to the development of the conceptual framework in which tax awareness mediates the relationship between digital transformation and sustainable tax compliance.

4. Findings

The findings of this study are derived from a critical synthesis of 21 academic and empirical sources published between 2020 and 202. Through thematic categorization and analysis, several key insights emerged regarding the interplay between digital transformation, tax awareness, and sustainable tax compliance. The literature consistently indicates that digital transformation initiatives (such as the introduction of electronic filing systems, e-invoicing, and real-time data analytics) have the potential to improve tax compliance outcomes by increasing system efficiency, reducing human error, and limiting face-to-face interactions that often breed informality and corruption (Bellon et al., 2022; Hidayat & Defitri, 2024).

For instance, Murnidayanti & Putranti (2023) demonstrated that, over time, the digitization of tax systems in Indonesia led to a measurable reduction in compliance costs for MSMEs, resulting in greater voluntary engagement with tax authorities. A dominant theme across the reviewed literature is the pivotal role of tax awareness in converting the benefits of digital systems into actual behavioral compliance. Studies (e.g., Hardika & Suardani, 2023; Agustina et al., 2024) reveal that even the most advanced digital tools require a baseline of taxpayer knowledge and engagement to function effectively. When taxpayers are unaware of their rights, obligations, or how to navigate digital platforms, the tools remain underutilized or misunderstood. This reinforces the idea that awareness is not a supplementary element but a necessary mediator between digital transformation and sustainable compliance. The analysis revealed that the mediating role of tax awareness is not uniform across all contexts. In some studies, awareness fully mediated the relationship between digitalization and compliance (e.g., Septianto et al., 2023), while in others, it served only a partial mediator due to additional influencing factors such as trust in institutions, digital literacy, or socioeconomic barriers (Meita & Malau, 2023; Zhang & She, 2024). This suggests that the effectiveness of awareness as a mediator is contingent upon broader institutional and cultural conditions. The findings show that awareness is not passively acquired. Rather, it is cultivated through targeted education campaigns, community-based tax centers, and interactive digital guidance tools embedded within e-tax systems (Rajeswari et al., 2024; Adelakun et al., 2024). Countries that combined digital reforms with well-funded tax literacy programs demonstrated stronger compliance behavior than those relying on automation alone. Collectively, the literature points to the emergence of a holistic compliance model wherein digital tools act as enablers, tax awareness as a behavioral driver, and compliance as the sustainable outcome. This model reflects the growing consensus that long-term improvements in tax compliance cannot be achieved solely through technology or enforcement but through integrated strategies that prioritize both human and technical dimensions.

Integrated Digital-Tax Awareness Model (IDTAM) *for Sustainable Tax Compliance in Developing Economies*

The Integrated Digital-Tax Awareness Model (IDTAM) is a practical policy-oriented framework designed for tax authorities and public sector institutions to improve tax compliance through the synergistic integration of digital transformation initiatives with strategic tax awareness programs. It emphasizes a dual-path approach:

Path 1: Technological Enablement – Strengthening digital tax infrastructure (e-filing, e-invoicing, real-time audits).

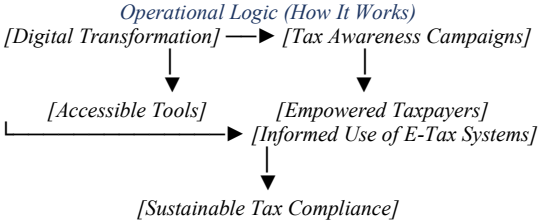
Path 2: Behavioral Empowerment – Increasing tax literacy, awareness, and public trust through targeted outreach.

Both paths interact dynamically, with tax awareness acting as a mediator that enhances the effectiveness of digital reforms as in Table (1).

Table (1): Model Components

Component	Description	Implemented Through
1. Digital Infrastructure	Establishing accessible, user-friendly, and secure e-tax systems.	E-filing portals, mobile tax apps, AI-based risk detection
2. Awareness Campaigns	Mass education initiatives to explain tax rights, duties, and digital tools.	Media, social networks, workshops, infographics
3. Embedded User Support	Integrating tutorials and live help within digital platforms.	Chatbots, FAQ tools, human support desks
4. Community Tax Outreach	Localized programs targeting SMEs, rural taxpayers, informal workers.	University tax clinics, mobile service units
5. Feedback & Trust Loop	Mechanisms for citizens to provide feedback and improve digital services.	Satisfaction surveys, taxpayer panels

6. Institutional Integration	Aligning tax awareness with national digital strategy and education policy.	Inter-agency collaboration, school curricula



Mediation Mechanism: Awareness enhances taxpayers' ability and motivation to use digital tools correctly and ethically.

Reinforcement Loop: The more accessible and transparent the tools, the more taxpayers engage; the more they engage, the stronger their awareness becomes.

Government agencies, particularly in tax and finance ministries, are advised to **adopt the IDTAM model** as a strategic roadmap. The model is adaptable to different national contexts and aligns with public sector modernization goals under digital governance and sustainable development frameworks. It requires initial investment in both technology and human capital but promises **multi-dimensional returns** in efficiency, equity, and civic trust.

