THE IMPACT OF DIGITAL TAX LITERACY ON TAX COMPLIANCE: THE MODERATING ROLE OF INSTITUTIONAL TRUST

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ABSTRACT

Purpose: This study aims to empirically examine how institutional trust modulates the influence of digital tax literacy on tax compliance.

Method: Employing a quantitative research design with a non-probability purposive sampling technique, primary data were collected via a structured survey from a sample of 168 individual taxpayers across diverse demographic characteristics (age groups, educational backgrounds, and employment sectors). Data were analyzed using hierarchical moderated regression analysis (MRA) with robust Huber–White–Hinkley standard errors to address heteroskedasticity.

Finding: The empirical findings reveal that digital tax literacy has a positive and statistically significant direct effect on tax compliance. Crucially, institutional trust independently exerts a positive effect on compliance but acts as a Quasi Moderator that significantly weakens the positive relationship between digital tax literacy and tax compliance, exposing a substitution and cognitive redundancy effect where high trust reduces the marginal necessity of technical competence. Conversely, digital literacy becomes a critical safeguard to sustain compliance when trust is low.

Novelty: The novelty of this research lies in empirically identifying this unexpected substitution effect, challenging the conventional assumption that institutional trust uniformly amplifies technological capabilities in fiscal compliance.

INTRODUCTION

The rapid digital transformation of tax administration across the globe has necessitated a shift in taxpayer engagement, moving from traditional manual procedures toward integrated, technology-driven reporting systems (Indonesia et al., 2025; Lidyah et al., 2025). In this context, the acquisition of digital tax literacy has emerged as a critical determinant of compliance behavior, as taxpayers must navigate increasingly complex electronic infrastructures to fulfill their fiscal obligations (Dantani, 2025). Despite growing scholarly attention to the role of digital competencies in shaping taxpayer behavior, comparatively little is known about how taxpayers' confidence in governing institutions conditions the extent to which such competencies translate into sustained, willing participation in digital reporting processes.

This research gap is particularly pertinent as modern tax regimes transition from traditional deterrence-based models toward frameworks that prioritize voluntary cooperation and institutional legitimacy (Winda et al., 2025). While existing literature acknowledges that digital literacy and technological fluency are essential for reducing procedural complexities, these factors often operate in an interdependent relationship with the psychological perception of authority (Adellya & Markhumah, 2026; Oluka, 2026). Specifically, although digitalization inherently fosters efficiency and transparency, the actual manifestation of compliance remains contingent upon whether taxpayers perceive these automated interactions as equitable and reliable (Dantani, 2025; Winda et al., 2025).

Consequently, understanding the interplay between digital proficiency and institutional trust becomes vital for designing fiscal policies that encourage voluntary adherence rather than mere technical submission (Wulandari et al., 2026). This study therefore addresses this nexus by empirically examining how institutional trust modulates the influence of digital literacy on tax compliance (Alghusaini et al., 2026).

By integrating the psychological dimensions of trust into the assessment of technological adoption, this analysis aims to bridge the disconnect between the functional capacity to navigate digital platforms and the underlying behavioral drivers of compliance (Abu-Silake et al., 2024, p. 1; Al-Okaily, 2024). Moreover, this investigation highlights how digital skills serve as a prerequisite for taxpayers to effectively utilize electronic filing systems, thereby reducing the systemic leakages often associated with manual administrative processes (Adelekan et al., 2024, p. 314; Fadhilatunisa et al., 2025). Nevertheless, the intricate design of these digital systems can simultaneously introduce new operational challenges, such as concerns regarding data privacy and technical incompatibilities, which may inadvertently undermine the potential improvements these technological changes were meant to provide. Therefore, addressing these administrative hurdles requires a dual focus on refining the technical accessibility of digital infrastructure while simultaneously fostering institutional legitimacy to ensure taxpayers view the transition as both functional and trustworthy (Hidayat & Defitri, 2024, p. 133; Opiso et al., 2023, p. 11).

