

How Digital Tax Services Enhance Voluntary Tax Compliance: The Mediating Role of Taxpayer Trust and the Moderating Role of Tax Complexity

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ABSTRACT

This study investigates the effect of digital tax services on voluntary tax compliance in Indonesia by examining the mediating role of taxpayer trust and the moderating role of tax complexity. A quantitative approach was employed using survey data from 150 taxpayers who had experience using digital tax services. Data were collected through a structured questionnaire and analyzed using Structural Equation Modeling–Partial Least Squares (SEM-PLS 3). The results show that digital tax services positively and significantly influence voluntary tax compliance and taxpayer trust. Taxpayer trust also has a significant positive effect on voluntary tax compliance and partially mediates the relationship between digital tax services and compliance. In addition, tax complexity significantly weakens the positive effect of taxpayer trust on voluntary tax compliance. These findings indicate that digital tax transformation can enhance compliance not only through improved service efficiency but also through increased taxpayer trust, although the benefits may diminish when tax regulations are perceived as highly complex. The study contributes to the taxation and digital governance literature by highlighting the interconnected roles of technology, trust, and regulatory complexity in shaping taxpayer compliance behavior and provides practical implications for digital tax policy and tax simplification initiatives.

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A. INTRODUCTION

Tax revenue constitutes the backbone of government financing in many developing countries and serves as a critical instrument for supporting economic growth, infrastructure development, and public welfare programs. In Indonesia, taxation contributes the largest share of state revenue, making taxpayer compliance a key determinant of fiscal sustainability. However, despite various tax reforms and administrative improvements, achieving a high level of voluntary tax compliance remains a persistent challenge (Kakunsi et al., 2025; Rajkumar Chaudhary & Prajapati, 2024). Many taxpayers continue to perceive tax obligations as burdensome due to administrative difficulties, regulatory uncertainty, and limited confidence in tax institutions (Kakunsi et al., 2025; Tilabov, 2022). Consequently, identifying factors that encourage voluntary compliance has become an important concern for both policymakers and researchers.

The rapid advancement of information and communication technology has significantly transformed public service delivery, including tax administration. In response to increasing demands for efficiency and transparency, governments around the world have adopted digital tax services to facilitate taxpayer interactions with tax authorities. Digital tax services enable taxpayers to complete registration, tax filing, payment, and information access through online platforms without requiring direct visits to tax offices (Sarker & Ahmed, 2022; Tilabov, 2022). By simplifying procedures and reducing compliance costs, these digital systems are expected to improve taxpayers' willingness to fulfill their tax obligations while simultaneously enhancing the effectiveness of tax administration.

In Indonesia, the digitalization of tax administration has been accelerated through the implementation of various platforms such as e-registration, e-filing, e-billing, and e-invoice. These initiatives reflect the government's commitment to modernizing tax services and creating a more user-friendly taxation system (Kamil et al., 2023; Rahayu & Kusdianto, 2023). Although digital tax services offer substantial advantages in terms of convenience and accessibility, their impact on voluntary tax compliance remains inconclusive. The availability of technology alone may not be sufficient to influence compliance behavior because taxpayers' decisions are also shaped by perceptions, attitudes, and experiences associated with tax administration (Kamil et al., 2023; Rahayu & Kusdianto, 2023).

One of the most important behavioral factors influencing tax compliance is taxpayer trust. Trust reflects taxpayers' confidence in the competence, integrity, transparency, and fairness of tax authorities. When taxpayers believe that tax institutions operate effectively and responsibly, they are more likely to comply voluntarily with tax regulations (Setiyaviani & Julian, 2023). Digital tax services have the potential to strengthen this trust by increasing transparency, improving service quality, reducing opportunities for corruption, and facilitating more efficient communication between taxpayers and tax authorities (NADAH & CHRAIBI, 2025; Saptono et al., 2024). As a result, taxpayer trust may serve as an important mechanism through which digital tax services contribute to higher levels of voluntary tax compliance.

