

The Effectiveness of Tax Reform on Taxpayer Compliance in Digital Age

Adelia Wijayanti¹, Dimas Aditya², Yusuf Adam Hilman³

¹ Universitas Muhammadiyah Ponorogo, Indonesia; sheilaadelia735@gmail.com

² Universitas Muhammadiyah Ponorogo, Indonesia; aditya135dimas@gmail.com

³ Universitas Muhammadiyah Ponorogo, Indonesia; adam_hilman@umpo.ac.id

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ABSTRACT

The rapid advancement of information technology has driven structural transformation in public administration systems, including the taxation sector. In response, the Indonesian government has initiated digital-based tax reform as a strategic effort to improve administrative efficiency, transparency, and accountability, while simultaneously expanding the national tax base. This study aims to evaluate the effectiveness of such digital tax reform in enhancing taxpayer compliance in the digital era, employing a qualitative approach through an extensive review of academic literature and recent policy documents. The findings indicate that the implementation of systems such as e-Filing, e-Billing, e-SPT, and the Core Tax Administration System has positively contributed to simplifying reporting and payment procedures, while also strengthening real-time oversight and control mechanisms. The study underscores the necessity of a multidimensional approach to digital tax policy development – one that not only prioritizes technological innovation but also encompasses institutional capacity-building, public education, regulatory harmonization, and the creation of an inclusive, responsive taxation system that aligns with the evolving characteristics of the digital economy. The effectiveness of tax reform depends largely on an integrated policy ecosystem and the active participation of citizens as central actors within the tax system. Therefore, Indonesia's digital tax transformation must not only aim to increase revenue collection but also to reinforce fiscal legitimacy and long-term equity

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Corresponding Author:

Yusuf Adam Hilman

Universitas Muhammadiyah Ponorogo, Indonesia; adam_hilman@umpo.ac.id

1. INTRODUCTION

The rapid advancement of digital technology has driven major transformations in various sectors of life, including in the tax system. Digitalization not only affects the transaction patterns of economic actors, but also demands a comprehensive reform of the national administrative system and tax policy.

The Government of Indonesia has implemented a number of tax reforms with the aim of improving administrative efficiency and the level of compliance of taxpayers, including through the implementation of e-filing, e-billing, and strengthening regulations on digital-based economic transactions. However, this change process also presents a number of challenges, such as digital literacy inequality among taxpayers, regulatory complexity, threats to data security, and the risk of tax evasion that takes advantage of technology gaps (Akbar, 2025).

The problem is even more complex when the conventional tax system is no longer able to reach digital business models that are cross-border, dispersed, and difficult to monitor with traditional approaches. On the other hand, digitalization opens up great opportunities to increase the effectiveness of tax administration through automation processes, increased data accuracy, and efficiency in public services. Therefore, the study of the effectiveness of tax reform is increasingly important in order to encourage consistent improvement in taxpayer compliance and achieve state revenue targets in the digital era (Management, 2025).

This research is important because the success of tax reform also determines the state's ability to raise sustainable revenues. In addition, the results of this study are expected to be able to provide an empirical picture of the impact of reforms on the tax administration, service, and revenue systems, as well as identify various factors that are obstacles and drivers of tax compliance in the digital era. The findings of the research are also aimed at contributing to the formulation of tax policies that are more adaptive to the evolving technological dynamics and behavior of taxpayers (Masruri, 2018).

The rapid development of the digital economy that includes online platforms, application-based services, and cross-border transactions poses new challenges in tax regulation and collection. Phenomena such as *base erosion and profit shifting* (BEPS), transfer pricing practices, and the existence of digital entities without a physical presence (nexus) further complicate tax authorities in upholding the principles of fairness and improving fiscal compliance. This condition requires the conventional tax system to make adjustments to be relevant to the characteristics of a dynamic and global digital economy (Scott, 2025)

In response, the Indonesian government through the Directorate General of Taxes (DGT) has initiated a number of adaptive steps, including the development of a core tax administration system, strengthening Value Added Tax (VAT) regulations on Trade Through Electronic Systems (PMSE), and establishing international cooperation within the framework of the Inclusive Framework on BEPS. However, the effectiveness of this policy in improving taxpayer compliance still needs to be analyzed comprehensively, because the success of reform does not solely depend on technological or regulatory aspects, but also on the reaction and behavior of taxpayers as the main actors in the system (Priyono, 2025).

