

Factors Influencing Taxpayer Compliance in the Digital Tax Era

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Abstract: This study aims to explore the effects of behavioral, institutional, and technological factors on taxpayer compliance behavior within a digital tax environment. The research employs a cross-sectional survey design, and data were analyzed using PLS-SEM on a sample of taxpayers in Central Java, Indonesia. The findings reveal that tax morale, tax digitization, tax sanctions, and tax incentives each have a significant positive impact on taxpayer compliance. Among these, tax morale emerges as the strongest predictor, highlighting that intrinsic motivation and perceived fairness are fundamental to compliance even in technologically advanced systems. Tax digitization facilitates compliance by reducing administrative complexity, while sanctions serve as a credible deterrent. Conversely, financial reporting literacy demonstrates a weaker direct effect, suggesting that technical accounting competence alone is insufficient to drive compliance without a supportive behavioral and institutional context. The study contributes to the tax compliance literature by integrating behavioral, institutional, and digital determinants into a single empirical framework, thereby extending the application of the Theory of Planned Behavior to contemporary digital taxation. The findings offer practical implications for developing holistic tax administration strategies that combine trust-building, robust digital infrastructure, clear enforcement, and transparent incentives.

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INTRODUCTION

The digitization of tax administration has been established as a key reform priority for both developed and developing countries (Roy & Khan, 2021). Governments are increasingly adopting electronic taxation systems to improve the efficiency of administrative processes and increase taxpayer compliance. These systems are designed to facilitate registration, reporting, payment, monitoring, and enforcement through integrated digital platforms (Belahouaoui & Attak, 2025; Gupta, Keen, Shah, et al., 2017; Jin, 2025; OECD, 2022, 2023b). Digital tax collection is therefore more than a software update; it is also a behavioral and institutional tool that changes the dynamics of the relationship between the state and taxpayers. By reducing compliance costs, increasing transparency, and strengthening the credibility of tax enforcement, digital tax administration is expected to encourage taxpayers to comply more accurately and consistently (Anomah et al., 2024; Bergman & Nevarez, 2006a; Han et al., 2025). In the current era of widespread digitalization, however, governments still face growing challenges in ensuring sustainable compliance, particularly in economies with relatively low tax capacity, uneven digital readiness, and diverse taxpayer capabilities.

Recent studies on compliance reveal mixed outcomes despite the advantages of digitization. Digital tax systems can simplify access, reduce manual paperwork, and speed up interactions between taxpayers and authorities, potentially removing procedural barriers (Barriers, 2024). However, they may also introduce new accessibility challenges that rely heavily on data accuracy, digital

infrastructure, system stability, and taxpayer preparedness. Beyond enabling the use of digital tools and maintaining financial records, these systems require trust in data security, privacy, and platform credibility (A. Al-Okaily et al., 2023; Carter et al., 2011). Digital solutions tend to benefit taxpayers with higher administrative capacity, especially when tasks are simple and documentation skills are strong (Soboleva et al., 2025a). On the other hand, some users face difficulties with digital processes, particularly if systems seem complex, inaccessible, or risky (Acquah, 2025; Adela et al., 2025; Androshchuk, 2023; Gütschow & Lucke, 2026). These results suggest that digitization alone does not ensure increased compliance; its success depends on taxpayer knowledge, perceptions of fairness, institutional trust, system reliability, and the broader behavioral context of digital taxation.

Recent studies on tax compliance increasingly examine both economic and psychological factors affecting taxpayer behavior. Frameworks based on trust highlight the importance of tax morale, fairness, and confidence in public authorities as key drivers of voluntary compliance (Batrancea et al., 2024a; Batrancea & Goje, 2025a; Bruns et al., 2025a). Taxpayers tend to comply more when they view the tax system as fair, trust the legitimacy of authorities, and believe tax revenues are managed ethically. Conversely, prevention-focused models attribute compliance to penalties, audit likelihood, and enforcement severity, suggesting taxpayers comply to avoid legal and financial risks (Abdul-Jabbar & Bin-Nashwan, 2022a; Musah et al., 2025a). Recent research indicates that neither enforcement nor service quality alone fully explains taxpayer behavior in modern tax systems, especially digital ones. Instead, compliance results from complex interactions in which trust, enforcement, service quality, and institutional design influence one another (Dwenger & Gumpert, 2025; Fernández Sierra et al., 2025). Thus, understanding the relationship between trust and prevention is essential when analyzing taxpayer compliance in the digital era.

