

The Effect Of The Use Of E-Filing, Understanding, And Awareness On Taxpayer Compliance At KPP Sukomanunggal Surabaya

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ABSTRACT

This research analyzes the influence of e-filing utilization, taxation understanding, and taxpayer awareness on compliance levels at KPP Sukomanunggal Surabaya. The research methodology employed a quantitative approach with multiple regression analysis of 123 respondents selected through purposive sampling. The research instrument in the form of structured questionnaires met validity and reliability tests with Cronbach's Alpha values ranging from 0.860-0.880. Analysis results demonstrate that e-filing utilization has a dominant influence on taxpayer compliance with a beta coefficient of 0.600, followed by taxation awareness (0.185) and taxation understanding (0.176). The research model explains 88.6% of taxpayer compliance variance with an F-value of 308.190 ($p < 0.001$). Findings indicate that taxation technology modernization through e-filing serves as the primary catalyst in enhancing compliance behavior. Integration of technological aspects, education, and moral consciousness development creates optimal synergy in taxation compliance management. Research implications emphasize the urgency of implementing holistic strategies that combine technological convenience with enhanced taxation literacy and civic responsibility internalization to create sustainable voluntary compliance.

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1. Introduction

Digital transformation in Indonesia's tax system has undergone significant evolution since its implementation Electronic Filing (e-filing) as an instrument for modernizing tax administration. Indonesia's tax system that adheres to Self-assessment system Demand the

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active participation of taxpayers in calculating, depositing, and reporting their tax obligations independently. This condition presents complex challenges in ensuring taxpayer compliance, especially in the era of digitalization which requires technological adaptation in the tax reporting process. The implementation of e-filing as a manifestation of tax bureaucratic reform has shown a positive impact on increasing taxpayer compliance. Data from the Directorate General of Taxes shows that the compliance rate for reporting the Annual Tax Return (SPT) has increased from 73.06 percent in 2019 to 77.63 percent in 2020, and reached 84.07 percent in 2021 (Directorate General of Taxes, 2023). This phenomenon indicates a positive correlation between the modernization of the tax system and the level of taxpayer compliance, which is an important foundation in optimizing state revenue from the tax sector (Rani et al., 2025).

The Sukomanunggal Tax Service Office (KPP) Surabaya as one of the vertical work units of the Directorate General of Taxes has a strategic role in implementing tax policies in the western Surabaya area. The heterogeneous demographic and economic characteristics of the community in the work area of KPP Sukomanunggal create its own complexity in managing taxpayer compliance. Variations in education levels, digital literacy, and tax awareness are determinant factors that affect the effectiveness of e-filing implementation in improving taxpayer compliance. Taxpayers' understanding of tax regulations and reporting procedures through e-filing is a crucial element in creating voluntary compliance. The complexity of tax regulations, which often undergo changes and adjustments, requires ongoing educational efforts to ensure that taxpayers have a comprehensive understanding of their tax obligations. This limited understanding is often an obstacle in the optimal use of the e-filing system, thus potentially hindering the achievement of the set compliance targets (Meiryani et al., 2023).

Tax awareness as a manifestation of the taxpayer's civic duty is also a fundamental determinant in creating long-term compliance. This awareness is not only related to legal aspects and sanctions, but also includes an understanding of the benefits of taxes as an instrument of national development. Transformation of taxpayer mindset from a compliance paradigm that is Compliance-driven towards a compliant nature Commitment-driven is a strategic challenge in modern tax management. The integration between the use of e-filing technology, increasing tax understanding, and strengthening taxpayer awareness creates synergies that have the potential to optimize compliance levels. However, the level of contribution of each factor and its interaction in influencing taxpayer compliance still requires in-depth empirical studies to produce effective policy recommendations (Indrawan, 2024).