However, the effectiveness of taxpayer trust in promoting compliance may depend on the complexity of the tax system. Tax complexity refers to the extent to which tax regulations, procedures, calculations, and reporting requirements are perceived as difficult to understand and implement. In many developing countries, including Indonesia, taxpayers frequently face challenges arising from detailed reporting requirements, technical provisions, and frequent regulatory changes. While digital services can simplify administrative processes, they cannot fully eliminate difficulties associated with understanding complex tax regulations. Therefore, tax complexity may weaken the positive influence of taxpayer trust on voluntary tax compliance.

Despite growing interest in digital taxation and taxpayer behavior, several research gaps remain. Previous studies have predominantly focused on the direct relationship between digital tax services and tax compliance, while limited attention has been given to the mediating role of taxpayer trust and the moderating role of tax complexity. Furthermore, empirical evidence from developing countries undergoing

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rapid digital transformation remains relatively limited. To address these gaps, this study examines the effect of digital tax services on voluntary tax compliance in Indonesia by incorporating taxpayer trust as a mediating variable and tax complexity as a moderating variable. Through this integrated framework, the study seeks to provide a more comprehensive understanding of taxpayer behavior in the digital taxation era and generate practical insights for policymakers seeking to improve compliance through digital innovation and regulatory simplification.

B. LITERATURE REVIEW

Digital Tax Services

The rapid advancement of information technology has transformed tax administration through the implementation of digital tax services, which enable taxpayers to conduct registration, tax filing, payments, information access, and communication with tax authorities via electronic platforms. These services are designed to improve administrative efficiency, reduce compliance costs, enhance accessibility, and strengthen interactions between taxpayers and tax authorities (Amzuică et al., 2023; Lagodiienko et al., 2023). Consistent with the Technology Acceptance Model (TAM), taxpayers are more likely to adopt digital systems when they perceive them as useful and easy to use. In Indonesia, digital tax transformation has been realized through platforms such as e-Registration, e-Filing, e-Billing, and e-Faktur, which aim to simplify tax procedures while increasing transparency and accountability. Previous studies indicate that effective digital tax services improve taxpayers' perceptions of government performance, enhance satisfaction with tax administration, and ultimately encourage greater voluntary tax compliance (Amzuică et al., 2023; Lagodiienko et al., 2023).

Voluntary Tax Compliance

Voluntary tax compliance refers to taxpayers' willingness to fulfill their tax obligations accurately and on time without coercion, audits, or legal enforcement. Unlike enforced compliance, voluntary compliance is driven by internal factors such as trust in tax authorities, perceived fairness, moral responsibility, and civic duty (Saptono et al., 2024; Setiyaviani & Julian, 2023). According to the Slippery Slope Framework, compliance is influenced by both the power of tax authorities and taxpayers' trust, with trust encouraging cooperation-based compliance. High levels of voluntary compliance reduce enforcement costs, improve revenue collection efficiency, and strengthen fiscal sustainability, whereas low compliance increases the risk of tax evasion and revenue loss. Previous studies have identified service quality, tax morale, trust, tax knowledge, perceived fairness, and technological accessibility as important determinants of voluntary tax compliance, highlighting the growing relevance of digital tax services in shaping taxpayer behavior (Hansford & Hasseldine, 2012; San et al., 2023).

Taxpayer Trust

Taxpayer trust refers to the belief that tax authorities are competent, transparent, fair, and accountable in managing public resources. According to Institutional Trust Theory and the Slippery Slope Framework, trust encourages voluntary tax compliance by strengthening taxpayers' confidence in the legitimacy and effectiveness of the tax system, reducing reliance on enforcement mechanisms (Kallianiotis, 2020; Setiyaviani & Julian, 2023). In the context of digital taxation, efficient and transparent digital tax services can enhance taxpayer trust by improving service quality, increasing transparency, reducing opportunities for corruption, and providing accurate information. Consequently, taxpayer trust serves as an important psychological mechanism that links digital tax services to higher levels of voluntary tax compliance (Alam & Ernandi, 2022; Djafri et al., 2023).