Besides trust and law enforcement, fiscal policy tools and taxpayer capacity are becoming increasingly significant. Tax incentives are often employed to boost economic activity, encourage formalization, and lessen the perceived tax burden. While these incentives can potentially improve compliance by lowering effective tax rates and enhancing taxpayers' perception of reciprocal benefits from the fiscal system, evidence on their actual impact is mixed. Their effectiveness may be limited or indirect, especially when taxpayers encounter incomplete information, complex procedures, or uncertainty about eligibility (Deyganto, 2022; Klemm & van Parys, 2012; Naitili et al., 2022; Saptono et al., 2024a). Additionally, financial reporting literacy is a critical issue, especially for small- and medium-sized enterprises. Even with simplified electronic tax systems, basic accounting skills are essential for identifying taxable income, classifying expenses, maintaining records, understanding tax rules, and filing accurate reports. Consequently, accounting and reporting skills remain vital for compliance in the digital age (Achmad Wicaksono et al., 2024; Lorato et al., 2024; Saad, 2014a).

The ambiguity of the previous findings highlights a significant research gap. Many existing studies have examined tax morale, sanctions, digitization, incentives, and financial reporting literacy separately, but fewer have combined these factors into a single model. This segregation limits understanding of which factor most strongly influences taxpayer compliance and how different aspects of compliance interact in a digital setting. For example, a taxpayer might have access to digital tax services but lack financial reporting skills, while another might understand reporting procedures but distrust tax authorities. Alternatively, some may comply mainly due to sanctions rather than moral obligation. These differences indicate that taxpayer compliance cannot be fully explained by a single factor. Instead, a comprehensive framework that integrates behavioral motivation, institutional pressure, technological tools, fiscal policy, and taxpayer competence is necessary.

This paper aims to provide a thorough explanation of taxpayer compliance in digital taxation. It employs a comprehensive framework that integrates behavioral, institutional, technological, policy, and capability factors. The study is based on the Theory of Planned Behavior, which states that behavioral intentions and actions are shaped by attitude, subjective norms, and perceived control (Ajzen, 1991). Here, tax morale refers to taxpayers' internal attitudes and sense of ethical duty toward

compliance (Ariyanti Rahayuningsih & Puspa Sari, 2025; Kornhauser, 2022; Mohdali & Pope, 2010). Tax sanctions serve as institutional pressure and deterrence measures. Digitalization of taxes enhances perceived behavioral control by making processes more accessible and manageable (M. Al-Okaily, 2024; Hesami et al., 2024; Wang, 2003; Warkentin et al., 2002). Tax incentives impact perceptions of benefits and fairness, while financial literacy supports the technical skills needed for accurate tax calculation, documentation, and reporting (Lusardi & Mitchell, 2014; Musah et al., 2026).

This study advances the existing literature in three ways by examining how various factors influence taxpayer compliance in the digital age. First, it creates a comprehensive model that integrates components such as tax morale, sanctions, digitalization, incentives, and financial literacy. Second, it assesses the relative significance of each factor, providing clearer insight into whether compliance is mainly driven by behavioral, institutional, technological, fiscal, or capability-related aspects. Third, it offers policy suggestions for developing digital tax administration strategies that foster sustainable and inclusive compliance. These strategies should go beyond just digital infrastructure and enforcement, emphasizing the importance of trust, fairness, literacy, transparency, and taxpayer-focused services.

This study is divided into three parts. Section 2 describes the research methodology, covering design, population and sample, measurement, and data analysis methods. Section 3 presents the empirical findings and analysis. Section 4 summarizes the study, highlighting its theoretical contributions, practical implications, limitations, and suggestions for future research.