Based on the background that has been described, this study formulates several research problems that are the focus of the study. First, how does the use of e-filing affect the level of taxpayer compliance at KPP Sukomanunggal Surabaya? Second, how does tax understanding affect taxpayer compliance at KPP Sukomanunggal Surabaya? Third, how does tax awareness affect taxpayer compliance at KPP Sukomanunggal Surabaya? Fourth, what is the simultaneous influence of the use of e-filing, tax understanding, and tax

awareness on taxpayer compliance at KPP Sukomanunggal Surabaya? This study aims to analyze and measure the influence of the use of e-filing on the level of taxpayer compliance at KPP Sukomanunggal Surabaya. In addition, this study also aims to analyze the influence of tax understanding on taxpayer compliance and measure the influence of tax awareness on taxpayer compliance at the research site. The comprehensive purpose of this study is to analyze the simultaneous influence of the three independent variables, namely the use of e-filing, tax understanding, and tax awareness on taxpayer compliance at KPP Sukomanunggal Surabaya (Mandasari, 2024).

This research is expected to make a theoretical contribution to the development of tax science, especially in the context of modernization of tax administration and factors affecting taxpayer compliance. The results of this study can be an academic reference for further research related to tax digitalization and Behavioral Tax Compliance. Practically, this research is expected to provide input for the Directorate General of Taxes in formulating strategies to increase taxpayer compliance through optimizing the use of e-filing and tax education programs. For KPP Sukomanunggal Surabaya, the results of this research can be used as material for evaluation and improvement in the implementation of tax policies at the operational level. The benefit for the public, especially taxpayers, is the availability of information that can increase tax understanding and awareness to encourage voluntary compliance in fulfilling tax obligations (Rani et al., 2025).

2. Research Methodology

This study uses a quantitative approach with descriptive and verifiable research methods to analyze the influence of the use of e-filing, tax understanding, and tax awareness on taxpayer compliance at KPP Sukomanunggal Surabaya. The quantitative approach was chosen because of its ability to quantify phenomena numerically and test hypotheses statistically through structured and objective data analysis. This study uses an explanatory research design with data collection techniques through questionnaire surveys distributed to 123 taxpayer respondents registered at KPP Sukomanunggal Surabaya. The selection of respondents was carried out using a purposive sampling technique with the criteria of taxpayers who have used the e-filing system for at least one year and have an active Taxpayer Identification Number (NPWP). The research instrument used a structured questionnaire with a 5-point Likert scale that had been validated through validity and reliability tests, where the results of the reliability test showed a Cronbach's Alpha value for the e-filing variable (X1) of 0.869, tax understanding (X2) of 0.877, tax awareness (X3) of 0.860, and taxpayer compliance (Y) of 0.880, indicating a high level of reliability for all research variables.

The data analysis technique used was multiple linear regression analysis with the help of the Statistical Package for Social Sciences (SPSS) program to test the research hypothesis and measure the degree of influence of independent variables on dependent variables. Multiple linear regression analysis was chosen for its ability to comprehensively analyze the

simultaneous relationship between three independent variables to one dependent variable. Classical assumption tests which include normality, multicollinearity, heteroscedasticity, and autocorrelation tests were carried out to ensure that the regression model used met the criteria of the Best Linear Unbiased Estimator (BLUE). The results of the analysis showed a determination coefficient value (R^2) of 0.886 which showed that 88.6% of the variation in taxpayer compliance could be explained by the three independent variables, while the remaining 11.4% was influenced by other factors that were not studied. The F test showed a significance value of < 0.001 indicating that the regression model was feasible to use, while the t-test showed that all independent variables had a significant effect on taxpayer compliance with a significance level below 0.05, where e-filing had the greatest influence with a beta coefficient of 0.600, followed by tax understanding with a coefficient of 0.176, and tax awareness with a coefficient of 0.185.

3. Results and Discussion

Respondent Characteristics and Descriptive Analysis

This study involved 123 taxpayer respondents registered at KPP Sukomanunggal Surabaya as an analysis unit in examining the influence of the use of e-filing, tax understanding, and tax awareness on taxpayer compliance. The characteristics of the respondents show a representative distribution with a composition that reflects the heterogeneity of taxpayers in the work area of the Sukomanunggal KPP. Descriptive analysis of the research variables provides a comprehensive picture of respondents' perception of the implementation of the e-filing system, the level of tax understanding, tax awareness, and the level of taxpayer compliance. The descriptive analysis of the e-filing utilization variable (X1) showed that most respondents had a positive perception of the ease of use of the e-filing system in reporting the Annual Notification Letter. The average respondent answer score on this variable reached a value that indicates an optimal utilization rate. The indicator of ease of reporting tax returns through e-filing received the highest response, indicating that digital transformation in the tax system has had a positive impact on the efficiency of the reporting process. However, the security indicators of the e-filing system still show a significant variation in perception among respondents, which indicates the need for increased socialization regarding the security aspect of the system.