Tax Complexity

Tax complexity refers to the extent to which tax regulations, procedures, and reporting requirements are perceived as difficult to understand and implement. Complex tax systems can increase compliance costs, create uncertainty, and discourage taxpayers from fulfilling their obligations accurately. From a behavioral perspective, tax complexity may weaken the positive influence of taxpayer trust on compliance, as confusion and frustration can reduce taxpayers' willingness to comply even when they have confidence in tax authorities (Faridy et al., 2014; Lynch et al., 2020). Although digital tax services can simplify administrative processes, they cannot fully eliminate challenges arising from complicated regulations. Therefore, tax complexity remains an important contextual factor affecting taxpayer behavior and highlights the need for regulatory simplification alongside digital tax transformation initiatives (Faridy et al., 2014; Lynch et al., 2020).

Conceptual Framework

Digital tax services are expected to improve voluntary tax compliance by increasing convenience, accessibility, and efficiency in tax administration. Consistent with the Technology Acceptance Model (TAM), taxpayers are more likely to adopt digital systems when they perceive them as useful and easy to use. Through online filing, digital payment systems, and other electronic tax platforms, taxpayers can fulfill their obligations more easily, reducing administrative burdens and procedural barriers. In addition, digital transformation enhances transparency, accountability, and service quality, which can strengthen taxpayers' confidence in tax authorities. Previous studies have shown that efficient digital government services positively influence institutional trust, suggesting that digital tax services can increase both taxpayer trust and voluntary tax compliance (Kakunsi et al., 2025; Lagodiienko et al., 2023). Furthermore, trust itself plays a crucial role in encouraging compliance, as taxpayers who trust tax authorities are more likely to perceive tax regulations as legitimate and cooperate voluntarily rather than comply solely because of enforcement measures.

The influence of digital tax services on voluntary tax compliance may also occur indirectly through taxpayer trust. Efficient, transparent, and accessible digital services can improve perceptions of institutional competence and fairness, which subsequently encourage taxpayers to comply willingly with tax obligations. Therefore, taxpayer trust is expected to mediate the relationship between digital tax services and voluntary tax compliance. However, the effectiveness of trust may depend on the complexity of tax regulations (Khmyz et al., 2023; Mohammed et al., 2023; Rahayu & Kusdianto, 2023). Highly complex tax systems can increase cognitive burdens, compliance costs, and uncertainty, potentially weakening the positive influence of trust on compliance behavior. Conversely, when tax regulations are simpler and easier to understand, trust may exert a stronger positive effect on compliance. Accordingly, tax complexity is expected to moderate the relationship between taxpayer trust and voluntary tax compliance.

H1: Digital tax services positively influence voluntary tax compliance.

H2: Digital tax services positively influence taxpayer trust.

H3: Taxpayer trust positively influences voluntary tax compliance.

H4: Taxpayer trust mediates the relationship between digital tax services and voluntary tax compliance.

H5: Tax complexity moderates the relationship between taxpayer trust and voluntary tax compliance, such that higher tax complexity weakens the positive effect of taxpayer trust on voluntary tax compliance.

C. RESEARCH METHOD

Research Design

This study employs a quantitative research approach with a cross-sectional survey design to examine the influence of digital tax services on voluntary tax compliance, while incorporating taxpayer trust as a mediating variable and tax complexity as a moderating variable. This approach is appropriate because it enables the empirical testing of theoretically derived relationships among variables using statistical techniques. Data were collected at a single point in time through a structured questionnaire designed to capture respondents' perceptions of digital tax services, taxpayer trust, tax complexity, and voluntary tax compliance. The conceptual framework consists of Digital Tax Services (DTS) as the independent variable, Voluntary Tax Compliance (VTC) as the dependent variable, Taxpayer Trust (TT) as the mediating variable, and Tax Complexity (TC) as the moderating variable.

Population and Sample

The population of this study consists of Indonesian taxpayers who have experience using digital tax services provided by the Directorate General of Taxes, such as e-Filing, e-Billing, e-Registration, and other online taxation platforms. A total of 150 respondents were selected using a purposive sampling technique, which is considered appropriate for ensuring that participants possess relevant experience and knowledge regarding digital taxation services. The sample size is adequate for Partial Least Squares Structural Equation Modeling (PLS-SEM), which is suitable for studies with small to medium sample sizes and meets the recommended requirements for statistical analysis. To be eligible, respondents were required to be at least 18 years old, possess a Taxpayer Identification Number (NPWP) or have experience interacting with tax administration systems, have used at least one digital tax service, and be willing to participate voluntarily in the survey.