This synthesis suggests that while digital proficiency provides the practical means to comply with emerging fiscal requirements, its ultimate impact is contingent upon the perceived integrity and accountability of the regulatory environment (Anisykurlillah et al., 2024, p. 2; Perveen & Ahmad, 2022, p. 15). By fostering a climate of procedural fairness through transparent, data-driven administrative practices, tax authorities can effectively mitigate the uncertainties associated with technological adoption (Huang, 2024, p. 165).

Furthermore, empirical evidence suggests that when taxpayers possess higher levels of digital competence, they are better positioned to evaluate the efficacy and reliability of electronic tax services, thereby reinforcing the positive influence of institutional trust on voluntary compliance (Kinanti et al., 2025; Putri et al., 2025). Conversely, low levels of digital literacy may exacerbate anxieties surrounding system opacity, potentially deepening the disconnect between taxpayers and the administration despite high institutional trust (Altundağ, 2025, p. 9; Roida et al., 2025). Consequently, this study posits that digital tax literacy acts as a cognitive bridge, enabling individuals to interpret administrative interactions more accurately and thereby amplifying the impact of trust on compliance behavior (Adelakun et al., 2024, p. 847; Asamoah et al., 2023, p. 9).

This nuanced interplay suggests that comprehensive digital tax literacy programs should be coupled with targeted efforts to enhance institutional transparency to maximize voluntary reporting (Hương et al., 2025, p. 128; Ruhara, 2025). By prioritizing both technical empowerment and administrative accountability, policymakers can better leverage digital tools to cultivate a resilient, compliant tax culture (Damayanti et al., 2025; Sarker & Ahmed, 2022, p. 242). Recent advancements in automated oversight, such as real-time VAT monitoring and electronic taxpayer portals, illustrate the potential for digital integration to minimize tax evasion (Adelekan et al., 2024, p. 313); however, the efficacy of these tools remains heavily dependent on the taxpayer's ability to engage with them transparently and securely (Adelakun, 2023, p. 492; Adelakun et al., 2024, p. 30).

Furthermore, the adoption of such digital ecosystems—including e-invoicing and AI-driven monitoring represents a fundamental shift in the architecture of tax administration, necessitating an alignment between infrastructure deployment and public perception of procedural justice (Rizkina, 2025; Saputra & Prabowo, 2025). The integration of these systems not only streamlines administrative processes but also reinforces the fiscal contract by reducing opportunities for corruption and enhancing the perceived fairness of the tax system (Li et al., 2024; Mebratu, 2024, p. 6). As these digital frameworks continue to mature, the operational benefits achieved through decreased administrative complexity must be carefully balanced with a dedication to inclusive design, ensuring that all taxpayer demographics are able to participate equitably.

In the end, this integrated strategy enables revenue agencies to move past punishment-oriented enforcement traditions and adopt a partnership-based compliance framework that pairs technological sophistication with a foundation of shared trust between taxpayers and the state. This approach acknowledges that while digital systems provide the necessary tools for interaction, the sustainable maintenance of high compliance levels relies on a reciprocal dynamic where taxpayer confidence is nurtured through transparent governance (Batrancea et al., 2022, p. 20; Gebrihet et al., 2023, p. 8). Such systemic initiatives are essential for transforming tax administration from a purely transactional obligation into a collaborative ecosystem that prioritizes equity and welfare. By aligning digital functionality with these core values, authorities can better secure long-term commitment, ensuring that technological progress serves as a catalyst for both fiscal integrity and broader public trust (Damayanti et al., 2025; Winda et al., 2025).

THEORETICAL FRAMEWORK AND HYPOTHESIS DEVELOPMENT

Literature Review

The Theory of Planned Behavior offers a robust framework for analyzing taxpayer compliance by positing that behavior is fundamentally driven by the interaction of attitudes, subjective norms, and perceived behavioral control (Hương et al., 2025, p. 120; Lu et al., 2010; Mutammimah et al., 2025). In the context of digital tax administration, this theoretical lens is instrumental in conceptualizing how digital literacy serves as a proxy for perceived behavioral control, empowering taxpayers to overcome the technical complexities of electronic filing systems (Adellya & Markhumah, 2026; Fadhilatunisa et al., 2025). Concurrently, institutional trust, reflecting a taxpayer's favorable attitude toward government legitimacy, mediates the relationship between administrative interaction and the intention to comply (Michael, 2026; Winda et al., 2025). By synthesizing these behavioral foundations, this section explores how the alignment of technical empowerment and institutional credibility creates a synergistic effect, ultimately fostering a culture of voluntary reporting in the digital era (Kinanti et al., 2025; Rizkina, 2025).