The variable of tax understanding (X2) shows the varying level of respondents' understanding of the technical aspects of taxation. The descriptive analysis revealed that respondents' understanding of tax obligations obtained the highest scores, while the understanding of tax calculations and reporting procedures still showed room for improvement. This disparity in the level of understanding reflects the complexity of tax regulations that require continuous education efforts. The variable of tax awareness (X3) showed a relatively high level of awareness among respondents, with the indicator of responsibility as a citizen obtaining the highest score. This indicates that the civic duty aspect in taxation has been well internalized among taxpayers. The taxpayer compliance variable

(Y) as a dependent variable shows a varying level of compliance with a positive tendency. The tax return reporting accuracy indicator obtained the highest score, while the tax payment accuracy indicator showed greater variation. Bivariate correlation analysis showed a significant positive relationship between all independent variables and dependent variables, with correlation coefficients indicating substantial relationship strength. The highest correlation occurred between the variables of e-filing utilization and taxpayer compliance, which confirmed the initial hypothesis regarding the role of technology in improving tax compliance.

Table 1. Descriptive Statistics of Research Variables

Variable	N	Mean	Std. Deviation	Minimum	Maximum
E-Filing (X1)	123	19.42	3.89	10	25
Comprehension (X2)	123	19.02	4.12	9	25
Consciousness (X3)	123	19.25	3.95	11	25
Compliance (Y)	123	19.31	4.01	10	25

Table 1 shows that all research variables have average values that are in the good category, with a relatively consistent standard deviation. The e-filing variable had the highest average value (19.42), indicating that respondents had a very positive perception of the use of the e-filing system. The variable of tax understanding has the lowest average value (19.02), which indicates that there is still room for improvement in taxpayers' understanding of the technical aspects of taxation. The fairly wide range of values on all variables indicates a heterogeneity of perception among respondents, which reflects the complexity of factors affecting taxpayer compliance.

Instrument Validity and Reliability Test Results

Testing the validity and reliability of research instruments is a crucial stage in ensuring the quality of the data used in statistical analysis. The validity test is carried out to measure the level of accuracy of the instrument in measuring the construct that should be measured, while the reliability test measures the internal consistency of the instrument in producing stable results. Validity testing used Pearson's product moment correlation technique with the criteria of correlation coefficient values above 0.30 and significance levels below 0.05. The results of the validity test showed that all question items in the research instrument had a correlation coefficient value that was above the critical value of 0.30. The variable of e-filing utilization has a correlation coefficient value ranging from 0.598 to 0.808, with the question item regarding the ease of reporting tax returns having the highest correlation value. The tax comprehension variable showed that the correlation coefficient value ranged from 0.659 to 0.777, with the question item regarding the understanding of reporting procedures having the highest correlation value. The tax awareness variable has a correlation coefficient value ranging from 0.637 to 0.741, while the taxpayer compliance variable shows a correlation coefficient value ranging from 0.651 to 0.768.

Table 2. Instrument Reliability Test Results

Variable	Cronbach's Alpha	N of Items	Criterion
E-Filing (X1)	0,869	5	Reliable
Comprehension (X2)	0,877	5	Reliable
Consciousness (X3)	0,860	5	Reliable
Compliance (Y)	0,880	5	Reliable

Table 2 shows that all study variables had Cronbach's Alpha values that were above 0.70, indicating an excellent level of reliability. The taxpayer compliance variable had the highest Cronbach's Alpha value (0.880), indicating very high internal consistency in measuring compliance constructs. The variable of tax understanding has a Cronbach's Alpha value of 0.877, indicating excellent reliability in measuring the level of respondents' understanding of tax aspects. The variables of e-filing utilization and tax awareness had Cronbach's Alpha values of 0.869 and 0.860, indicating a consistent and reliable level of reliability. The item-total correlation analysis shows that all question items have a correlation value that is above 0.30, with the majority of items having a correlation value above 0.60. This indicates that each item of the question makes a significant contribution to the measurement of the construct in question. Cronbach's Alpha if Item Deleted value indicates that the removal of any item will not significantly improve the reliability of the instrument, which confirms that all question items are relevant and important to be retained in the research instrument.

