

Original Article

Tax System Digitalization and Taxpayer Compliance

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Abstract

By increasing efficiency, transparency, and compliance, digitalization has drastically changed tax administration systems worldwide. To streamline tax processes and bolster enforcement mechanisms, governments are increasingly utilizing digital tools including e-filing, electronic invoicing, real-time reporting, and automated verification. This study uses a descriptive and analytical method based on secondary data to investigate how digital tax systems affect taxpayer compliance. In order to explain how digitalization affects taxpayer views, faith in tax authorities, and compliance behavior, the analysis is driven by the Theory of Planned Behavior and the Slippery Slope Framework. The results show that digital tax systems promote voluntary tax compliance by lowering compliance costs, improving transparency, and reducing information asymmetry. But issues like cybersecurity threats, digital inequality, and low digital literacy persist, especially in emerging nations. The study indicates that in order to achieve sustainable compliance, successful digital tax administration necessitates not just cutting-edge technology but also taxpayer education and trust-building measures.

Keywords: Taxpayer Compliance; Digital Tax Administration; Theory of Planned Behavior; Slippery Slope Framework; E-Filing; Tax Compliance Behavior; Tax Governance; Taxation and Information Technology

Introduction

The world's tax structures are changing dramatically as a result of the quick development of digital technologies. To improve the efficacy, efficiency, and openness of tax administration, governments are increasingly utilizing digital solutions. Traditional tax procedures, including tax filing, payment, record-keeping, auditing, and enforcement, have been drastically altered by technologies like blockchain, cloud computing, artificial intelligence, and big data analytics. Improving tax collection efficiency, increasing electronic filing and payment alternatives, improving data accuracy, supporting larger digital governance projects, strengthening taxpayer services, and lowering compliance and administrative expenses are the main goals of digital tax systems. Mechanisms like computerized invoicing, pre-filled tax reports, real-time reporting, and automated verification systems are all brought about by digitalization. These technologies lessen the possibility of tax evasion, expedite tax refunds, and limit human mistake. A number of nations have successfully adopted digital tax systems and recorded increases in revenue collection and taxpayer compliance, including Estonia, Brazil, and EU members. But problems still exist, especially in emerging nations. Effective implementation is nevertheless hampered by problems such as unequal access to digital infrastructure, cybersecurity threats, low digital literacy, and reluctance to technological change. Using two well-known behavioral theories—the Theory of Planned Behavior and the Slippery Slope Framework—this study investigates how the digitization of tax systems affects taxpayer compliance. The paper highlights important findings, policy implications, and future research prospects through an analysis of previous research and worldwide experiences.

Background of Digitalization in Tax Systems

The way tax authorities function and how taxpayers carry out their duties has been profoundly altered by the incorporation of digital technologies into tax administration.



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Online taxpayer registration, electronic filing, digital payment systems, and automated compliance checks are just a few of the many technologies that make up digitalization. These developments have improved tax collecting accuracy, shortened processing times, and streamlined tax procedures. In addition to adopting new technology, digital transformation in tax administration necessitates redesigning tax procedures to conform to the digital platforms that taxpayers frequently utilize. Compliance becomes easier and more accessible as tax systems are integrated into commonplace digital contexts.

Objectives of the Study

This study's primary goals are to:

- Examine the idea and development of digitalization in tax systems;
- Analyze how digital tax systems affect taxpayer compliance;
- Explain taxpayer behavior using the Slippery Slope Framework and the Theory of Planned Behavior; and
- Determine the advantages and difficulties of digital tax administration.

Evolution of Tax Administration

In the past, paper-based systems and human processes were crucial to tax administration. Significant revenue losses resulted from these systems' frequent slowness, error-proneness, and susceptibility to corruption and tax fraud. The transition to digital tax systems, which replace manual processes with integrated digital platforms, signifies a fundamental structural change. Tax authorities are now able to offer online services, automate computations, and enhance monitoring systems thanks to this change. As a result, communication between taxpayers and tax authorities has improved in terms of efficiency and transparency.

Global Trends in Digital Tax Systems

The demand for better governance, increased compliance, and effective revenue management is driving the global shift towards digital tax systems. Digital technologies facilitate data-driven policy decisions, lower administrative expenses, and increase operational speed. Increased digital use by businesses is linked to better compliance and higher tax revenues, especially for small and informal businesses, according to studies. Modern tax administration heavily relies on cutting-edge technologies like blockchain, artificial intelligence, and automated reporting systems. By lowering information asymmetry, bolstering internal controls, facilitating real-time data matching, and boosting risk assessment capabilities, these tools increase overall tax compliance.

Theoretical Framework and Literature Review

Theories of Tax Compliance

A complex interplay of financial, social, moral, and psychological factors affects tax compliance. Several ideas are used to comprehend taxpayer behavior in the context of digitalization.

