

Tax Knowledge, Perceived Ease of Use, And Taxpayer Compliance in the Digital Era: The Mediating Role of Technology Adoption

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ABSTRACT: This study examines the influence of tax knowledge and perceived ease of use (PEOU) on the compliance of non-employee individual taxpayers in Palembang City, with technology adoption positioned as a mediating variable. It also investigates whether compliance levels differ across three income categories—low, medium, and high. Using a quantitative causal research design, primary data were collected from 120 non-employee taxpayers who use the e-Filing and e-Form systems, with their responses measured using a Semantic Differential scale. Data were analyzed using Partial Least Squares–Structural Equation Modeling (PLS-SEM) and Welch’s ANOVA. The results reveal that both tax knowledge and PEOU significantly enhance technology adoption. PEOU also has a direct and significant effect on taxpayer compliance. Although the direct effect of tax knowledge on compliance is not significant, its total effect becomes significant through the mediating role of technology adoption, indicating partial mediation. Furthermore, Welch’s ANOVA shows no significant differences in compliance across income groups, suggesting that economic capacity is not a primary determinant of compliance behavior in the digital reporting environment. Overall, the findings underscore the importance of strengthening digital literacy and improving system usability to promote higher voluntary tax compliance.

KEYWORDS: Tax Knowledge, Perceived Ease of Use, Technology Adoption, Taxpayer Compliance

INTRODUCTION

Taxation is indispensable to Indonesia’s fiscal framework, serving as the central mechanism for funding government operations and driving national development. As the predominant source of state revenue, the efficiency of tax collection is crucial for ensuring long-term fiscal stability and economic sustainability. Projections from the Ministry of Finance (2025) reinforce this importance: the 2025 State Budget (APBN) anticipates total state revenue of IDR 3,005.1 trillion, with IDR 2,189.3 trillion—approximately 73%—expected to originate from tax receipts. This underscores the essential role of taxpayer compliance in achieving fiscal independence. However, the effectiveness of the taxation system depends not only on regulatory reform but also on taxpayers’ willingness and ability to comply voluntarily.

To strengthen administrative efficiency and enhance compliance, Indonesia has undertaken a major digital transformation initiative. This effort includes the development of DJP Online, which integrates electronic reporting mechanisms such as e-Filing and e-Form. The initiative aligns closely with the principles of the OECD’s Tax Administration 3.0 framework, which promotes tax systems built on real-time data analysis and advanced, technology-driven compliance monitoring (OECD, 2024, 2025a, 2025b). Digitalization is expected to simplify reporting processes, improve accuracy, and promote transparency. Nevertheless, challenges persist, including low digital literacy, uneven infrastructure, and varying levels of technological adoption among taxpayers (Direktorat Jenderal Pajak, 2025). These barriers indicate that digital transformation must be supported by behavioral interventions and educational strategies to ensure equitable adoption and sustained compliance.

At the national level, the compliance rate of individual taxpayers reveals a marked disparity between employee taxpayers and non-employee taxpayers (Wajib Pajak Orang Pribadi Nonkaryawan). Between 2020 and 2023, the compliance ratio for non-employee taxpayers consistently lagged far behind that of employees, with the gap reaching more than 50 percentage points in 2021. This pattern demonstrates that self-employed taxpayers remain a vulnerable segment in terms of compliance behavior.

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Table 1. Comparison of Compliance Ratios between Employee and Non-Employee Individual Taxpayers at the National Level

No	Year	Employee (%)	Non-Employee (%)	Difference (%)
1	2023	94.07	67.41	-26.66
2	2022	93.71	69.11	-24.60
3	2021	98.73	45.53	-53.20
4	2020	85.41	52.44	-32.97

This national trend is also evident at the regional level. Palembang, the largest economic center in South Sumatra, exhibits a similar pattern of compliance disparity. Based on internal data on individual taxpayer compliance for the 2020–2023 tax years from the South Sumatra and Bangka Belitung Regional Offices of the Directorate General of Taxes, the compliance level of non-employee taxpayers remains much lower than that of employee taxpayers, with gaps exceeding 40 percentage points in several years.