In the global context, developed countries such as Australia and the United Kingdom have already implemented a state-of-the-art technology-based tax system that is integrated with banking data and other financial institutions. As a result, increased compliance can be achieved more accurately and efficiently. Meanwhile, Indonesia still faces challenges in integrating cross-agency data and simplifying the tax process for micro and small business actors who now operate mostly online (OECD, 2023).

In addition, digital economy actors in Indonesia are mostly dominated by the younger generation and informal business actors who have not been fully touched by the formal tax system. This shows that there is a significant gap between the scope of existing regulations and the reality on the ground. A survey conducted by the Katadata Insight Center (2024) shows that around 58% of online-based MSME actors do not fully understand their tax obligations, and many even do not have an NPWP (Katadata Insight Center, 2024).

Another challenge lies in the speed of technological change itself. Innovations in the form of digital assets such as crypto, NFT tokens, and virtual payment systems have outpaced the speed of adaptation of national tax regulations. This creates a gray space in fiscal policy, which risks being exploited by certain parties to avoid taxes through methods that are difficult to track conventionally (Pohan, 2022).

Digital tax literacy is the main prerequisite in supporting the success of reform. According to a study conducted by Suryadi and Maulana (2023), high digital tax literacy is directly proportional to the level of compliance, especially among business actors who have used e-commerce platforms. Therefore, reform is not enough only through the development of technological systems, but also needs to be accompanied by continuous education, both through social media campaigns, direct training, and incentives for compliant business actors (Suryadi & Maulana, 2023).

Therefore, this study aims to evaluate the extent to which tax reforms implemented by the government have an impact on increasing taxpayer compliance in the digital era. The focus of the study includes the integration of digital systems in tax administration, taxpayers' perception of the latest policies, and structural obstacles encountered during implementation. Through this approach, it is hoped that a comprehensive picture of the direction and effectiveness of tax reform in responding to the challenges posed by economic digitalization at the national level will be obtained.

The formulation of the problem in this study is "How effective is digital tax reform on taxpayer compliance?", This research on the effectiveness of tax reform on taxpayer compliance in the digital era aims to analyze the extent to which digital-based tax reform affects the level and behavior of taxpayer compliance in Indonesia, as well as identify factors that support or hinder the effectiveness of these reforms in the context of the transformation of the national tax system.

In general, the purpose of research is a statement about the results that the researcher wants to achieve after carrying out a systematic research process. This goal is to answer the formulation of the problem and provide clear direction in compiling methodologies, data analysis, and drawing conclusions (Sugiyono, 2018). In the context of public policy, including taxation, research objectives are often focused on measuring the success of a program or reform, as well as identifying areas that still need further intervention (Dunn, 2016).

The purpose of this research is also related to policy evaluation, which is to assess how a policy – in this case digital tax reform – has been implemented and its impact on the behavior of the target actor, namely taxpayers. According to Patton (2008), policy evaluation has an important value to ensure that government interventions run effectively, efficiently, and in accordance with the needs of the community. Therefore, this research is directed to not only look at the formal impact of digital reform, but also the behavioral, perception, and structural barriers aspects faced in the field.