Moreover, the integration of the Expectation-Confirmation Model and Information Systems Success Model highlights how the perceived quality of these digital interfaces significantly influences user satisfaction and subsequent tax filing continuance (Akram et al., 2019, p. 267). Research indicates that when digital platforms facilitate seamless interactions, they reinforce positive attitudes toward tax compliance, effectively transforming technical utility into a stronger commitment to the fiscal system (Lekjaeng & Sincharoonsak, 2025), (Masunga, 2024).

Digital Tax Literacy on Tax Compliance

Recent empirical findings underscore that digital literacy functions as a critical determinant of taxpayer behavior, as it directly impacts the ability to navigate complex administrative infrastructures and reduces the psychological barriers associated with technological adoption (Putri et al., 2025). By diminishing the friction caused by system complexity, high levels of digital proficiency allow users to capitalize on the transparency provided by electronic services, ultimately strengthening the overall efficacy of tax administration (Anggraeni, 2025; Sitio et al., 2025). This empowerment is essential, as the Theory of Planned Behavior suggests that individuals must perceive high behavioral control to effectively translate their intention to comply into consistent, accurate filings (Meiryani et al., 2023, p. 1021; Zaidi et al., 2017, p. 136).

Furthermore, performance expectancy and effort expectancy emerge as primary drivers in this digital transition, as taxpayers who find portal navigation intuitive are more likely to perceive the tax system as a reliable and convenient mechanism for fulfilling their obligations (Asmah et al., 2025). Consequently, fostering technological readiness is essential, as the convenience afforded by digital platforms not only mitigates compliance burdens but also builds the taxpayer confidence necessary for sustained participation in voluntary reporting (Moreno et al., 2025), (Ermadiani & Kesuma, 2025). Central to this dynamic is the Slippery Slope Framework, which posits that trust in tax authorities acts as a primary catalyst for voluntary cooperation, ensuring that digitalization efforts are perceived as a benevolent service rather than mere state-sanctioned surveillance, (Ardika et al., 2023, p. 66).

When taxpayers perceive that authorities use these digital tools to simplify compliance rather than exert coercive oversight, the resulting increase in perceived service quality significantly strengthens their intent to meet fiscal obligations (Saptono et al., 2023). This perception of service quality is further bolstered when authorities ensure that modernization efforts prioritize user-centric design, thereby allowing taxpayers to fulfill their duties with increased ease and efficiency (Erasashanti et al., 2024, p. 166). Consequently, the interplay between technological competence and institutional trust creates a virtuous cycle where digital proficiency reduces the cost and complexity of compliance, while organizational transparency bolsters the perceived legitimacy of the state (Adellya & Markhumah, 2026; Li et al., 2024). This convergence suggests that while digital tools provide the mechanical means for adherence, the psychological willingness to comply is deeply contingent upon the taxpayer's belief in the fairness and reliability of the governing authority (Putri et al., 2025; Winda et al., 2025). By integrating these behavioral and technological determinants, this study posits that high levels of digital literacy do not merely facilitate system usage but function as a critical prerequisite for translating administrative transparency into genuine taxpayer cooperation. Therefore, this research advances the following hypothesis:

H1: Digital tax literacy has a positive effect on tax compliance.

Digital Tax Literacy on Tax Compliance The Moderating Role of Trust in Tax Authorities

Trust in tax authorities functions as a critical moderator by shaping whether digital literacy translates into voluntary compliance or is merely utilized for administrative navigation (Li et al., 2024). When institutional trust is high, taxpayers perceive digital modernization as a benevolent facilitation of their civil duties, thereby reinforcing voluntary compliance. Conversely, when corruption is perceived to be widespread, such trust diminishes, potentially causing taxpayers to view digital tools with skepticism despite their technical proficiency.