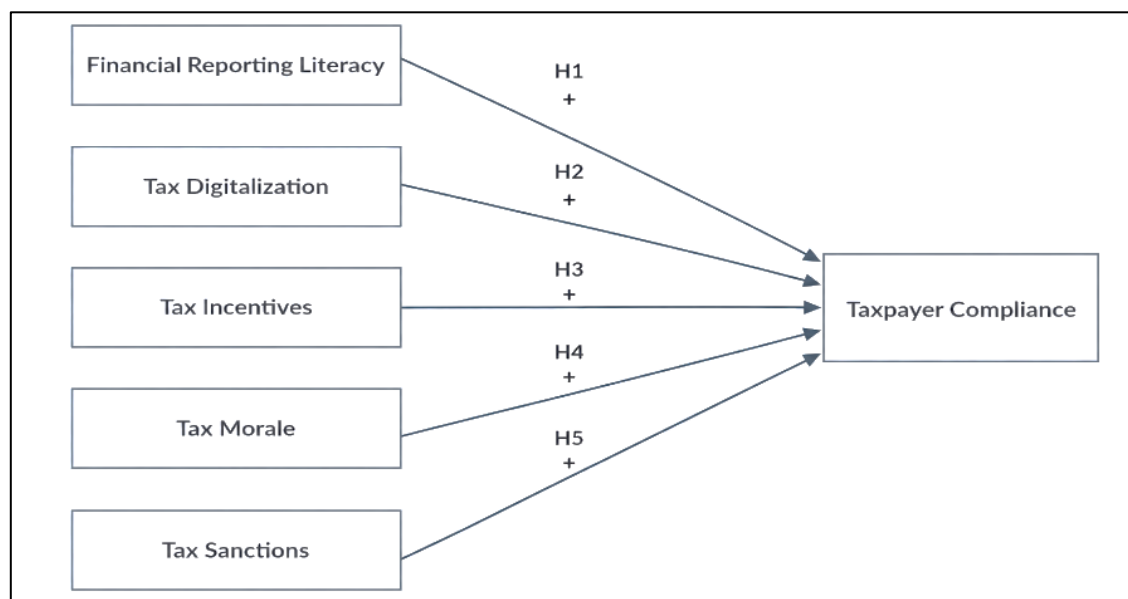


Figure 1. Conceptual Taxpayer Compliance in the Digital Tax Era

RESEARCH METHOD

This research uses a quantitative design and employs a cross-sectional survey to examine factors influencing taxpayers' compliance with digital tax generation. In tax compliance research, quantitative methodologies are commonly employed to capture behavioral, institutional, and technical determinants in a structured and generalizable manner (Hair & Alamer, 2022). The study is based on the Theory of Planned Behavior (Ajzen, 1991), which conceptualizes compliance behavior as a function of attitudes, subjective norms, and perceived behavioral control. Survey techniques are considered appropriate for studying tax perceptions, particularly when compliance is influenced by psychological and administrative processes rather than direct observation (Shejale et al., 2025). This architecture enables step-by-step testing of hypothesized relationships among latent constructs using structural equation modeling.

The study sample comprises small and medium taxpayers who operate formal businesses. Primary data were collected in 2025 through structured questionnaires administered to working taxpayers in Central Java, Indonesia. A purposive sampling method enabled selection based on criteria that ensured respondents were currently conducting business and had experience with digital tax systems. This sampling is in accordance with tax compliance studies, which are designed to target economically active taxpayers and those with firsthand experience with tax legislation and procedures (Saad, 2014b). A total of 154 complete questionnaires were collected and analyzed.

A self-administered questionnaire that measured all constructs using multi-item indicators on a Likert scale was used to gather data. The instruments were constructed by drawing on the well-documented tax compliance literature to ensure content validity and conceptual relevance (Bruns et al., 2025b; Shejale et al., 2025). Financial reporting knowledge, tax digitalization, tax incentives, tax morale, and encouraging taxpayer compliance were operationalized using reflective indicators drawn from prior empirical research (Dwi Wibawa et al., 2024). In a pilot review, the clarity and relevance of the items were confirmed. The complete list of variables, dimensions, indicators, and sources is provided in Appendix A1, in line with transparency standards proposed by the main journals (Hair & Alamer, 2022).