In the tax science approach, the research aims to examine the relationship between variables such as digital systems, taxpayer literacy, and fiscal compliance. This is in line with the theoretical approach that states that good tax reform must be able to create a simple, fair, and compliant system with minimal compliance costs (Musgrave & Musgrave, 1989). Thus, this study plays a role in identifying the extent to which digital taxation policies meet these principles. Through this goal, it is hoped that the research results can make an academic and practical contribution to improving the quality of tax policies in Indonesia, as well as becoming evaluation material for the Directorate General of Taxes in developing a follow-up reform strategy that is more inclusive, fair, and adaptive to the development of the dynamic digital economy.

2. METHODS

This study uses a qualitative approach with a literature review method to analyze the effectiveness of tax reform on taxpayer compliance in the digital era. Literature studies are chosen because they are able to provide a comprehensive understanding of the phenomenon being researched through the collection and study of various relevant scientific information sources. This method aims to identify, evaluate, and synthesize findings from various previous studies, as well as describe the relationship between tax policy reform and taxpayer compliance behavior in the context of digital technology developments.

The data in this study was collected from various credible secondary sources, such as national and international scientific journals, academic books, research reports, and official documents from government agencies and international organizations that discuss tax topics. These sources were

obtained through searching databases such as Google Scholar, ScienceDirect, and the Garuda Portal, using appropriate keywords such as "tax reform," "taxpayer compliance," "digital transformation," and "digital tax system." The selection of literature is based on certain criteria, namely relevance to the research topic, the up-to-date of information in the last ten years, and the methodological validity of each publication.

The analysis process is carried out through a qualitative approach with content analysis techniques, namely by critically reading each collected literature to identify main themes that are recurring and have conceptual relevance. Findings from various sources are then compiled and compared to find patterns, gaps, and cause-and-effect relationships that can explain how tax reform, especially in the context of digitalization, affects taxpayer compliance. This analysis also pays attention to the social and policy context in Indonesia as part of a more in-depth interpretation of the data.

Through this approach, it is hoped that the research can contribute to understanding theoretically and empirically how the effectiveness of tax reform transforms in the digital era and its implications for increasing taxpayer compliance.

3. FINDINGS AND DISCUSSION

The results of the study show that digital-based tax reform has a positive impact on taxpayer compliance, especially through the implementation of electronic systems such as e-Filing, e-Billing, and e-SPT. These digital services have been proven to be able to increase efficiency, transparency, and convenience in tax reporting and payment. Research by Mandasari et al. (2024) at KPP Pratama Makassar Selatan shows that the implementation of the three digital systems has a significant influence on increasing taxpayer compliance, with a determination coefficient value (R^2) of 0.608 which means that 60.8% of compliance variations can be explained by the digitization of the tax administration system (Mandasari et al., 2024).

Digital transformation in tax administration is also seen as the government's effort to close the non-compliance gap while facilitating supervision. Through the Coretax system, the Directorate General of Taxes seeks to build a comprehensive integrated system, from registration to tax reporting and payment. This system allows governments to detect transactions in real-time, reduce data manipulation practices, and improve accuracy and speed in tax processing. A study by Kusnadi and Sudaryanto (2023) revealed that the Coretax system has great potential in improving tax governance which has been manual and fragmented, although its implementation still faces challenges such as digital infrastructure readiness and technology literacy gaps among taxpayers (Kusnadi & Sudaryanto, 2023).

The discussion began with the understanding that the digitization of tax services such as e-Filing, e-Billing, e-Invoices, and e-Forms has brought striking administrative conveniences, empirically proven to be able to increase taxpayer compliance. A study at KPP Pratama Kuala Tungkal shows that although this application is effective in helping taxpayers meet their obligations, daily use is still constrained by technical problems, weak internet connectivity, and lack of adequate usage guidance (Feri Alvoncius R.P & Hapsari, 2024). Meanwhile, research by Susilawati et al. in Tegal Regency confirms that tax digitalization also has a positive impact on taxpayers' awareness and trust in the government, which is a key factor in willingness to comply voluntarily (Susilawati & Amalia, 2023).