Table 2. Comparison of Compliance Ratios between Employee and Non-Employee Individual Taxpayers in Palembang (2020–2023)

No	Year	Employee (%)	Non-Employee (%)	Difference (%)
1	2023	82.97	39.71	-43.26
2	2022	88.56	51.68	-36.88
3	2021	92.89	40.26	-52.63
4	2020	89.31	59.65	-29.66

Table 2 confirms that the compliance challenge among non-employee taxpayers is not only a national issue but also a regional one. Despite the availability of digital platforms such as DJP Online, a considerable number of taxpayers still face obstacles in adapting to electronic filing systems. Thus, tax compliance in the digital era must be understood not only from an economic perspective but also through behavioral and technological dimensions.

A crucial behavioral determinant of compliance is tax knowledge, which encompasses taxpayers' understanding of relevant legislation, procedural requirements, and rights. Rooted in Fischer's Tax Compliance Model (Fischer et al., 1992), knowledge is theorized to influence both moral obligation and the accuracy with which taxpayers fulfill their duties. While a substantial body of literature—including studies by Hidayanto et al. (2023), Silaban et al. (2022), and Al-Ttaffi et al. (2020)—confirms that stronger tax knowledge significantly enhances compliance, empirical findings are not entirely consistent. Other studies have shown that knowledge alone may be insufficient to ensure compliance, particularly when taxpayers experience low levels of digital competence or confidence (Romadhona, 2025; Yahaya et al., 2023).

A second central factor is the Perceived Ease of Use (PEOU) of digital tax systems, a concept originating from the Technology Acceptance Model (TAM) (Davis, 1989). PEOU reflects the user's belief that a system can be operated with minimal effort. A user-friendly digital environment—characterized by intuitive navigation, reliable system performance, and clear procedural guidance—is expected to significantly increase taxpayers' willingness to adopt the technology. The empirical evidence supporting this proposition is substantial, as demonstrated by HS and Rahmadhani (2025), Ilieva et al. (2024), and Anityasari et al. (2024), who found that PEOU positively affects the adoption of e-tax platforms. However, contradictory evidence also exists. Studies by Sijabat (2020) and Saputro et al. (2025) indicate that ease of use alone does not necessarily guarantee higher adoption rates, especially when system reliability or user trust is compromised.

Based on the preceding discussion, technology adoption emerges as a critical mediating mechanism linking both tax knowledge and perceived ease of use (PEOU) to compliance behavior. International empirical evidence, such as that presented by Night and Bananuka (2020), Halawa et al. (2024), and Heinemann and Stiller (2025), consistently demonstrates that the adoption of digital tax systems enhances accuracy, timeliness, and transparency, which subsequently promote more reliable compliance outcomes. However, Indonesia faces persistent challenges due to significant variations in technology adoption across regions and income groups. These disparities necessitate localized analysis and tailored behavioral reinforcement strategies.

Income level has also long been associated with compliance behavior. Higher-income taxpayers generally possess greater financial capacity to meet tax obligations but may also have stronger incentives and more opportunities to avoid taxes (Alstadsæter et al., 2019; Fischer et al., 1992). Conversely, low-income taxpayers may lack both financial resources and familiarity with digital reporting tools. However, recent findings (Febriyanti et al., 2023; Umah & Riduwan, 2022) suggest that income differences no longer play a dominant role in determining compliance, largely due to the standardization and automation introduced by digital systems.

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Despite extensive prior research, several empirical gaps remain. First, few studies have simultaneously integrated Fischer's Tax Compliance Model and the Technology Acceptance Model to explain compliance in Indonesia's digital tax environment. Second, the mediating role of technology adoption between cognitive factors (knowledge) and perceptual factors (ease of use) has rarely been examined. Third, the influence of income-level differences on taxpayer compliance in the digital reporting era remains insufficiently explored.