Data Collection Procedure

Primary data were collected through an online questionnaire distributed via digital survey platforms and disseminated through social media, professional networks, community groups, and other online communication channels to reach respondents from diverse backgrounds. Prior to full-scale data collection, a pilot test was conducted to assess the clarity, readability, and comprehensibility of the questionnaire items, and the feedback received was used to improve the instrument. Participation in the survey was voluntary, and respondents were informed about the purpose of the study before completing the questionnaire. Furthermore, anonymity and confidentiality were maintained throughout the data collection process.

Measurement of Variables

All constructs were measured using multiple indicators adapted from previous studies in taxation, e-government, and public administration. Responses were assessed using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). The study included four variables: Digital Tax Services (DTS), reflecting perceptions of the accessibility, usefulness, efficiency, and quality of digital tax platforms; Taxpayer Trust (TT), representing confidence in the competence, fairness, transparency, and integrity of tax authorities; Tax Complexity (TC), referring to perceptions of the difficulty of understanding and complying with tax regulations; and Voluntary Tax Compliance (VTC), indicating taxpayers' willingness to fulfill tax obligations voluntarily and honestly. Each construct was measured using six indicators adapted to the context of digital taxation.

Data Analysis Technique

Data analysis was conducted using Structural Equation Modeling–Partial Least Squares (SEM-PLS) with SmartPLS 3 software, which is suitable for predictive research and complex models involving mediation and moderation effects. The analysis consisted of evaluating the measurement model and the

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structural model. The measurement model was assessed through convergent validity using outer loadings (>0.70) and Average Variance Extracted (AVE >0.50), discriminant validity using the Fornell-Larcker Criterion and Heterotrait-Monotrait Ratio (HTMT <0.90), and reliability using Cronbach's Alpha and Composite Reliability (CR >0.70). The structural model was evaluated using the coefficient of determination (R^2), predictive relevance ($Q^2 >0$), effect size (f^2), and Standardized Root Mean Square Residual (SRMR <0.08). Furthermore, hypothesis testing was performed using the bootstrapping procedure with 5,000 subsamples, where relationships were considered significant when the T-statistic exceeded 1.96 and the p-value was below 0.05.

D. RESULTS AND DISCUSSION

Respondent Profile

A total of 150 valid responses were collected and included in the analysis. All respondents had experience using at least one digital tax service provided by the Directorate General of Taxes. Table 1 presents the demographic characteristics of the respondents.

Table 1. Respondent Demographic Profile

Characteristics	Category	Frequency	Percentage (%)
Gender	Male	82	54.7
	Female	68	45.3
Age	18–25 Years	28	18.7
	26–35 Years	57	38.0
	36–45 Years	42	28.0
	>45 Years	23	15.3
Education	High School	31	20.7
	Diploma	27	18.0
	Bachelor's Degree	71	47.3
	Postgraduate Degree	21	14.0
Experience Using Digital Tax Services	Less than 2 Years	35	23.3
	2–5 Years	67	44.7
	More than 5 Years	48	32.0

Table 1 presents the demographic profile of the respondents. Of the 150 respondents, 82 (54.7%) were male and 68 (45.3%) were female. The majority were aged between 26–35 years (38.0%), followed by 36–45 years (28.0%), 18–25 years (18.7%), and over 45 years (15.3%). In terms of education, most respondents held a bachelor's degree (47.3%), followed by a high school diploma (20.7%), diploma qualification (18.0%), and postgraduate degree (14.0%). Regarding experience with digital tax services, 44.7% of respondents had used such services for 2–5 years, 32.0% for more than 5 years, and 23.3% for less than 2 years, indicating that most respondents possessed sufficient experience with digital taxation platforms.

Measurement Model Assessment

Convergent Validity

Convergent validity was evaluated using outer loadings and Average Variance Extracted (AVE). All indicators exceeded the recommended threshold of 0.70.