The digital transformation carried out by the DGT through a self-assessment system combined with information technology has been able to make tax reporting easier. Rahayu and Kusdianto's study revealed that the main benefits arise from the use of big data and predictive systems in compliance risk management—although the challenge of integration between systems continues to be an obstacle. These findings are consistent with the analysis of Rosyid et al. (2024) who said that digitalization has accelerated administration and increased tax revenue through e-Filing and e-Billing, but data security and digital access gaps remain a serious concern (Abdul Rosyid et al., 2024). This is also strengthened by Kursillah & Dwiaty's research which states that understanding tax regulations, socialization, and

modern administrative systems have a strong influence on compliance, while sanctions are less effective as the main driver of voluntary compliance (Kursillah & Dwiati, 2024).

In addition to strengthening the system, digital-based socialization also plays an important role in encouraging compliance. Research conducted by Agustina et al. (2024) in Malang City shows that socialization through digital media directly contributes to increasing the awareness and motivation of taxpayers, especially MSME actors. In the study, administrative digitalization and digital socialization have a significant influence on taxpayer compliance, both directly and through motivational mediation. These findings strengthen the argument that the effectiveness of tax reform is not only determined by technology, but also by educational and communicative approaches that are adaptive to taxpayer characteristics (Agustina et al., 2024).

Nevertheless, several studies also highlight the obstacles faced in the implementation of digital tax reform. One of the main challenges is the lack of legal certainty for digital economy activities, especially in reaching tax subjects engaged in the informal digital sector such as social media-based business actors or the sharing economy. The unclear status of tax subjects and objects in the digital context hinders law enforcement efforts and raises potential non-compliance. Research by Abdul Rosyid et al. (2024) states that although legal reform has begun to be directed to respond to digital dynamics, a more comprehensive and adaptive policy is still needed for changes in the form of transactions and business actors (Rosyid et al., 2024).

In addition, taxpayers' perception of tax fairness and trust in government institutions are also important factors. Some literature shows that even if digital systems are available, compliance levels will not be optimal without a perception of fairness in tax distribution, information disclosure, and government accountability. The study conducted by Mahpudin et al. (2024) emphasizes that reform is not enough on the technological aspect, but must also touch on the institutional and behavioral aspects that build public trust (Mahpudin et al., 2024).

A critical analysis of the phenomenon of reform in Indonesia shows that although digitalization brings convenience, many systems are constrained in implementation. The CoreTax case launched in early 2025 faces serious technical failures: system crashes, data mismatches, and chaotic data migration. As a result, the DGT had to open the old system again as a temporary alternative route, even reporting fines were removed for cases of technical delays. In addition, user responses in online forums show considerable public frustration with the complex, difficult to use, or unclear functioning tax system, reinforcing the view that reforms are often not accompanied by socio-technical support and real adaptation for end-users.

Comparatively, the main difference between the current findings and the literature of the previous decade lies in the strengthening of the technical and digital aspects. The previous study by Mayasari & Narsa (2020) emphasized the importance of modernizing the system as well as the integrity of tax authorities, while the findings now show that technologies without user readiness, data integration, and adaptive regulation are not effective enough. Indawati (2024) highlights that administrative simplification has been proven to help voluntary compliance, but community literacy and consistency of law enforcement still need to be strengthened to produce sustainable behavioral change (Nuryati et al., 2023).

In the Indonesian context, efforts to expand the digital tax base through foreign digital VAT regulations since July 2020 show a positive direction. However, the threshold provisions have not yet fully reached informal platforms and small actors, so until now there is still potential for non-compliance in the micro-digital economy sector. This raises a critical question: is reform sufficiently responsive to the heterogeneous reality of a digital society?