Consequently, the primary objective of this study is twofold: first, to empirically assess the influence of tax knowledge and perceived ease of use (PEOU) on taxpayer compliance, mediated by technology adoption; and second, to comparatively examine compliance variations across different income groups. By focusing on non-employee individual taxpayers in Palembang, this research offers substantial value. Theoretical contributions arise from bridging the gap between behavioral factors (knowledge and PEOU) and technological adoption in the compliance literature. Practically, the findings provide the Directorate General of Taxes (DJP) with evidence necessary to design more inclusive, adaptive, and digitally oriented compliance reinforcement policies.

LITERATURE REVIEW

Taxpayer Compliance

Taxpayer compliance refers to the extent to which individuals fulfill their fiscal obligations accurately and punctually. This concept encompasses both formal compliance, which involves adherence to administrative procedures, and material compliance, which concerns the accuracy and completeness of the tax information reported (Rahayu, 2010).

Technology Adoption

Technology adoption is characterized as the intentional process by which individuals or organizations accept, utilize, and integrate new innovations. The primary purpose of this integration is to improve the effectiveness and efficiency of their operational activities (Rogers, 2003).

Income Levels

Income level reflects an individual's financial capacity and, in this study, is categorized into low, medium, and high-income groups. Within Fischer's Tax Compliance Model, income serves as an opportunity factor that can shape compliance behavior, as individuals with different income brackets face varying incentives and risks.

Tax Knowledge

Tax knowledge refers to a taxpayer's understanding of essential tax-related information, including their rights, obligations, applicable procedures, and the role of tax revenues in financing government expenditure and national development (Rahayu, 2010; Trisnasari et al., 2017).

Perceived Ease of Use

Perceived Ease of Use (PEOU) denotes the degree to which an individual believes that using a particular system or innovation will require minimal effort, thereby increasing the likelihood of adoption (Davis, 1989).

Research Conceptual Framework

The conceptual framework illustrated below presents the theoretical model that underpins this study. It depicts the hypothesized structural relationships among tax knowledge, perceived ease of use (PEOU), technology adoption, and taxpayer compliance. In addition, the framework incorporates the analytical approach used to examine compliance differences across income groups among non-employee individual taxpayers.

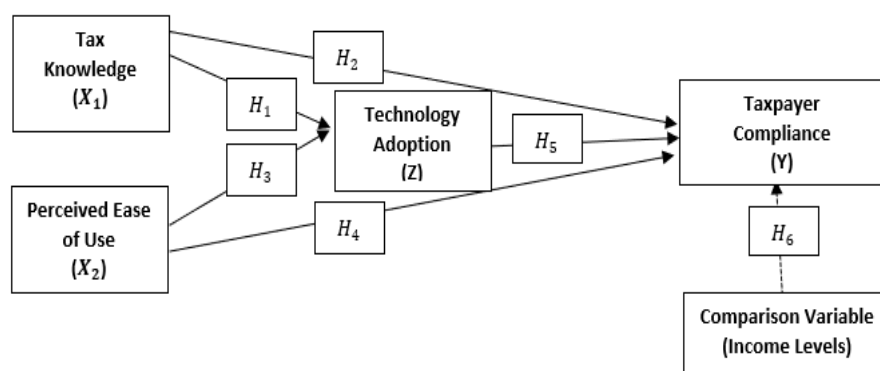


Figure 1. Research Conceptual Framework

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Hypothesis

Drawing upon Fischer's Tax Compliance Model (Fischer et al., 1992) and the Technology Acceptance Model (TAM) (Davis, 1989), tax knowledge is posited to enhance taxpayers' cognitive ability to understand and effectively utilize digital tax systems. Empirical studies by Hardika et al. (2022), Halawa et al. (2024), and Night and Bananuka (2020) demonstrate that higher tax literacy is associated with increased adoption of e-Filing. However, research by Nuzba and Mayasari (2025) and Mandasari (2024) indicates that this effect may be contingent upon contextual and digital literacy factors.

H_1 : Tax knowledge is hypothesized to have a positive and statistically significant effect on technology adoption.