Partial Least Squares Structural Equation Modeling (PLS-SEM) was used to analyze the data. This procedure is recommended for forward regression in programs with multiple latent constructs having complex relationships (Hair & Alamer, 2022). The analysis had two stages: the first testing the reliability and validity of a measurement model, and the second testing the structural levels, path notation, and the strength of relationships among variables in a conceptual model. PLS-SEM has been widely used in tax compliance and behavioral accounting research because it is robust to non-normal data and can be used for hybrid exploratory-confirmatory research (Henseler et al., 2024). The hypotheses were tested using bootstrapping to compare the significance of relationships.

RESULTS AND DISCUSSION

The respondent demographics, detailed in Table 1, show that the majority of taxpayers were aged 40–49 years (37.66%), followed by those aged 30–39 (29.22%). Over half (57.79%) were males. Educationally, most participants were high school graduates (35.06%) or held a bachelor's degree (33.77%). Regarding business types, 28.57% operated micro-businesses, with medium and large enterprises accounting for 27.27% and 26.62%, respectively. Additionally, 34.42% had been in business for less than 5 years, indicating a relatively dynamic taxpayer population.

Table 2 presents the descriptive statistics for all the latent variables. Overall, the distributions are quite appropriate, with means close to zero and standard deviations around 1, indicating consistent variability across variables. Skewness coefficients are small (ranging from -0.285 to 0.158), reflecting slight asymmetries, while negative excess kurtosis values (from -0.466 to -0.901) suggest that the distributions are somewhat flatter than normal but do not exhibit extreme peakedness. The observed minimum and maximum scores (about -2.19 to 2.21) are within reasonable limits, indicating no severe outliers that could affect SEM estimation. In summary, these patterns demonstrate that the data distribution is sufficiently appropriate for subsequent measurement and evaluation of the structural model.

Table 1. Demographic Characteristics of Respondents

Category	Classification	Frequency	Percentage
Age (years)	20–29	18	11.69
	30–39	45	29.22
	40–49	58	37.66
	50–59	24	15.58
	≥ 60	9	5.84
Gender	Male	89	57.79

Education Level	Female	65	42.21
	High School	54	35.06
	Diploma	28	18.18
	Bachelor's Degree	52	33.77
Occupation	Master's Degree	20	12.99
	Small Business Owner / Retailer	32	20.78
	Freelancer	12	7.79
	Office Staff / Technician	27	17.53
	Supervisor / Manager / Professional	41	26.62
	Entrepreneur	20	12.99
	Director / Senior Manager	10	6.49
	Consultant	1	0.65
Business Size	Micro (<10 employees)	44	28.57
	Small (10–50 employees)	27	17.53
	Medium (50–250 employees)	42	27.27
	Large (>250 employees)	41	26.62
Years in Business	< 5 years	53	34.42
	5–9 years	45	29.22
	10–19 years	30	19.48
	≥ 20 years	26	16.88
Annual Revenue (Million IDR)	≥ 10,000	10	6.49
	Others	144	93.51
Total		154	100

Table 2. Descriptive statistics results

Construct	Mean	Median	Min	Max	Std. Deviation	Skewness	Excess Kurtosis
FRL	0.000	0.017	-2.173	2.206	1.000	0.158	-0.466
TC	0.000	0.235	-2.152	1.951	1.000	-0.285	-0.609
TD	0.000	0.032	-2.134	1.887	1.000	0.014	-0.901
TI	0.000	0.148	-1.989	2.006	1.000	-0.115	-0.893
TM	0.000	-0.11	-2.175	1.926	1.000	0.085	-0.715
TS	0.000	-0.003	-2.19	2.139	1.000	-0.232	-0.721

Please refer to Tables 3 and 4 for a comparison of the model measurement validation results. As shown in Table 3, the outer loadings of all scales are high for their respective latent constructs (ranging from 0.772 to 0.900), exceeding the 0.70 threshold and the established theoretical expectations. It should be noted that each indicator represents its underlying latent entity well, thereby ensuring the reliability of the indicators. It was determined that no indicator deletion was necessary, indicating that the measurement model is stable and well-defined.