Structural factors such as regulatory complexity, apparatus capacity, and infrastructure inequality also affect the effectiveness of digital reform. The discussion by Fatmawati Astri (2025) raised that high regulatory complexity and policy changes that often confuse taxpayers and increase compliance costs, while digital inequality between regions exacerbates inequalities in access to effective electronic services. On a macro level, Indonesia's relatively low tax ratio compared to ASEAN countries ($\pm 10-13\%$)

reinforces the urgency of improving compliance through inclusive and equitable digitalization. A comprehensive interpretation of these studies confirms that digital tax reform is not just a matter of technology, but a matter of synergy between systems, regulations, education, and institutions. Without data integration, user literacy, and adaptive technical stability and regulation, the potential for digitalization will not be fully realized in improving tax compliance.

4. CONCLUSION

The conclusion of this study shows that digital-based tax reform in Indonesia has a positive influence on increasing taxpayer compliance. The application of technologies such as eFiling, eBilling, and eSPT has been proven to simplify administrative procedures, improve reporting accuracy, and strengthen the transparency of the tax system. The CoreTax system developed by the Directorate General of Taxes is one of the reform milestones that shows integrative efforts in building automated and real-time tax management. On the other hand, the existence of digital socialization is also an important driving factor in increasing taxpayer awareness and motivation, especially among MSME actors and the informal sector.

However, the effectiveness of this reform is inseparable from various structural and technical challenges. Obstacles such as the unpreparedness of digital infrastructure, low tax and digital literacy among the public, and unclear regulations on digital economic activities such as e-commerce and social media are obstacles to increasing equitable compliance. The case of CoreTax's implementation failure in the early stages of the rollout also shows that the success of the reform is determined not only by the sophistication of the system, but also operational readiness, human resource training, and consistent quality of service. In addition, taxpayers' perception of the fairness of the system and the accountability of tax institutions greatly influences the level of compliance, even greater than the convenience of technology itself.

The implications of these findings show that tax reform is not enough to rely solely on digital innovation, but needs to be accompanied by a comprehensive approach that includes simplifying regulations, equitable distribution of infrastructure, public education, and strengthening institutional governance. The government needs to ensure that tax policies in the digital era can accommodate the ever-evolving complexity of the digital economy, without neglecting the principles of fairness, inclusivity, and transparency. With synergy between technology, adaptive policies, and active community participation, tax reform will be able to increase taxpayer compliance in a sustainable manner and strengthen the country's fiscal capacity in the long term.

REFERENCES

- Abdul Rosyid, M., Pangesti, I., Hasanah, N., & Mastutik, S. (2024). Pengaruh Digitalisasi Terhadap Kepatuhan Dan Penerapan Hukum Pajak Di Indonesia. *Mendapo: Journal of Administrative Law*, 5(3), 265–280. <https://doi.org/10.22437/mendapo.v5i3.32242>
- Abdul Rosyid, M. et al. (2024). Reformasi Perpajakan di Era Ekonomi Digital dan Problematika Hukum Pajak di Indonesia. *Jurnal Mendapo*. <https://online-journal.unja.ac.id/Mendapo/article/view/32242>
- Agustina, L. et al. (2024). The Impact of Digital Socialization and Digitalization of Tax Administration on Compliance through Motivation of Cooperative Taxpayers in Malang City. *ResearchGate*. <https://www.researchgate.net/publication/382632139>
- Akbar, L. (2025). *Pentingnya digitalisasi dan membangun database perpajakan berbasis AI*. <https://www.antarane.ws.com/berita/4558870/pentingnya-digitalisasi-dan-membangun-database-perpajakan-berbasis-ai>
- Dunn, W. N. (2016). *Public Policy Analysis: An Integrated Approach*. Routledge.