Grounded in Fischer's Tax Compliance Model (Fischer et al., 1992), tax knowledge—which encompasses understanding of taxpayer rights, obligations, and procedures—is considered fundamental in shaping voluntary compliance. Empirical studies (Al-Ttaffi et al., 2020; Atmaja & Sumarta, 2023; Silaban et al., 2022) consistently support its positive role, whereas others (Romadhona, 2025; Yahaya et al., 2023) report mixed findings. In this study, tax knowledge is expected to affect compliance both directly and indirectly through technology adoption.

H_2 : Tax knowledge is hypothesized to have a positive and statistically significant total effect on taxpayer compliance (through both direct and indirect pathways via technology adoption).

Consistent with the Technology Acceptance Model (Davis, 1989), Perceived Ease of Use (PEOU) is theorized to shape user acceptance and the intention to adopt digital systems. Empirical findings from HS and Rahmadhani (2025), Njoroge et al. (2025), and Ilieva et al. (2024) confirm that intuitive and user-friendly e-Filing systems significantly increase technology adoption. However, Saputro et al. (2025) found that the effect may diminish among highly digitally competent users.

H_3 : Perceived ease of use (PEOU) is hypothesized to have a positive and statistically significant effect on technology adoption.

PEOU also reflects the extent to which a technology is perceived as easy to operate (Davis, 1989; Venkatesh & Bala, 2008). Prior research (Anggraeni et al., 2025; Haq & Tarmidi, 2024; Night & Bananuka, 2020) indicates that ease of use promotes compliance, although some studies (Rakhmawati et al., 2020) found nonsignificant results. In this study, PEOU is theorized to influence compliance via both direct and indirect mechanisms.

H_4 : Perceived ease of use (PEOU) is hypothesized to have a positive and statistically significant total effect on taxpayer compliance (through both direct and indirect pathways via technology adoption).

Technology adoption reflects actual use of the e-Filing or e-Form systems in fulfilling tax obligations (Davis, 1989; Fischer et al., 1992). Empirical findings (Halawa et al., 2024; Kusumawardhani et al., 2024; Night & Bananuka, 2020) consistently show that digital system usage enhances transparency, efficiency, and compliance.

H_5 : Technology adoption is hypothesized to have a positive and statistically significant effect on taxpayer compliance.

Within Fischer's Tax Compliance Model (1992), income level represents a demographic and opportunity factor influencing compliance by shaping the taxpayer's financial capacity and incentives to pay. While some studies (Devandi et al., 2020; Situmorang & Maharani, 2023) report a positive association between income and compliance, others (Alstadsæter et al., 2019; Febriyanti et al., 2023) reveal mixed or contrary findings.

H_6 : There are hypothesized to be statistically significant differences in taxpayer compliance across the three income categories (low, medium, and high).

RESEARCH METHODOLOGY

The population of this study comprises all active non-employee individual taxpayers registered at the tax offices within the administrative area of Palembang, totaling 35,182 individuals. A purposive sampling technique was utilized to select respondents based on predetermined eligibility criteria aligned with the research objectives. In accordance with the recommended rules of thumb for Partial Least Squares–Structural Equation Modeling (PLS-SEM) proposed by Barclay et al. (1995) and Hair et al. (2022), a minimum sample size of 120 respondents was deemed sufficient for the model, which consists of 24 indicators.

Data analysis was conducted using the Partial Least Squares–Structural Equation Modeling (PLS-SEM) approach to evaluate both the measurement (outer) and structural (inner) models. In addition, Welch's ANOVA was employed to assess differences in taxpayer compliance across the defined income groups.

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RESULTS AND DISCUSSION

Outer Model

1. Convergent Validity and Reliability

Convergent validity was assessed based on factor loadings, Average Variance Extracted (AVE), Composite Reliability (CR), and Cronbach's Alpha. Table 3 summarizes the results for each construct.