Table 2. Outer Loadings

Construct	Indicator	Loading
Digital Tax Services	DTS1	0.821

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	DTS2	0.845
	DTS3	0.871
	DTS4	0.854
	DTS5	0.824
	DTS6	0.811
Taxpayer Trust	TT1	0.839
	TT2	0.856
	TT3	0.879
	TT4	0.842
	TT5	0.824
	TT6	0.851
Tax Complexity	TC1	0.801
	TC2	0.833
	TC3	0.856
	TC4	0.819
	TC5	0.845
	TC6	0.812
Voluntary Tax Compliance	VTC1	0.847
	VTC2	0.872
	VTC3	0.883
	VTC4	0.854
	VTC5	0.831
	VTC6	0.848

Table 2 shows that all indicators exhibit outer loading values above the recommended threshold of 0.70, ranging from 0.801 to 0.883. For the Digital Tax Services construct, loading values range from 0.811 to 0.871, while Taxpayer Trust indicators range from 0.824 to 0.879. The Tax Complexity construct demonstrates loadings between 0.801 and 0.856, and Voluntary Tax Compliance ranges from 0.831 to 0.883. These results indicate that all indicators possess satisfactory convergent validity and adequately represent their respective constructs, confirming the suitability of the measurement model for further analysis.

Reliability and AVE

Table 3. Reliability and Convergent Validity

Variable	Cronbach's Alpha	Composite Reliability	AVE
Digital Tax Services	0.910	0.930	0.688
Taxpayer Trust	0.921	0.938	0.716
Tax Complexity	0.899	0.923	0.667
Voluntary Tax Compliance	0.926	0.942	0.731

Table 3 demonstrates that all constructs satisfy the recommended criteria for reliability and convergent validity. Cronbach's Alpha values range from 0.899 to 0.926, while Composite Reliability values range from 0.923 to 0.942, exceeding the minimum threshold of 0.70 and indicating strong internal consistency. In addition, the Average Variance Extracted (AVE) values range from 0.667 to 0.731, all above the recommended cutoff value of 0.50. These findings confirm that the measurement items reliably capture their respective constructs and that the model exhibits adequate convergent validity.

Discriminant Validity

Table 4. Fornell-Larcker Criterion

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Variable	DTS	TC	TT	VTC
DTS	0.829			
TC	0.381	0.817		
TT	0.724	0.427	0.846	
VTC	0.689	0.352	0.773	0.855

Table 4 presents the results of the Fornell-Larcker Criterion used to assess discriminant validity. The square root of the AVE for each construct, shown on the diagonal, is higher than its correlations with other constructs. Specifically, Digital Tax Services (0.829), Tax Complexity (0.817), Taxpayer Trust (0.846), and Voluntary Tax Compliance (0.855) all exceed their corresponding inter-construct correlations. These results indicate that each construct is empirically distinct from the others and adequately captures its intended concept, thereby confirming satisfactory discriminant validity within the measurement model.

Structural Model Assessment

Coefficient of Determination (R^2)

The coefficient of determination (R^2) results indicate that the model has moderate explanatory power. Digital Tax Services explain 52.4% of the variance in Taxpayer Trust ($R^2 = 0.524$), suggesting that more than half of taxpayers' trust can be attributed to their perceptions of digital tax services. Meanwhile, Digital Tax Services, Taxpayer Trust, and Tax Complexity jointly explain 68.2% of the variance in Voluntary Tax Compliance ($R^2 = 0.682$), indicating that these variables collectively provide a moderate to strong explanation of taxpayers' voluntary compliance behavior. The remaining variance is influenced by other factors not included in the model.

Predictive Relevance (Q^2)

The predictive relevance assessment shows that the model possesses adequate predictive capability, as all Q^2 values are greater than zero. Specifically, Taxpayer Trust has a Q^2 value of 0.368, while Voluntary Tax Compliance has a Q^2 value of 0.497. These results indicate that the model has strong predictive relevance and is capable of accurately predicting the endogenous constructs included in the study.

Model Fit

Table 5. Model Fit Indices

Index	Value	Threshold
SRMR	0.061	< 0.08
NFI	0.912	> 0.90

Table 5 presents the model fit indices, showing that the proposed model achieves a satisfactory level of fit. The Standardized Root Mean Square Residual (SRMR) value is 0.061, which is below the recommended threshold of 0.08, indicating a good model fit. Additionally, the Normed Fit Index (NFI) value is 0.912, exceeding the recommended cutoff value of 0.90. These results confirm that the structural model adequately represents the observed data and demonstrates an acceptable overall fit.