- Feri Alvoncius R.P, & Hapsari, A. A. (2024). Efektivitas Digitalisasi Perpajakan terhadap Kepatuhan Wajib Pajak di Lingkungan Kerja KPP Pratama Kuala Tungkal. *Operation Technology and Management (OPTIMA) Journal*, 1(1), 39–50. <https://doi.org/10.33830/optima.v1i1.7088>
- Gumiwang, R. (2025). *Artikel ini telah tayang di DDTCTNews dengan judul "Tantangan Pajak di Era Ekonomi Digital, Simak Ulasannya di Buku Ini". Baca selengkapnya: <https://news.ddtc.co.id/berita/nasional/1810377/tantangan-pajak-di-era-ekonomi-digital-simak-ulasannya-di-buku-ini>*
- Katadata Insight Center. (2024). *Survei Perpajakan Digital UMKM Indonesia*. Jakarta: Katadata.
- Kursillah, D. A., & Dwiati, A. R. (2024). The Influence Of Understanding Tax Regulations, Taxation Socialization, Modern Administration Systems And Tax Sanctions On Cooperative Taxpayer Compliance. *E-Jurnal Akuntansi*, 34(12), 1339–1352. <https://doi.org/10.24843/eja.2024.v34.i12.p19>
- Kusnadi, R., & Sudaryanto, T. (2023). Transformasi Digital Administrasi Pajak melalui Sistem Coretax. *Jurnal Ilmu Administrasi, Universitas Palangka Raya*. <https://e-journal.upr.ac.id/index.php/SAJ/article/view/19497>
- Mahpudin, H. et al. (2024). Digital Transformation of Tax Regulation: A Policy Perspective. *Journal of Innovation in Public Decision*. <https://systems.enpress-publisher.com/index.php/jipd/article/view/7032>
- Manajemen, N. A. (2025). *Neraca Akuntansi Manajemen, Ekonomi*. 17(8), 3–6.
- Mandasari, N. et al. (2024). The Effect of Tax Digitalization Electronic System on Increasing Individual Taxpayer Compliance. *ResearchGate*. <https://www.researchgate.net/publication/383576492>
- Masruri, F. A. (2018). Pengaruh Reformasi Administrasi Perpajakan Terhadap Kepatuhan Wajib Pajak Orang Pribadi (Studi Kasus Pada Kantor Pelayanan Pajak (Kpp) Pratama Sumedang). *Jurnal Akuntansi, Bisnis Dan Ekonomi*, 4(2), 1123–1136. <https://doi.org/10.33197/jabe.vol4.iss2.2018.185>
- Musgrave, R. A., & Musgrave, P. B. (1989). *Public Finance in Theory and Practice*. McGraw-Hill.
- Nuryati, T., Khasanah, U., & Hertanto, D. A. (2023). How Does Digitizing The Tax System Increase Taxpayer Compliance? *Insight Journal Universiti Teknologi Mara Cawangan Johor*, 10(1), 82–96. <https://journal.uitm.edu.my/ojs/index.php/IJ/article/view/3538/1682>
- OECD. (2023). *Tax Administration 2023: Comparative Information on OECD and other Advanced and Emerging Economies*. OECD Publishing.
- Patton, M. Q. (2008). *Utilization-Focused Evaluation*. SAGE Publications.
- Pohan, C. A. (2022). *Perpajakan Internasional dan Aset Digital*. Jakarta: PT Gramedia Pustaka Utama.
- Priyono, E. (2025). *Menata Pajak Era Digital: PMK 37/2025 dalam Bingkai Pembangunan Hukum*. <https://www.pajak.go.id/id/artikel/menata-pajak-era-digital-pmk-372025-dalam-bingkai-pembangunan-hukum>
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alfabeta.
- Suryadi, A., & Maulana, H. (2023). Pengaruh Literasi Pajak Digital terhadap Kepatuhan Wajib Pajak UMKM di Era Ekonomi Digital. *Jurnal Ilmu Administrasi Fiskal*, 12(1), 1–14.
- Susilawati, A. D., & Amalia, M. R. (2023). Analisis Efektivitas Digitalisasi Pajak Terhadap Kesadaran Wajib Pajak Umkm Kabupaten Tegal Dengan Kepercayaan Kepada Pemerintah Sebagai Variabel Moderasi. *CAPITAL: Jurnal Ekonomi Dan Manajemen*, 7(1), 1. <https://doi.org/10.25273/capital.v7i1.14678>