As shown in Table 4, there is acceptable convergent validity and internal consistency reliability for all constructs. The Cronbach's alpha and rho_a and rho_c values for all variables are higher than the required threshold (≥ 0.70). This indicates reliable internal consistency for these scales (Peterson & Halm-Anderson, 2017). In addition, the AVE values ranged from 0.671 to 0.764, exceeding the threshold value ($AVE > 0.50$), indicating that all constructs explained more than half of the variance (Fornell & Larcker, 1981). The findings generally support the conclusion that the measurement model successfully meets the reliability and convergent validity criteria required to proceed with discriminant validity and structural model testing.

Table 3. Outer Loadings Results

Indicator	FRL	TC	TD	TI	TM	TS
FRL1	0.842					
FRL2	0.772					
FRL3	0.813					

FRL4	0.847					
TC1		0.852				
TC2		0.899				
TC3		0.871				
TD1			0.861			
TD2			0.863			
TD3			0.908			
TD4			0.832			
TI1				0.888		
TI2				0.858		
TI3				0.855		
TM1					0.846	
TM2					0.883	
TM3					0.874	
TS1						0.799
TS2						0.900
TS3						0.797

Table 4. Convergent Validity Result

	Cronbach's alpha	(rho_a)	(rho_c)	(AVE)
FRL	0.844	0.887	0.891	0.671
TC	0.845	0.846	0.907	0.764
TD	0.892	0.944	0.923	0.751
TI	0.840	0.892	0.901	0.752
TM	0.836	0.838	0.902	0.754
TS	0.783	0.840	0.872	0.694

The HTMT values indicate the Goodness of fit. Table 5 presents the results of the discriminant validity assessment. All HTMT values are below the strict cutoff of 0.85 and well below the more lenient cutoff of 0.90, confirming empirical discriminant validity between constructs. The highest HTMT value is between TM and TC at 0.491, which, while somewhat elevated, remains within acceptable limits and suggests that the constructs are closely related yet conceptually distinct. Overall, these results support acceptable discriminant validity, validate the measurement model, and allow examination of the model's structural components.

Table 5. HTMT result

	FRL	TC	TD	TI	TM	TS
FRL						
TC	0.186					
TD	0.072	0.212				
TI	0.073	0.217	0.096			
TM	0.132	0.491	0.073	0.095		
TS	0.108	0.288	0.132	0.092	0.112	

As illustrated in Figure 2, the measurement model is based on standardised outer loadings for all constructs. The loadings of all indicators are elevated on the latent variables they measure (exceeding 0.70, which is considered more than sufficient), demonstrating the reliability of the indicators. The AVE values indicated in the constructs were also greater than 0.50, supporting appropriate convergent validity. In summary, the figure indicates that the measurement model is correctly specified and appropriate for subsequent examination of the structural model.