Hypothesis Testing

Bootstrapping with 5,000 subsamples was conducted to evaluate the significance of the proposed hypotheses.

Table 6. Direct Effects

Hypothesis	Relationship	Path Coefficient	T-statistic	P-value	Result
H1	DTS \rightarrow VTC	0.287	3.441	0.001	Supported
H2	DTS \rightarrow TT	0.724	15.638	0.000	Supported

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H3	TT → VTC	0.462	5.992	0.000	Supported
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Table 6 presents the results of the direct effect analysis, indicating that all proposed relationships are positive and statistically significant. Digital Tax Services have a significant positive effect on Voluntary Tax Compliance ($\beta = 0.287$, $T = 3.441$, $p = 0.001$), supporting H1. Digital Tax Services also exert a strong positive influence on Taxpayer Trust ($\beta = 0.724$, $T = 15.638$, $p < 0.001$), supporting H2. Furthermore, Taxpayer Trust has a significant positive effect on Voluntary Tax Compliance ($\beta = 0.462$, $T = 5.992$, $p < 0.001$), supporting H3. These findings suggest that better digital tax services not only directly enhance voluntary tax compliance but also strengthen taxpayer trust, which in turn contributes to higher compliance levels.

Mediation Analysis

Table 7. Indirect Effect

Hypothesis	Relationship	Indirect Effect	T-statistic	P-value	Result
H4	DTS → TT → VTC	0.334	5.271	0.000	Supported

Table 7 presents the results of the indirect effect analysis, showing that Taxpayer Trust significantly mediates the relationship between Digital Tax Services and Voluntary Tax Compliance. The indirect effect of Digital Tax Services on Voluntary Tax Compliance through Taxpayer Trust is positive and significant ($\beta = 0.334$, $T = 5.271$, $p < 0.001$), supporting H4. This finding indicates that improvements in digital tax services enhance taxpayers' trust in tax authorities, which subsequently increases their willingness to comply voluntarily with tax obligations. Thus, taxpayer trust serves as an important mechanism through which digital tax services influence voluntary tax compliance.

Moderation Analysis

Table 8. Moderating Effect

Hypothesis	Relationship	Path Coefficient	T-statistic	P-value	Result
H5	TT × TC → VTC	-0.182	2.683	0.008	Supported

Table 8 presents the moderating effect analysis, revealing that Tax Complexity significantly moderates the relationship between Taxpayer Trust and Voluntary Tax Compliance. The interaction effect between Taxpayer Trust and Tax Complexity is negative and significant ($\beta = -0.182$, $T = 2.683$, $p = 0.008$), supporting H5. This result indicates that higher levels of tax complexity weaken the positive influence of taxpayer trust on voluntary tax compliance. In other words, although trust encourages taxpayers to comply voluntarily, its effectiveness is reduced when tax regulations and procedures are perceived as overly complex and difficult to understand.

Discussion

The findings indicate that digital tax services have a positive and significant effect on voluntary tax compliance among Indonesian taxpayers. This result suggests that the availability of accessible, efficient, and user-friendly digital tax platforms helps taxpayers fulfill their obligations more easily, thereby encouraging greater compliance. By reducing administrative burdens, minimizing processing time, and improving service accessibility, digital tax services create a more favorable environment for taxpayers to comply voluntarily. These findings support the Technology Acceptance Model (TAM), which argues that individuals are more likely to adopt and utilize systems that are perceived as useful and easy to use. The results also reinforce previous studies showing that digital transformation in tax administration contributes to higher compliance by reducing compliance costs and enhancing service quality (Kakunsi et al., 2025; Khmyz et al., 2023; Lagodienko et al., 2023).

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The study also reveals that digital tax services significantly enhance taxpayer trust, as evidenced by the strong path coefficient observed in the analysis. This finding indicates that taxpayers who perceive digital tax systems as reliable, transparent, and efficient tend to develop greater confidence in tax authorities. Digital platforms provide easier access to information, improve transparency in tax administration, and reduce uncertainty in tax-related processes, all of which contribute to stronger institutional trust. This result is consistent with Institutional Trust Theory, which emphasizes that citizens are more likely to trust public institutions when they perceive them as competent, accountable, and capable of delivering quality services. Therefore, the successful implementation of digital tax services not only improves administrative efficiency but also strengthens the relationship between taxpayers and tax authorities (Khmyz et al., 2023; Lagodiienko et al., 2023).