This aligns with the Fiscal Exchange Model, which posits that the quality of public services and perceived accountability are essential for sustaining compliance, especially when taxpayers evaluate the benefits of government spending against their fiscal contributions. Furthermore, the strategic deployment of digital interfaces to enhance transparency and administrative efficiency satisfies taxpayer expectations for service quality, thereby bolstering the perceived legitimacy of the fiscal system (Kinanti et al., 2025; Saptono et al., 2023). Consequently, the effectiveness of digital literacy in promoting adherence is contingent upon the taxpayer's belief that administrative systems are designed to provide equitable and efficient service (Haggai & Odunga, 2025).

In this context, tax authorities that leverage digital platforms to demonstrate accountability and responsiveness effectively convert technical proficiency into enhanced institutional legitimacy (Aminah, 2025). By aligning technological accessibility with the fair management of tax revenues, governments cultivate a high state of tax morale that encourages voluntary adherence among even the most digitally capable cohorts. Building on this foundation, the strategic deployment of digital administration platforms enables authorities to deliver more accurate and timelier services that simultaneously minimize compliance costs and reinforce taxpayer confidence in the procedural integrity of the fiscal system (Kinanti et al., 2025; Li et al., 2024).Thus, the mitigation of information asymmetry through digital interfaces serves to validate the taxpayer's perception of the state as a reliable steward of public resources (Kinanti et al., 2025; Li et al., 2024).This strategic alignment between administrative transparency and citizen-centric design fosters a collaborative fiscal environment where the perceived fairness of resource allocation directly incentivizes voluntary disclosure. Given the critical role of trust in conditioning taxpayer responses to technological modernization, it is essential to formally examine whether institutional confidence enhances the impact of digital capabilities on compliance outcomes (Li et al., 2024). Therefore, this study advances the following hypothesis:

H2: Trust in tax authorities positively moderates the relationship between digital tax literacy and tax compliance.

Research Framework

Based on the theoretical background and hypothesis development outlined above, the conceptual research model for this study is illustrated in Figure .

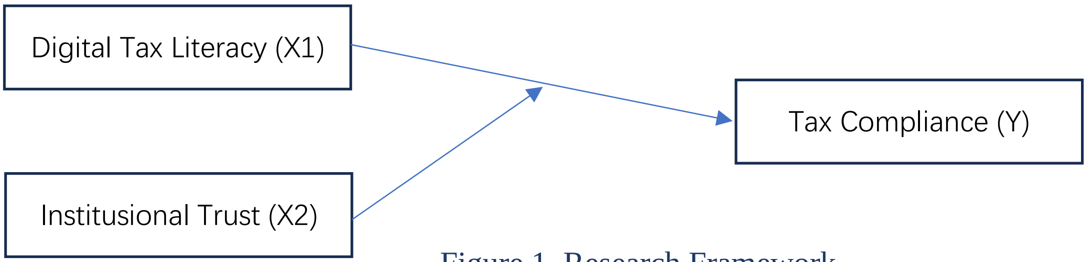


Figure 1. Research Framework

RESEARCH METHODOLOGY

To empirically evaluate this hypothesis, this study employs a quantitative design using a structured survey instrument distributed to individual taxpayers. It utilizes validated scales to measure digital literacy and trust in tax authorities and applies hierarchical regression techniques to test the moderating effect of trust on the relationship between tax-related digital literacy and fiscal compliance. This approach enables an in-depth analysis of variable interactions to identify how taxpayers' technical competence combines with perceptions of institutional integrity to determine compliance levels (Dermawan et al., 2025; Joni & Trisnawati, 2026).