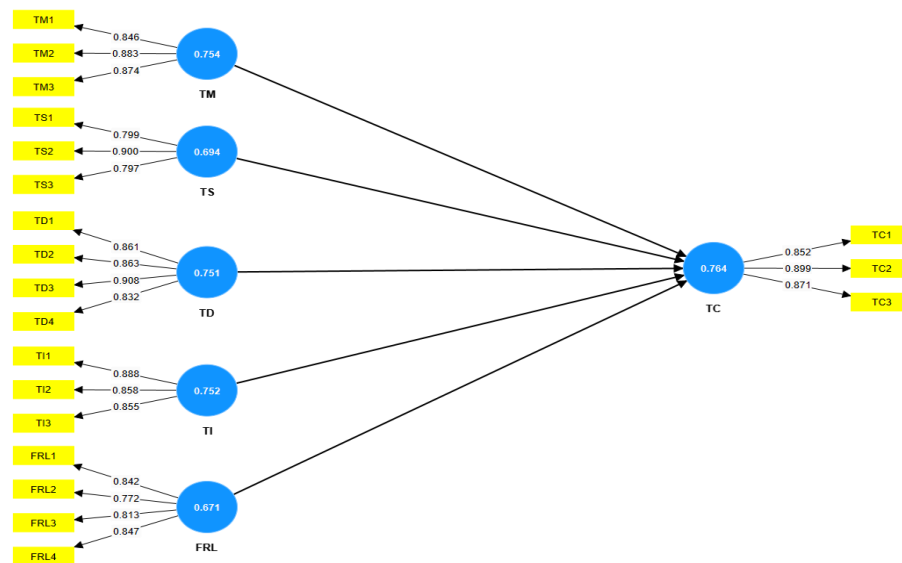


Figure 2. Measurement Model with Outer Loadings

As illustrated in Table 6 (structural model results), four out of the five hypothesized paths significantly affect taxpayer compliance. Tax morale has a notable positive and direct impact on compliance ($\beta = 0.395$, $t = 6.165$, $p < 0.05$), suggesting that accounting competence alone may not directly improve digital tax compliance.

Table 7's statistical inferences show that the model explains a moderate portion of the variance in taxpayer compliance, accounting for 33.1% ($R^2 = .331$; adjusted $R^2 = 0.309$). The effect size analysis reveals that tax morale has a medium-to-large influence on compliance ($f^2 = 0.228$), whereas tax sanctions ($f^2 = 0.105$) and tax digitalization ($f^2 = 0.093$) have medium effects. Tax incentives ($f^2 = 0.046$) and financial reporting literacy ($f^2 = 0.022$) exhibit moderate effect sizes. Additionally, the predictive relevance indicated by Q^2 for "compliance to taxpayer" is 0.232, suggesting the model has adequate predictive power for overall taxpayer compliance.

Table 6. Path Coefficients and Hypothesis Testing Results

Path	(O)	(M)	(STDEV)	(O/STDEV)	P values
FRL -> TC	0.122	0.137	0.066	1.851	0.064
TD -> TC	0.251	0.259	0.070	3.586	0.000
TI -> TC	0.176	0.179	0.069	2.542	0.011
TM -> TC	0.395	0.391	0.064	6.165	0.000
TS -> TC	0.265	0.269	0.063	4.225	0.000

Table 7. Coefficient of Determination (R^2), Effect Size (f^2), and Predictive Relevance (Q^2)

Endogenous	R^2	R^2 Adjusted	f^2 (FRL)	f^2 (TD)	f^2 (TI)	f^2 (TM)	f^2 (TS)	Q^2
Taxpayer Compliance (TC)	0.331	0.309	0.022	0.093	0.046	0.228	0.105	0.232

Refer to Figure 3 for the structural model results, illustrating the relationships between explanatory constructs and taxpayer compliance. It shows that measures like tax morale, sanctions, digitalisation, and incentives significantly boost compliance. In contrast, financial reporting literacy exhibits a weaker, marginal effect. The model satisfactorily explains the variance in taxpayer compliance, indicating that behavioural, institutional, and technological factors all play roles in shaping tax cooperation in the digital era.