Results of Multiple Linear Regression Analysis

Multiple linear regression analysis was performed to test the influence of independent variables on dependent variables simultaneously and partially. Before conducting regression analysis, a classical assumption test was carried out which included normality, multicollinearity, heteroscedasticity, and autocorrelation tests to ensure that the regression model used met the criteria of the Best Linear Unbiased Estimator (BLUE). The results of the classical assumption test show that the regression model meets all the necessary statistical requirements. The results of the regression analysis show that the research model has a very high level of conformity in explaining the phenomenon of taxpayer compliance. A determination coefficient value (R^2) of 0.886 indicates that 88.6% of the variation in taxpayer compliance can be explained by the variables of e-filing utilization, tax understanding, and tax awareness, while the remaining 11.4% is explained by other factors not studied in this study. This high R^2 value indicates that the research model has excellent predictive ability in explaining variations in taxpayer compliance.

Table 3. Regression Analysis Summary Model

Type	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,941	0,886	0,883	1,728

Table 3 shows that a correlation coefficient (R) of 0.941 indicates a very strong relationship between independent variables together and dependent variables. An Adjusted R Square value of 0.883 indicates that the model still has high predictive ability after adjusting for the

number of variables and sample size. A Standard Error of the Estimate value of 1.728 indicates a relatively small rate of prediction error, which indicates high model accuracy.

Table 4. F Test Results (ANOVA)

Type	Sum of Squares	Df	Mean Square	F	Sig.
Regression	2759,856	3	919,952	308,190	< 0.001
Residual	355,217	119	2,985		
Total	3115,073	122	-	-	-

Table 4 shows the results of the F test used to test the significance of the regression model as a whole. An F-value of 308.190 with a significance level of < 0.001 indicates that the regression model is feasible to be used to predict taxpayer compliance. These results indicate that at least one independent variable has a significant effect on the dependent variable, which validates the use of multiple linear regression models in this study.

Table 5. Results of the t-test (Coefficients)

Variable	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
	B	Std. Error	Beta	
Constant	0,953	0,648	-	1,471
E-Filing (X1)	0,595	0,099	0,600	6,021
Comprehension (X2)	0,175	0,088	0,176	1,985
Consciousness (X3)	0,188	0,088	0,185	2,132

Table 5 shows the results of the t-test used to test the significance of the influence of each independent variable on the dependent variable partially. The variable of e-filing utilization had the most significant influence with a calculated t-value of 6.021 and a significance level of < 0.001. A beta coefficient of 0.600 indicates that an increase of one unit in the e-filing utilization variable will increase taxpayer compliance by 0.600 units. The variable of tax understanding has a calculated t-value of 1.985 with a significance level of 0.049, indicating a significant influence on taxpayer compliance. The variable of tax awareness has a calculated t-value of 2.132 with a significance level of 0.035, showing a significant influence on taxpayer compliance.

Discussion of Research Results and Theoretical Implications

The results of the study show that the use of e-filing has the most dominant influence on taxpayer compliance at KPP Sukomanunggal Surabaya. These findings are in line with research conducted by (Situmorang & Ginarti, 2022) which found that the implementation of e-filing had a positive and significant effect on the compliance of individual taxpayers. The dominance of the influence of e-filing can be explained through the perspective of Technology Acceptance Model (TAM) which shows that the ease of use and usefulness of the technology system are the determining factors in the adoption of technology by users. The implementation of e-filing has succeeded in reducing the complexity of the tax reporting process, saving time and costs, and improving reporting accuracy, ultimately driving taxpayer compliance. The significant influence of tax understanding on taxpayer compliance

confirms the theory Planned Behavior which emphasizes the importance of knowledge and understanding in shaping individual attitudes and behaviors. These results are consistent with the findings (Danan Nugroho, 2022) which shows that the level of tax understanding affects taxpayer compliance. A comprehensive understanding of tax regulations, reporting procedures, and the consequences of non-compliance allows taxpayers to make rational decisions in fulfilling their tax obligations. However, the relatively smaller coefficient of influence compared to the e-filing variable indicates that the ease of accessibility factor is more dominant than the cognitive factor in the context of tax compliance.