Figure (2) illustrates the Integrated Digital-Tax Awareness Model (IDTAM) proposed in this study as a practical and adaptable framework for improving tax compliance in digitally transforming tax environments. The model emphasizes the dual and interdependent roles of technological enablement and behavioral empowerment, placing tax awareness at the center of the compliance process. The model begins with Digital Transformation, which refers to the implementation of e-filing systems, digital invoicing, and AI-powered risk detection by tax authorities. These tools serve as enablers that increase access, automate processes, and promote administrative efficiency. Simultaneously, the model underscores the importance of Tax Awareness Campaigns, which provide taxpayers with essential knowledge about their rights and obligations, as well as guidance on how to effectively use digital tax systems. This is achieved through media outreach, community workshops, digital guides, and school curricula. These two inputs converge at the level of the Empowered Taxpayer. Here, taxpayers possess both the technical capability and behavioral motivation to interact with e-tax platforms responsibly and efficiently. Awareness enhances compliance and fosters positive perceptions of fairness and trust in the tax system. The Informed Use of E-Tax Systems represents the practical outcome of this empowerment. Taxpayers engage actively with digital tools, provide feedback, and comply voluntarily. This engagement, in turn, leads to Sustainable Tax Compliance, characterized by reduced evasion, lower enforcement costs, increased trust in public institutions, and improved revenue collection. Importantly, the model incorporates a feedback loop, whereby insights gathered from taxpayer experiences feed back into the awareness campaigns and system design, ensuring continuous improvement and adaptability.

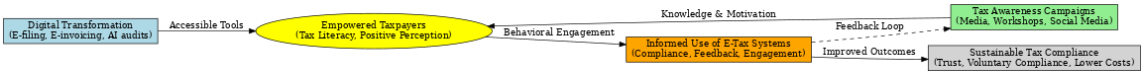


Figure (2): Integrated Digital-Tax Awareness Model (IDTAM)

The IDTAM model provides a policy-relevant roadmap that tax authorities, particularly in developing countries, can adopt to ensure that digital reforms are not just technologically sound, but also socially

inclusive and behaviorally effective. It operationalizes the central finding of this review: that awareness is not a by-product of technology but a necessary bridge between reform and compliance.

5. Discussion

The findings of this review affirm the complex but critical role that tax awareness plays in shaping the effectiveness of digital transformation initiatives within tax administration systems. While numerous studies demonstrate the direct impact of digitalization on compliance, the literature clearly indicates that technology alone is insufficient to drive sustainable behavioral change among taxpayers. This aligns with Bellon et al. (2022) and Hidayat & Defitri (2024), who argue that although e-tax services can improve administrative efficiency, their true potential is only realized when taxpayers are capable of and willing to engage with these tools. This study reinforces the theoretical proposition that awareness functions as a mediating variable—one that translates the advantages of digital systems into concrete compliance behavior. The synthesis showed that tax awareness strengthens taxpayers' perception of fairness, transparency, and their own responsibility, thereby facilitating voluntary compliance (Hardika & Suardani, 2023; Agustina et al., 2024). Furthermore, studies such as Rajeswari et al. (2024) and Septianto et al. (2023) support the argument that awareness initiatives (especially those embedded in digital platforms) can significantly improve compliance outcomes. A particularly important contribution of this review is the identification of contextual sensitivity in the mediating effect of awareness. As Meita & Malau (2023) and Zhang & She (2024) illustrate, factors such as digital literacy, socioeconomic status, institutional trust, and the quality of public service delivery play a decisive role in determining whether awareness can truly mediate digital transformation's effect. This suggests that a one-size-fits-all approach is inadequate, and that policymakers must tailor their digital tax strategies to local realities. Moreover, the integration of educational outreach into digital systems emerges as a key strategic recommendation. Countries that have combined digitization with strong tax literacy programs show more consistent and sustainable compliance outcomes. These findings support the shift toward human-centered public sector innovation, which acknowledges that sustainable tax governance is as much about empowering citizens as it is about upgrading infrastructure. Collectively, the discussion points to the need for a holistic model of tax administration reform—one that integrates technological advancement, behavioral awareness, and institutional trust. The study thus contributes to the broader literature on fiscal sustainability and digital public services by highlighting that the human factor remains central, even in highly automated environments.

6. Conclusion

This study set out to explore how tax awareness mediates the relationship between digital transformation and sustainable tax compliance, drawing on recent empirical and conceptual literature. The findings confirm that while digital transformation enhances the operational efficiency and transparency of tax systems, it does not automatically translate into improved compliance unless taxpayers possess sufficient awareness of their obligations and the benefits of compliance. The review demonstrates that tax awareness acts as a behavioral catalyst that bridges the gap between technological capacity and civic engagement. It empowers taxpayers to make informed decisions, enhances their trust in the system, and contributes to the long-term sustainability of tax compliance strategies. Importantly, the effect of tax awareness is context-dependent, shaped by factors such as digital literacy, trust in public institutions, and access to reliable information. As such, any digital tax reform must be accompanied by proactive awareness-building programs, through formal education, media campaigns, digital help centers, and community tax outreach. In light of these insights, the study recommends that tax authorities, particularly in developing countries, adopt a dual-pronged approach: investing in digital infrastructure while simultaneously strengthening tax education and taxpayer

engagement. This integrated model offers the most promising pathway toward building a sustainable, inclusive, and transparent tax system in the digital era.

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