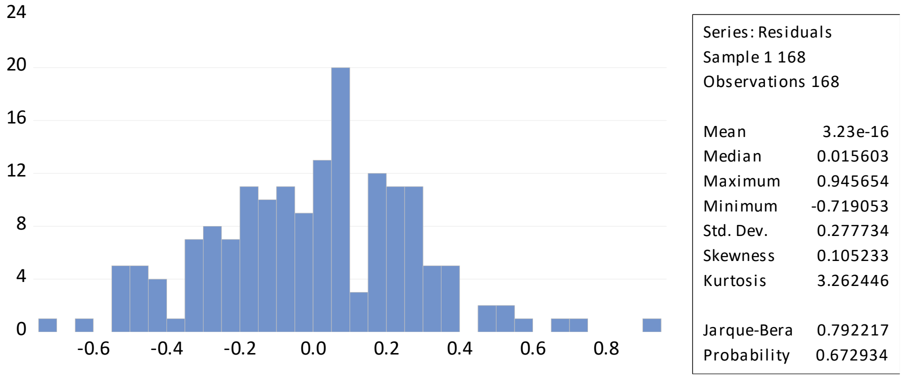
The study began with a pilot test involving 35 respondents to ensure the validity and reliability of the questionnaire, which covers key dimensions of digital literacy and trust variables. Full-scale primary data collection was subsequently conducted over a 15-day period in May, with the results analyzed using hierarchical regression techniques to validate the moderating interaction. The hierarchical regression model incorporates demographic control variables to ensure that the estimated moderating effect remains consistent after accounting for factors such as the taxpayers' age, education level, and work experienc (Masri et al., 2024, p. 133).

The study's variables are operationalized as follows: tax-related digital literacy is defined as the level of taxpayer understanding and skill in utilizing digital platforms to fulfill tax obligations (Adellya & Markhumah, 2026); trust in tax authorities is measured through taxpayers' perceptions regarding the integrity, fairness, and reliability of the tax institution (Li et al., 2024); and tax compliance is measured by the accuracy and timeliness with which taxpayers voluntarily report and pay their taxes (Kinanti et al., 2025). Based on this definition, a statistical analysis was conducted to test the significance of the interaction coefficient, which would confirm whether trust in tax authorities significantly strengthens the influence of digital literacy on taxpayer compliance.

RESULTS AND DISCUSSION

Result

Normality Test



The normality test was conducted to determine whether the residuals in the regression model are normally distributed. The test results show a probability value of 0.672934. Since this probability value is greater than the significance level of 0.05 (0.672934 > 0.05), it can be concluded that the residuals of the regression model are normally distributed, indicating that the model satisfies the normality assumption.

Multicollinearity Test

Variance Inflation Factors
Date: 07/15/26 Time: 18:35
Sample: 1 168
Included observations: 168

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.000688	1.471293	NA
X1	0.002061	2.802701	2.802701
Z	0.004556	5.987675	5.987675
X1_Z	0.000884	5.287604	4.816311

Based on the table, the Centered VIF values for X_1 (2.802701), Z (5.987675), and the interaction variable $X_1 \times Z$ (4.816311) are all consistently below the threshold of 10. Therefore, it can be concluded that the regression model is free from multicollinearity, indicating that no multicollinearity problem exists among the independent variables.

Heteroskedasticity Test

Heteroskedasticity Test: Breusch-Pagan-Godfrey
Null hypothesis: Homoskedasticity

F-statistic	8.889366	Prob. F(3,164)	0.0000
Obs*R-squared	23.49759	Prob. Chi-Square(3)	0.0000
Scaled explained SS	25.33032	Prob. Chi-Square(3)	0.0000

The test results presented in Table 3 indicate that the Obs*R-squared statistic has a Prob. Chi-Square value of 0.0000. Since this value is lower than the significance level of 0.05 (0.0000 < 0.05), the regression model is identified as having a heteroskedasticity problem.

To address this issue without altering the original questionnaire data, the study employed a robust standard error estimation approach, specifically the Huber–White–Hinkley (HC1) Heteroskedasticity-Consistent Standard Errors and Covariance estimator. This method adjusts the standard errors of the regression coefficients, ensuring that the resulting t-statistics and p-values remain consistent, reliable, and statistically valid for hypothesis testing despite the presence of heteroskedasticity.