Planned Behavior Theory

An extension of the Theory of Reasoned Action, the Theory of Planned action asserts that the most direct cause of an individual's action is their desire to carry it out. According to TPB, three primary factors—attitude toward the conduct, subjective standards, and perceived behavioral control—have a significant impact on taxpayer non-compliance behavior. An individual's favorable or negative assessment of engaging in an action is referred to as their attitude. The perceived social pressure to participate in or refrain from an activity is known as a subjective norm. The term "perceived behavioral control" describes how easy or difficult a person believes an activity to be. In the context of digital tax systems, a taxpayer's intention to comply may be influenced by their positive attitude toward e-filing, their perception of their capacity to use digital platforms efficiently, and the perceived social expectation to comply.

Slippery Slope Framework

By combining psychological and economic aspects, the Slippery Slope Framework provides an alternate method for comprehending tax compliance. It implies that faith in tax officials and their authority are the two main factors influencing tax compliance. Voluntary compliance is encouraged by trust in tax officials. Taxpayers are more likely to comply voluntarily when they believe that tax authorities are just, open, and accountable. By boosting transparency, decreasing potential for corruption, and improving service perception, digitalization can strengthen this confidence. The ability of the tax authorities to enforce compliance through audits, penalties, and non-compliance detection is referred to as power. By raising the possibility of identifying non-compliance and decreasing tax evasion, digital tax systems' improved data integration and analytics capabilities can bolster the power dimension. According to studies, handling tax collection with accountability, transparency, and responsibility—all of which are frequently made possible by digitalization—can boost taxpayer trust and, in turn, voluntary compliance. The relationship between power and enforced compliance can be more complicated, with some research failing to uncover a direct positive association between power and enforced compliance, even if trust encourages voluntary compliance, which benefits overall tax compliance.

Impact of Digitalization on Tax Compliance

Through a variety of channels, digitalization significantly improves taxpayer compliance. By reducing information gaps between taxpayers and tax authorities, digital tools increase the difficulty of tax evasion. Automated systems increase productivity, shorten processing times, and make taxpayer compliance processes easier. Additionally, automated controls and real-time data matching improve internal governance and responsibility, especially within businesses. By reducing paperwork and administrative delays, digital technologies help reduce compliance costs for tax authorities and taxpayers. In general, the use of information technology increases taxpayer trust, improves enforcement accuracy, and increases transparency—all of which promote voluntary compliance and improve revenue results.

Research Methodology

Based on secondary data, this study uses a descriptive and analytical research design. Academic journals, books, working papers, and institutional reports pertaining to digital tax systems and taxpayer compliance were the sources of pertinent literature. In order to assess the connection between digitization and tax compliance, the study examines current theoretical and empirical data.

Important Results and Discussion

The literature study shows that by streamlining tax processes and increasing transparency, digitalization has a favorable impact on taxpayer compliance. When digital systems offer precise information, quicker services, and equitable enforcement, trust in tax authorities rises. Data analytics and automation improve surveillance systems and decrease tax evasion. However, infrastructure accessibility, cybersecurity readiness, and digital literacy all affect how effective digital tax systems are.

Conclusion

By increasing efficiency, transparency, and confidence in tax administration, digitalization of tax systems is essential to improve taxpayer compliance. Digital technology integration improves enforcement capacity, lowers administrative expenses, and streamlines compliance procedures. Behavioral theories that shed light on how digital systems affect taxpayer attitudes, trust, and compliance intents include the Theory of Planned Behavior and the Slippery Slope Framework. Even though digital tax systems have many advantages, issues with cybersecurity, digital access, and taxpayer preparedness need to be resolved. To guarantee equitable and long-lasting tax compliance, especially in developing nations, governments should make investments in digital infrastructure, taxpayer education, and trust-building programs.

References

1. Hardika, N. S., Ardika, M. I., and Suardani, A. A. P. (2023). The impact of tax socialization on individual taxpayer compliance and tax digitization. *Applied Sciences in Accounting, Finance, and Tax Journal*, 6(2), 61. <https://doi.org/10.31940/jasafint.v6i2.61-68>.
2. Mulligan, E., Bassey, E. O., and Ojo, A. (2022). A rigorous assessment of a conceptual framework for digital tax administration [A thorough review of a conceptual framework for digital tax administration]. *Government Information Quarterly*, 39(4), 101754. Elsevier BV. <https://doi.org/10.1016/j.giq.2022.101754>
3. Belloň, J., and Špěková, T. (2021). A link between tax law and economics and the theory of planned behavior as a research tool. *Review of Financial Law*, 1. <https://doi.org/10.4467/22996834flr.21.001.13284>
4. Hardika, N. S., and I. N. Darmayasa (2024). The authority and trust aspects of the slippery slope framework tax compliance model comprise the core tax administration system. *Cogent Management & Business*, 11(1). <https://doi.org/10.1080/23311975.2024.2337358>
5. Han, L., Sun, J., Wang, Y., and Sun, Z. (2025). What impact does the use of digital technologies have on tax compliance? *Letters on Finance Research*, 85, 107932. <https://doi.org/10.1016/j.frl.2025.107932>
6. Jenkins, H., Hesami, S., and Jenkins, G. P. (2024). E-invoicing and pre-filled returns: A comprehensive review of the literature on the digital transformation of tax administration and compliance. *Research and Practice in Digital Government*, 5(3), 1. This link: <https://doi.org/10.1145/3643687>