Tax awareness has been shown to have a significant effect on taxpayer compliance, which confirms the theory civic duty in taxation. These findings are in line with research (Mahfud & Farina, 2025) which shows that tax awareness has a positive and significant effect on the compliance of freelancer taxpayers. High tax awareness reflects the internalization of civic values and social responsibility in the context of contributing to national development. Taxpayers who have high awareness tend to view tax payments as a moral and social obligation, not just as a legal obligation that can be avoided. The simultaneous influence of the three independent variables on taxpayer compliance shows that there is a strong synergy in creating optimal compliance behavior. These results indicate that a holistic approach that integrates aspects of technology, education, and tax awareness building will be more effective in improving taxpayer compliance compared to a partial approach. These findings are consistent with research (Nuriyah Shinta Devi & Suci Rohayati, 2024) which shows that the combination of ease of use of e-filing, taxpayer awareness, and tax sanctions has a significant effect on individual taxpayer compliance.

The theoretical implication of this study is the development of an integrative model of tax compliance that combines technological, cognitive, and socio-psychological perspectives. This model shows that taxpayer compliance is not only influenced by a single factor, but is the result of a complex interaction between technological ease, cognitive capacity, and individual value orientation. The theoretical contribution of this research is the strengthening of tax compliance theory in the context of digitization of tax administration, which shows that technological transformation can be a catalyst in improving tax compliance through mechanisms to increase the efficiency and effectiveness of the tax process. Comparisons with previous studies show some interesting differences in findings. Research (Maksum & Widaryanti, 2023) found that the implementation of the e-filing system had a negative and insignificant effect on taxpayer compliance, which contradicts the findings of this study. This difference can be explained by contextual factors such as the level of digital literacy of the respondents, the quality of technological infrastructure, and the intensity of socialization of the use of e-filing in the research area. Meanwhile, research (Fadhilah & Afiqoh, 2022) found that the implementation of e-filing had no effect on individual taxpayer compliance, which is also different from the findings of this study. The consistency of the findings of this study with the majority of previous studies, as conducted by (Alting & Suwito, 2021) which shows that the application of electronic systems has a positive effect on taxpayer compliance,

indicating the robustness of the research model used. The difference in findings with several previous studies can be an indicator that contextual factors have an important role in determining the effectiveness of e-filing implementation in improving taxpayer compliance. This shows the importance of a situational approach in analyzing the phenomenon of tax compliance.

4. Conclusion

An empirical investigation of taxpayer compliance determinants at KPP Sukomanunggal Surabaya revealed substantial findings regarding the multidimensional contribution of factors influencing compliance behavior. The results of multiple regression analysis demonstrate that the use of e-filing technology has a predominant impact on the level of taxpayer compliance with a determination coefficient of 0.600, indicating the superiority of digital infrastructure in optimizing tax administrative efficiency. The modernization of electronic reporting systems has been proven to eliminate traditional procedural complexities, thereby facilitating better accessibility in the fulfillment of tax obligations. The synergy between the ease of technology and the transformation of behavioral patterns creates a new paradigm in more sustainable and effective tax compliance management. The contribution of tax understanding and taxpayer awareness, although it has a relatively moderate coefficient (0.176 and 0.185), still shows consistent statistical significance in shaping compliance behavior. The integration of these three dimensions resulted in a predictive model with an accuracy rate of 88.6%, indicating that a holistic approach that combines aspects of technology, education, and moral awareness formation has optimal potential in creating voluntary compliance. These findings affirm the urgency of implementing a comprehensive strategy that focuses not only on technological modernization, but also on improving tax literacy and internalizing civic responsibility in the context of national tax obligations.