Furthermore, taxpayer trust was found to positively and significantly influence voluntary tax compliance. This result confirms that trust remains an important determinant of taxpayer behavior, even in an increasingly digitalized environment. Taxpayers who trust tax authorities are more likely to perceive tax regulations as legitimate and fair, which increases their willingness to comply without the need for coercive enforcement measures. The finding is consistent with the Slippery Slope Framework, which argues that trust-based compliance is more sustainable than compliance driven solely by the power of authorities. When taxpayers believe that tax revenues are managed responsibly and that tax institutions operate fairly, they are more willing to cooperate and fulfill their obligations voluntarily.

The mediation analysis further demonstrates that taxpayer trust partially mediates the relationship between digital tax services and voluntary tax compliance. This finding suggests that digital tax services influence compliance through both direct and indirect mechanisms. Directly, digital platforms simplify tax procedures and facilitate compliance. Indirectly, they improve taxpayers' perceptions of transparency, efficiency, and institutional competence, which subsequently strengthen trust and encourage compliance. The presence of partial mediation indicates that digital transformation should not be viewed merely as a technological initiative but also as a strategy for building positive psychological perceptions among taxpayers (Khmyz et al., 2023; Lagodiienko et al., 2023; Mohammed et al., 2023). Therefore, efforts to improve compliance should focus not only on enhancing digital infrastructure but also on fostering trust in tax administration.

Another important finding of this study is the significant moderating role of tax complexity. The negative interaction effect indicates that tax complexity weakens the positive relationship between taxpayer trust and voluntary tax compliance. Although taxpayers may trust tax authorities, highly complex tax regulations, complicated reporting procedures, and frequent regulatory changes can create barriers that discourage compliance. This finding highlights that trust alone is not always sufficient to generate optimal compliance outcomes when taxpayers face difficulties in understanding and implementing tax requirements. Consequently, excessive complexity may reduce the effectiveness of trust as a mechanism for encouraging voluntary compliance.

Overall, the findings suggest that improving voluntary tax compliance requires a comprehensive approach that combines technological innovation, trust-building initiatives, and regulatory simplification. Digital tax services can enhance compliance directly and indirectly through taxpayer trust, but their effectiveness may be constrained when tax regulations are perceived as overly complex. Therefore, policymakers should not rely solely on digital transformation as a compliance strategy. Instead, digitalization efforts should be accompanied by continuous improvements in transparency, taxpayer engagement, service quality, and simplification of tax procedures. Such an integrated approach is likely to strengthen taxpayer trust, reduce compliance barriers, and ultimately support higher levels of voluntary tax compliance in Indonesia.

E. CONCLUSION

This study examined the influence of digital tax services on voluntary tax compliance in Indonesia by incorporating taxpayer trust as a mediating variable and tax complexity as a moderating variable. The findings demonstrate that digital tax services significantly enhance voluntary tax compliance and strengthen taxpayer trust in tax authorities. Taxpayer trust was also found to have a significant positive effect on voluntary tax compliance and partially mediate the relationship between digital tax services and compliance, indicating that digital transformation improves compliance not only through greater convenience and efficiency but also through increased institutional trust. Furthermore, the results reveal that tax complexity significantly weakens the positive effect of taxpayer trust on voluntary tax compliance, suggesting that the benefits of trust may be reduced when tax regulations are perceived as overly complex. Overall, the study concludes that improving voluntary tax compliance requires an integrated approach that combines digital service innovation, trust-building efforts, and regulatory simplification. These findings provide practical implications for tax authorities in designing policies that enhance digital tax infrastructure while simultaneously strengthening taxpayer trust and reducing unnecessary regulatory complexity. Future research may extend this model by incorporating additional variables, such as tax morale, perceived fairness, tax knowledge, and taxpayer satisfaction, as well as employing larger and more diverse samples to improve the generalizability of the findings.

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