Table 3. Loading Factor and Reliability Summary

Variable	Loading Range	AVE	CR	Cronbach's α	Status
Tax Knowledge	0.760–0.899	0.722	0.930	0.922	Reliable
Perceived Ease of Use	0.840–0.905	0.790	0.948	0.947	Reliable
Technology Adoption	0.827–0.918	0.776	0.944	0.942	Reliable
Taxpayer Compliance	0.865–0.938	0.835	0.963	0.960	Reliable

As shown in Table 3, all constructs demonstrate excellent convergent validity. Factor loading values are consistently above 0.70, and AVE values exceed the recommended threshold of 0.50. Internal consistency reliability is also confirmed as both CR and Cronbach's Alpha values are well above 0.70 (Hair et al., 2022). Overall, the indicators are valid and reliable representations of their respective constructs.

2. Discriminant Validity

Discriminant validity was examined using the Fornell–Larcker criterion and the Heterotrait–Monotrait Ratio (HTMT). Results are shown in Tables 4 and 5.

Table 4. Discriminant Validity – Fornell–Larcker Criterion

Variables	Technology Adoption	Taxpayer Compliance	Tax Knowledge	Perceived Ease of Use
Technology Adoption	0.881			
Taxpayer Compliance	0.763	0.914		
Tax Knowledge	0.789	0.715	0.849	
Perceived Ease of Use	0.792	0.731	0.758	0.889

The diagonal values, reflecting the square roots of AVE, are consistently greater than the inter-construct correlations, confirming discriminant validity per Fornell–Larcker.

Table 5. Discriminant Validity – HTMT Ratio

Variables	Technology Adoption	Taxpayer Compliance	Tax Knowledge	Perceived Ease of Use
Technology Adoption				
Taxpayer Compliance	0.796			
Tax Knowledge	0.838	0.755		
Perceived Ease of Use	0.836	0.762	0.808	

All HTMT values are below 0.90, indicating acceptable discriminant validity.

Inner Model

1. R Square

Table 6. R Square

Variables	R Square
Technology Adoption	0.711
Taxpayer Compliance	0.639

Technology Adoption (Z) has an R^2 of 0.711, meaning that Tax Knowledge (X_1) and Perceived Ease of Use (X_2) explain 71.1% of its variance—classified as strong predictive power. Taxpayer Compliance (Y) has an R^2 of 0.639, indicating that 63.9% of its variance is explained by Technology Adoption, Tax Knowledge, and PEOU. Given the complexity of compliance behavior, this level of explanatory strength is considered substantial.

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2. Effect Size

Effect size (f^2) was used to assess each predictor variable's contribution. Results are summarized in Table 7.

Table 7. F Square

Description	f^2
$X_1 \rightarrow Z$	0.290
$X_1 \rightarrow Y$	0.038
$X_2 \rightarrow Z$	0.307
$X_2 \rightarrow Y$	0.065
$Z \rightarrow Y$	0.121

Applying Hair et al.'s (2022) criteria, both Tax Knowledge (X_1) and PEOU (X_2) have medium effects on Technology Adoption (Z). Their effects on Compliance (Y) are small, while Technology Adoption (Z) shows a small-to-medium effect on Compliance.

3. Hypothesis Testing

Bootstrapping with 5,000 subsamples was performed to test the structural paths. Results for direct, indirect, and total effects are presented in Tables 8, 9, and 10.

Table 8. Direct Effects

	Original Sample (O)	Sample Mean (M)	T Statistics	P Values	Information
$X_1 \rightarrow Z$	0.444	0.443	4.780	0.000	Significant
$X_1 \rightarrow Y$	0.204	0.207	1.307	0.191	Not Significant
$X_2 \rightarrow Z$	0.456	0.458	4.279	0.000	Significant
$X_2 \rightarrow Y$	0.268	0.259	2.255	0.024	Significant
$Z \rightarrow Y$	0.389	0.399	3.120	0.002	Significant

Table 9. Indirect Effects

	Original Sample (O)	Sample Mean (M)	T Statistics	P Values	Information
$X_1 \rightarrow Z \rightarrow Y$	0.173	0.174	2.948	0.003	Significant
$X_2 \rightarrow Z \rightarrow Y$	0.177	0.188	2.125	0.034	Significant