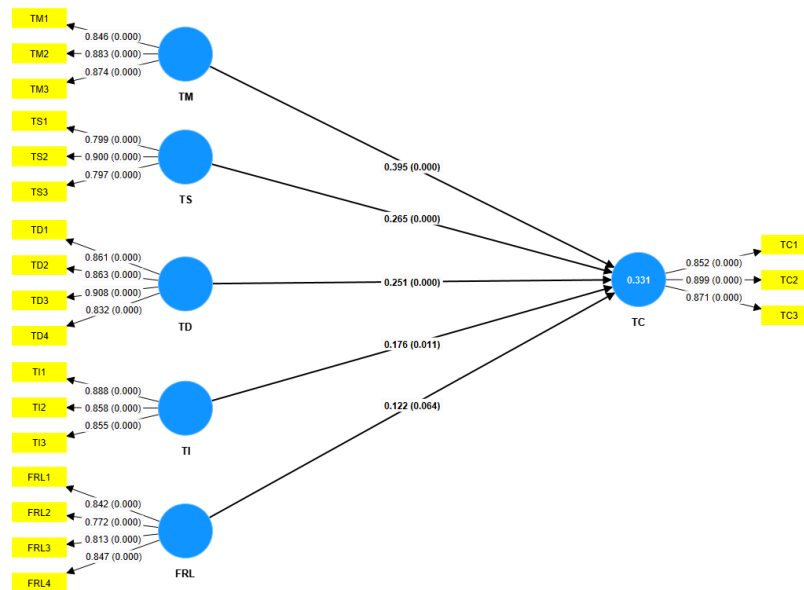


Figure 3. Structural Model Results with Path Coefficients

Table 8 presents the PLS-SEM fit indices. The overall SRMR (0.061) is below the standard cutoff of 0.08, indicating a good fit. The NFI value (0.772) exceeds the minimum threshold of 70, suggesting a reasonable fit. Additionally, the d_ULS and d_G values fall within acceptable ranges based on the bootstrap reference distribution. Overall, these indices demonstrate that the structural model exhibits satisfactory goodness of fit.

Table 8. Model Fit Indices

Model Fit Index	Saturated Model	Estimated Model	Recommended Threshold	Assessment
SRMR	0.061	0.061	≤ 0.08	Good Fit
d_ULS	0.78	0.78	≤ 95% HI	Acceptable
d_G	0.364	0.364	≤ 95% HI	Acceptable
Chi-square	345.574	345.574	-	-
NFI	0.772	0.772	≥ 0.70	Acceptable

DISCUSSION

The results of this study indicate that online tax compliance is influenced by a combination of behavioral, institutional, and technological factors, rather than solely by economic considerations. In line with the Theory of Planned Behavior, individuals' propensity to comply is influenced by prevailing social expectations, personal attitudes, and perceived behavioral control. These findings are in line with the latest global literature on this topic, which shows that the digitization of tax operations does not automatically increase compliance unless it is supported by positive behavioral conditions (Belahouaoui & Attak, 2024; Bui & Krajcsák, 2023; OECD, 2023a; Suryandari, 2015). As mentioned in the introduction, it is crucial that the efficiency enabled by information and communication technology (ICT) is combined with trust mechanisms and norms for contemporary tax systems to be sustainable and compliant.

Research shows that tax morality is a significant predictor of tax compliance. This highlights the importance of intrinsic motivation and a sense of moral obligation in fulfilling tax obligations. These results are consistent with recent research highlighting that trust in government, perceptions of fairness, and civic duty remain significant factors in voluntary compliance, even in highly digitalized tax systems (Batrancea et al., 2024b; Batrancea & Goje, 2025b; Bruns et al., 2025b; Shejale et al., 2025).

Although digital tools can facilitate compliance, taxpayers may still seek to evade taxes due to low tax morale. These findings support the assertion that tax morale is a fundamental component of compliance behavior, not merely an integration factor. This is particularly relevant in contexts where law enforcement and monitoring are often automated.

Tax digitization also has a significant impact on compliance behavior, as seen from two perspectives. First, it reduces the administrative burden. Second, it increases the perception of behavioral control. These results are in line with recent international studies showing that user-friendly digital taxation platforms improve compliance by simplifying processes and reducing the cost of regulatory compliance (Gupta, Keen, & Shah, 2017; Soboleva et al., 2025b). The literature suggests that the sustainability of digitization depends on two key factors: taxpayer digital readiness and the level of trust in the system. As shown in the research model, DDAs are most effective when there is adequate guidance, transparency, and taxpayer education. It is also important to note the inclusion of financial reporting literacy.

The deterrent effect of tax sanctions shows that deterrence remains a key consideration in contemporary tax systems, especially when compliance credibility is reinforced by digital surveillance. These results are consistent with the principles of deterrence theory and consistent with empirical evidence showing the continued relevance of certainty and clarity in compliance decisions (Abdul-Jabbar & Bin-Nashwan, 2022b; Bergman & Nevarez, 2006b; Musah et al., 2025b). However, even modern literature offers a caveat: sanctions are essential to maintaining compliance with conventions. However, sanctions alone are insufficient to ensure long-term compliance, especially for building fair and trusting relationships. These findings are in line with the concept of the “slippery slope theory” regarding the role of law enforcement and trust. In this theory, the two complement each other rather than replace each other.