5. Suggestion

- a. Optimizing e-filing technology infrastructure through the development of a more user-friendly interface and improving security systems to minimize taxpayers' concerns related to privacy and data security
- b. Intensification of continuous tax education programs by integrating digital and conventional learning methods to improve taxpayers' technical understanding of complex tax regulations
- c. Implementation of a systematic tax awareness campaign with a behavioral economics approach to change the taxpayer paradigm from compliance-driven to commitment-driven behavior
- d. Development of a periodic monitoring and evaluation system on the effectiveness of e-filing implementation to identify areas for improvement and optimization of tax services

- e. Increased collaboration with relevant stakeholders in creating a tax ecosystem that is supportive and responsive to the needs of modern taxpayers

References

- Alting, F., & Suwito. (2021). The Effect of Tax Knowledge, Taxpayer Awareness, Tax Sanctions, Tax Socialization and the Implementation of the E-Samsat System on Motor Vehicle Taxpayer Compliance. *Indonesian Retail Management Journal*, 2(1), 33–49.
- Danan Nugroho. (2022). The Effect of E-Filing Implementation, Tax Understanding Level and Taxpayer Awareness on Individual Taxpayer Compliance. *Journal of Management Partners*, 5(9), 581–598. <https://doi.org/10.52160/ejmm.v5i9.568>
- Fadhilah, P. N., & Afiqoh, N. W. (2022). The Influence of Taxpayer Awareness, Tax Socialization, Implementation of E-Filing, and Tax Sanctions on Individual Taxpayer Compliance. *RISTANSI: Accounting Research*, 3(1), 12–26. <https://doi.org/10.32815/ristansi.v3i1.1002>
- Indrawan, R. (2024). Efficiency Tax Reporting System as Variable Moderation for Digitalization of Tax Compliance. *Journal of Industrial Systems Engineering*, 13(2), 65–74. <https://doi.org/10.26593/jrsi.v13i2.7181.65-74>
- Mahfud, M., & Farina, K. (2025). The Effect of the Implementation of the E-Filing System, Knowledge, Socialization, Awareness, and Tax Sanctions on the Compliance of Independent Taxpayers.
- Maksum, M. A., & Widaryanti, W. (2023). Factors that affect taxpayer compliance. *Solutions*, 21(1), 67–74. <https://doi.org/10.26623/slsi.v21i1.6292>
- Mandasari, N. (2024). The Effect of Tax Digitalization (Electronic System) on Increasing Individual Taxpayer Compliance. *Advances in Taxation Research*, 2(3), 153–167. <https://doi.org/10.60079/atv.v2i3.62>
- Meiryani, Alkhanifani, D., & Ramadhanti, V. (2023). The Effect of E-System Modernization, Self Efficacy and Digital Literacy Capabilities on Taxpayer Compliance. *E3S Web of Conferences*, 426. <https://doi.org/10.1051/e3sconf/202342601020>
- Nuriyah Shinta Devi, & Suci Rohayati. (2024). The Effect of Ease of Use of E-Filing, Taxpayer Awareness, and Tax Sanctions on Individual Taxpayer Compliance. *El-Mal: Journal of Islamic Economic and Business Studies*, 5(11), 5517–5532. <https://doi.org/10.47467/elmal.v5i11.3600>
- Rani, A. S., Nuryat, T., Yulaeli, T., Nurbaiti, B., & Prawestiningrum, E. (2025). Literature review of the Influence of tax service quality and tax system modernization on taxpayer compliance by moderating on taxpayer satisfaction. *Journal of Stagflation: Economics, Management and Accounting*, 3(1), 24–30.
- Situmorang, D. S., & Ginarti, C. (2022). The Effect of the Implementation of E-Filing, Tax Understanding, and Taxpayer Awareness on Individual Taxpayer Compliance at KPP

Pratama Medan Petisah. Journal of Accounting, Finance and Taxation, 5(2), 87–95.
<https://doi.org/10.51510/jakp.v5i2.988>