Table 10. Total Effects

	Original Sample (O)	Sample Mean (M)	T Statistics	P Values	Information
$X_1 \rightarrow Z$	0.444	0.443	4.780	0.000	Significant
$X_1 \rightarrow Y$	0.377	0.380	2.772	0.006	Significant
$X_2 \rightarrow Z$	0.456	0.458	4.279	0.000	Significant
$X_2 \rightarrow Y$	0.446	0.447	4.785	0.000	Significant
$Z \rightarrow Y$	0.389	0.399	3.120	0.002	Significant

Drawing upon the data presented in Tables 8, 9, and 10, the findings for each hypothesis can be summarized as follows.

The test assessing the influence of Tax Knowledge on Technology Adoption produced a path coefficient of $\beta = 0.444$ with a t-statistic of 4.780, which clearly exceeds the critical value of 1.96. This result confirms that tax knowledge has a positive and statistically significant effect on technology adoption, leading to the acceptance of Hypothesis 1. This finding is consistent with Fischer's Tax Compliance Model (Fischer et al., 1992), which positions tax knowledge as a psychological factor that enhances cognitive understanding and reduces uncertainty in the use of digital systems. Greater tax knowledge increases taxpayers' confidence and ability to navigate electronic reporting platforms efficiently. The result aligns with empirical evidence reported by Hardika et al. (2022), Halawa et al. (2024), and Night and Bananuka (2020).

The direct effect of Tax Knowledge (X_1) on Taxpayer Compliance (Y) produced a coefficient of $\beta = 0.204$ with a t-statistic of 1.307, indicating that the direct effect is not statistically significant. However, the indirect effect of Tax Knowledge (X_1) on Compliance (Y) through Technology Adoption (Z) is significant ($\beta = 0.173$; $t = 2.948$). When these pathways are combined, the total effect becomes statistically significant ($\beta = 0.377$; $t = 2.772$), supporting Hypothesis 2. These results confirm that tax knowledge contributes to

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compliance primarily through its indirect influence via technology adoption. The overall positive and significant relationship is consistent with findings from Hidayanto et al. (2023), Atmaja and Sumarta (2023), Hanjaya and Suparmun (2021), Silaban et al. (2022), Muvidah and Andriani (2022), Al-Ttaffi et al. (2020), Musimenta (2020), and Alkhatib et al. (2020).

The test evaluating the influence of Perceived Ease of Use (PEOU) on Technology Adoption yielded a path coefficient of $\beta = 0.456$ with a t-statistic of 4.279. Since this value exceeds the critical threshold of 1.96, the results demonstrate that PEOU has a positive and significant effect on technology adoption, thereby supporting Hypothesis 3. This finding is fully aligned with the Technology Acceptance Model (Davis, 1989), which identifies PEOU as a principal driver of user acceptance and behavioral intention. A system that is easy to access, intuitive to navigate, and supported by clear procedural guidance tends to encourage taxpayers to adopt digital reporting platforms. This result is further supported by studies from HS and Rahmadhani (2025), Njoroge et al. (2025), and Ilieva et al. (2024).

The direct effect of PEOU on Taxpayer Compliance produced a coefficient of $\beta = 0.268$ with a t-statistic of 2.255, indicating a significant direct relationship. The indirect effect, mediated by Technology Adoption (Z), is also significant ($\beta = 0.177$; $t = 2.125$). Consequently, the total effect of PEOU on Compliance is strongly significant ($\beta = 0.446$; $t = 4.785$), resulting in the acceptance of Hypothesis 4. These findings reinforce the core proposition of TAM that ease of use strengthens system utilization and ultimately compliance behavior. This dual pathway (direct and indirect) is consistent with previous work by Anggraeni et al. (2025), Shantha and Weerasinghe (2025), Haq and Tarmidi (2024), and Atmaja and Sumarta (2023).