Fiscal incentives can influence compliance to some extent, but this impact is secondary and not the main driver of change. These findings are consistent with other studies showing that incentive programs can encourage formalization and short-term compliance, especially in companies experiencing economic pressure (Arastika & Khairunnisa, 2020; Saptono et al., 2024b; Soboleva et al., 2025b). However, these programs do not automatically lead to long-term compliance without the provision of relevant information and the simplification of procedures. The study results show that incentives are most effective when they are considered fair, transparent, and easy for taxpayers to apply for. It is important that incentives are considered an integral component of a comprehensive compliance strategy, rather than a separate entity.

Finally, financial reporting literacy plays a relatively less significant but still important role in ensuring compliance, suggesting that technical competence alone is not always an indicator of compliant behavior. These findings are consistent with recent studies suggesting that accounting education indirectly affects compliance by improving taxpayers' ability to navigate digital systems and tax regulations. This observation contradicts the direct motivational impact of educational interventions on compliance behavior (Saad, 2014b; Susanto & Oktari, 2024). These findings point to the need to integrate literacy programs with ethical, structural, and technological transformations. Overall, this debate demonstrates that this study is innovative. By using an integrated behavior-technology model rather than a set of separate policy tools, this study provides valuable insights into how taxpayers comply with regulations in the era of digital taxation.

CONCLUSION

In this investigation, we examine the factors that influence taxpayer compliance in the digital tax era. We approach this from a combination of behavioral, institutional, and technology-centric perspectives. The results, grounded in the Theory of Planned Behavior, indicate that taxpayer compliance is not driven by any single policy instrument. Rather, it is an outcome of both intrinsic motivation and the instruments introduced for enforcement, administrative digitalization, and

taxpayers' ability. Your analysis has highlighted the importance of moral and institutional aspects, even in the context of digitalizing tax systems. This affirms that digital transformation is an enabler of compliance rather than a standalone solution.

Key implications

This document outlines several important practical implications that policy makers, tax authorities, and researchers should consider. The results show that maintaining policies to boost tax morale is essential, as intrinsic motivation and fairness perceptions significantly influence voluntary compliance. Digital tax systems tend to promote higher compliance because they are straightforward and transparent. However, for these systems to work effectively, taxpayers must trust and be willing to adopt digital methods. Tax penalties remain a vital deterrent, especially when combined with effective enforcement through digital tracking. Regarding tax incentives, they should be simple, clear, and transparent, with effective communication to ensure taxpayers understand and perceive the system as fair. The system's success largely depends on taxpayers' understanding and their sense of fairness. Better financial reporting literacy among professionals can also decrease accidental non-compliance and improve engagement with digital tax platforms. Ultimately, the major finding is that there is a strong theoretical foundation for combining behavioral and technological factors within a comprehensive tax compliance framework.

Limitations of the study

This study has certain limitations despite its valuable contributions. First, because we rely on cross-sectional survey data, we cannot track changes in compliance behavior over time. Second, the specific sample of taxpayers may limit the applicability of the findings to other taxpayer groups or institutional contexts. Third, using self-reported data may introduce response bias, as taxpayers tend to overstate their compliant behavior. These considerations are important to keep in mind when interpreting these results.

Future research directions

This study can be expanded in several ways in future research. Longitudinal studies could explore how taxpayer compliance evolves as e-filing becomes more established. Cross-regional or cross-country comparisons might help assess whether these results are applicable in different institutional contexts. Additionally, incorporating more exogenous variables, such as trust in tax authorities or perceived service quality, as moderators or mediators could improve understanding of the factors that influence compliance behavior. The analysis could also incorporate experimental or mixed-method approaches to better understand how taxpayers choose the most effective digital tax system for their needs.

Author Contributions

Conceptualization and research design were conducted by the authors. Data collection and instrument development were jointly performed. Data analysis and interpretation were carried out using PLS-SEM. The manuscript was written, reviewed, and revised collaboratively. All authors have read and approved the final manuscript.

Data Availability Statement

The data supporting the findings of this study are available from the corresponding author upon reasonable request.

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Ethical Approval

This study was conducted in accordance with ethical standards for social and behavioral research. Ethical approval was obtained from the relevant institutional review committee prior to data collection.

Informed Consent Statement

Informed consent was obtained from all participants involved in the study. Participation was voluntary, and respondents were assured of anonymity and confidentiality.

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