Moderated Regression Analysis (MRA) Model Estimation Results

Dependent Variable: Y
Method: Least Squares
Date: 07/15/26 Time: 18:49
Sample: 1 168
Included observations: 168
Huber-White-Hinkley (HC1) heteroskedasticity consistent standard errors and covariance

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	4.333437	0.031626	137.0198	0.0000
X1	0.366517	0.063269	5.792995	0.0000
Z	0.382557	0.086589	4.418072	0.0000
X1_Z	-0.110818	0.035482	-3.123208	0.0021
R-squared	0.870991	Mean dependent var		4.278095

Adjusted R-squared	0.868631	S.D. dependent var	0.773250
S.E. of regression	0.280263	Akaike info criterion	0.317346
Sum squared resid	12.88178	Schwarz criterion	0.391726
Log likelihood	-22.65706	Hannan-Quinn criter.	0.347533
F-statistic	369.0764	Durbin-Watson stat	2.213641
Prob(F-statistic)	0.000000	Wald F-statistic	288.9042
Prob(Wald F-statistic)	0.000000		

Based on Table 4, the estimated empirical Moderated Regression Analysis (MRA) model is expressed as follows:

$$Y = 4.333437 + 0.366517X_1 + 0.382557Z - 0.110818(X_1 \times Z)$$

Partial t-Test

Effect of X_1 on Y: The coefficient of X_1 is positive ($\beta = 0.366517$) with a p-value of 0.0000 ($p < 0.05$). This result indicates that Digital Tax Literacy has a positive and statistically significant direct effect on Tax Compliance. Therefore, H1 is supported.

Effect of Z on Y: The variable Z has a positive coefficient ($\beta = 0.382557$) with a p-value of 0.0000 ($p < 0.05$). This finding demonstrates that Institutional Trust independently exerts a positive and statistically significant effect on Tax Compliance.

Moderating Effect of $X_1 \times Z$ on Y: The interaction term $X_1 \times Z$ has a negative coefficient ($\beta = -0.110818$) with a p-value of 0.0021 ($p < 0.05$). This indicates that Institutional Trust (Z) significantly moderates the relationship between Digital Tax Literacy (X_1) and Tax Compliance (Y). However, the negative interaction coefficient suggests that the moderating effect weakens, rather than strengthens, the positive relationship between Digital Tax Literacy and Tax Compliance. Since both the main effect of Z and the interaction effect ($X_1 \times Z$) are statistically significant, Institutional Trust is classified as a Quasi Moderator.

F-Test (Overall Model Significance)

The overall model was evaluated using the robust Wald F-statistic, which yielded a value of 288.9042 with a probability of 0.000000 ($p < 0.05$). This result indicates that Digital Tax Literacy (X_1), Institutional Trust (Z), and their interaction ($X_1 \times Z$) jointly have a statistically significant effect on Tax Compliance (Y). Therefore, the regression model is considered highly significant and well-fitted.

Coefficient of Determination (R^2)

The model produced an Adjusted R-squared value of 0.868631, indicating that approximately 86.86% of the variation in Tax Compliance (Y) is explained by Digital Tax Literacy (X_1), Institutional Trust (Z), and their interaction ($X_1 \times Z$). The remaining 13.14% of the variation is attributable to other factors not included in the regression model.

Discussion

Effect of Digital Tax Literacy on Tax Compliance

The empirical findings demonstrate that Digital Tax Literacy (X_1) has a positive and statistically significant effect on Tax Compliance (Y). This result supports the Theory of Planned Behavior (TPB), which posits that literacy reflects an individual's perceived behavioral control, thereby enhancing the likelihood of engaging in compliant behavior (Adellya & Markhumah, 2026; Fadhilatunisa et al., 2025). Taxpayers with higher levels of digital literacy are better equipped to overcome both psychological and administrative barriers associated with the adoption of digital tax technologies (Putri et al., 2025). The ease of using digital tax services, such as e-filing and e-billing, reduces procedural compliance costs and encourages taxpayers to fulfill their tax obligations accurately and on time (Asmah et al., 2025; Ermadiani & Kesuma, 2025). These findings suggest that digital tax literacy strengthens taxpayers' capability and confidence to navigate digital tax systems, ultimately fostering higher levels of voluntary tax compliance.