The test for the effect of Technology Adoption (Z) on Taxpayer Compliance (Y) resulted in a path coefficient of $\beta = 0.389$ with a t-statistic of 3.120, clearly surpassing the 1.96 threshold. This indicates that technology adoption has a positive and statistically significant effect on compliance, leading to the acceptance of Hypothesis 5. This finding supports the theoretical linkage between TAM (Davis, 1989) and Fischer's Tax Compliance Model (Fischer et al., 1992), confirming that actual system use is a key mechanism that translates intention into compliant behavior. Taxpayers who adopt digital reporting systems exhibit better compliance because technology reduces procedural complexity, minimizes errors, and promotes transparency and accountability. This result aligns with prior studies by Night and Bananuka (2020), Halawa et al. (2024), Heinemann and Stiller (2025), Kotsogiannis et al. (2025), Kusumawardhani et al. (2024), and Widyari (2023).

To further examine the sixth hypothesis (H_6), which posits differences in compliance across income groups, Welch's ANOVA was conducted. This test was selected because preliminary assessments indicated unequal variances across the groups. The results are presented in Table 11.

Table 11. Welch's ANOVA Results

Income Group	Mean Compliance	Std. Deviation	Sig. (p)
Low Income ($\leq$ IDR 60 million)	6.0667	0.92742	0.278
Medium Income (IDR 60–500 million)	6.0208	1.48362	
High Income ($>$ IDR 500 million)	5.6125	1.54070	
Welch's ANOVA			

The results of Welch's ANOVA indicate that no statistically significant differences exist in taxpayer compliance across the three income categories ($p = 0.278 > 0.05$). Consequently, Hypothesis 6 is rejected. The mean compliance values for low-income ($M = 6.07$), medium-income ($M = 6.02$), and high-income taxpayers ($M = 5.61$) display only minimal variation, suggesting a generally uniform compliance pattern regardless of income level.

This outcome reinforces the view that psychological and social determinants—such as tax knowledge, perceived fairness, and trust in the tax system—play a stronger role in shaping compliance than purely economic capacity, consistent with the principles of Fischer's Tax Compliance Model (Fischer et al., 1992). The observed uniformity also reflects the influence of standardized digital reporting platforms—specifically e-Filing and e-Form—that streamline the reporting process and reduce disparities across income groups. This aligns with the OECD's Tax Administration 3.0 framework (OECD, 2024), which positions digitalization as an equalizing mechanism in taxpayer compliance. The findings are also in line with Susilowati and Mappanyukki (2024), who found that compliance in digital environments is driven more by system accessibility and user experience than by differences in income.

CONCLUSIONS, LIMITATIONS, AND SUGGESTIONS

This study concludes that both tax knowledge and Perceived Ease of Use (PEOU) play an essential role in encouraging the adoption of digital tax reporting systems. PEOU was found to exert a significant influence on taxpayer compliance through both direct and indirect pathways, confirming its central position in the technology acceptance process. Meanwhile, tax knowledge affects

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compliance only through its total effect, indicating that technology adoption serves as a necessary behavioral bridge that converts knowledge into consistent compliance actions. Overall, technology adoption is confirmed as a partial mediator linking cognitive (tax knowledge) and perceptual (PEOU) factors to taxpayer compliance.

Furthermore, Welch's ANOVA results demonstrate that compliance levels do not significantly differ across income categories. This suggests that economic capacity is not the primary driver of compliance behavior in a digitized tax environment, where standardized e-Filing and e-Form systems may reduce disparities across income segments.

This research is subject to several limitations. The sample consisted of only 120 non-employee taxpayers located in Palembang, and the data were collected using self-reported measures, which may introduce response bias. Future studies should consider expanding the sample size and including multiple regions to improve generalizability. Additional behavioral constructs, such as attitudes toward technology, system trust, or user experience, may also enrich the explanatory power of subsequent models.

From a practical standpoint, the findings highlight the need for the Directorate General of Taxes (DJP) to intensify digital tax literacy programs and continually enhance the usability, accessibility, and stability of the DJP Online platform. Strengthening these elements is essential for sustaining high voluntary compliance in an increasingly digitalized tax administration system.

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