Institutional Trust as a Moderating Variable

The most important finding of this study is the negative interaction coefficient between Digital Tax Literacy (X_1) and Institutional Trust (Z) ($\beta = -0.1108$, $p = 0.0021$). This result indicates that Institutional Trust functions as a Quasi Moderator, significantly weakening the positive effect of Digital Tax Literacy on Tax Compliance. Although Institutional Trust independently contributes positively to tax compliance, the negative interaction effect reveals a substitution effect, whereby high levels of trust reduce the marginal contribution of digital tax literacy.

This finding can be interpreted from several theoretical perspectives. First, according to the Slippery Slope Framework (Kirchler et al., 2008), tax compliance is driven by two complementary mechanisms: trust in tax authorities and the power of tax authorities, the latter of which is increasingly reflected through digital monitoring systems (Ardika et al., 2023). When Institutional Trust reaches a high level, taxpayers develop strong confidence that public funds are managed honestly, fairly, and transparently. Under these conditions, voluntary compliance becomes primarily motivated by moral commitment and psychological attachment to the state rather than by taxpayers' technical ability to operate digital tax systems. Consequently, even taxpayers with relatively limited digital tax literacy are likely to remain compliant because the legitimacy of the tax authority substitutes for the need for advanced technological competence (Li et al., 2024).

Second, the findings suggest the existence of a cognitive redundancy effect. When taxpayers simultaneously possess high levels of digital tax literacy and strong institutional trust, a ceiling effect emerges. Individuals who already have complete confidence in tax authorities are less motivated to invest additional cognitive effort in mastering increasingly sophisticated digital tax features because they assume that the system operates fairly and reliably. As a result, the incremental contribution of digital tax literacy to tax compliance gradually diminishes.

Conversely, Digital Tax Literacy becomes substantially more important when Institutional Trust is low. In situations where taxpayers are skeptical of government institutions, compliance shifts from being voluntary to enforced or rational compliance. Under these circumstances, taxpayers rely on their digital literacy to independently verify tax information, understand electronic tax regulations, and ensure that their transactions are reported accurately without opportunities for manipulation or administrative errors (Altundağ, 2025; Roida et al., 2025). In other words, digital tax literacy serves as a critical safeguard for tax compliance when public trust in tax authorities is weakened.

CONCLUSION

This study concludes that Digital Tax Literacy significantly enhances Tax Compliance. However, Institutional Trust operates as a Quasi Moderator that weakens the marginal positive effect of digital literacy on compliance through a substitution effect. When trust in public institutions is high, advanced digital tax literacy becomes less essential for securing compliance. On the other hand, digital tax literacy serves as a vital protective mechanism to maintain compliance when institutional trust declines.

Theoretical Implications

This research advances behavioral tax compliance literature by challenging the conventional assumption that institutional trust uniformly amplifies technological capabilities. By identifying a quasi-moderating substitution effect within the Slippery Slope Framework and Theory of Planned Behavior, this study demonstrates how institutional legitimacy can compensate for technical competency gaps, offering a more nuanced understanding of taxpayer behavior in digital tax environments.

Practical and Policy Implications

For revenue authorities, these findings emphasize that technological modernization and digital literacy training are insufficient on their own. Policymakers must adopt a balanced approach: while continuing to build intuitive digital tax portals, they must simultaneously nurture institutional trust through transparent revenue governance, fair enforcement, and clear procedural justice. In low-trust taxpayer segments, enhancing digital literacy should be prioritized as an immediate intervention to safeguard voluntary compliance.

Limitations and Future Research

This study acknowledges several limitations. First, the sample size of 168 individual taxpayers obtained via non-probability sampling may limit broader generalizability across different socio-demographic groups or geographical regions. Second, the cross-sectional survey design captures taxpayer perceptions at a single point in time, restricting definitive causal conclusions. Future studies should employ longitudinal or experimental designs and evaluate specific digital tax systems (such as real-time VAT monitoring or Core Tax Systems) across diverse taxpayer segments, including corporate entities and small businesses.

DECLARATION OF ARTIFICIAL INTELLIGENCE USAGE

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