

HOW DOES DIGITIZING THE TAX SYSTEM INCREASE TAXPAYER COMPLIANCE?

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ABSTRACT

Tax revenue, whose percentage reached above 80% of the total revenue of the State Budget in 2021, is the largest component of Indonesia's revenue. However, Indonesia's tax ratio in 2021 was only 9,11 %, according to the Indonesian Ministry of Finance in 2022. Indonesia implements the self-assessment system in collecting taxes, which of course requires the development of a good tax administration information system, such as the implementation of an e-filing information system to perform optimally. E-filing is an electronic-based tax reporting system which enables taxpayers to report via online without having to visit the tax office. This study aims to analyze the effect of the e-filing information system on taxpayers' compliance, directly and through the taxpayers' satisfaction variable on the services they receive. This study utilized path analysis based on Structural Equation Modelling (SEM) as its data analysis technique. The results of the study stated that the successful implementation of the e-filing information system gives a positive effect on taxpayer satisfaction and taxpayers' compliance, meanwhile, taxpayer satisfaction gives a positive effect on taxpayer compliance.

Keywords: Tax Revenue, E-filing, Information System Success, Taxpayer Satisfaction, Taxpayer Compliance.

1.0 INTRODUCTION

Tax revenue is the largest component of Indonesia's revenues. Based on the available data, more than 80% of Indonesia's revenue is coming from tax revenue. Based on the APBN (state budget) of 2021, the tax component was contribute Rp.1.444,54 trillion or around 83% of the total APBN of Rp.1,743.65 trillion (Kementrian Keuangan Republik Indonesia, 2022). The growth of tax revenue is shown in Table 1, which shows an increase in the contribution of tax revenues in state revenues, where taxes are the prima donnas that are highly relied on by the state.

Table 1 Realization of State Revenue (in Million IDR)

Period	Tax Revenue	Total Revenue	Tax / Total Revenue
2016	1.539.166	1.786.225	86%
2017	1 343 530	1 654 746	81%
2018	1 518 790	1 928 110	79%
2019	1 546 142	1 955 136	79%
2020	1.285.136	1 628 950	79%
2021	1,444,540	1,743.650	83%

Source: BPS and APBN Report (represented by the Author)

Indonesia's tax ratio in 2021 was only 9,11%. This number is still very low compared to other countries, even other Asian countries. The tax ratio is the ratio of tax revenue to gross domestic income. (Kementrian Keuangan Republik Indonesia, 2022). There are two implications of the low tax ratio. On one side, it may imply that the state has not succeeded in collecting tax maximally. On the other hand, it may indicate that there are still opportunities to increase tax revenues.

The low level of tax compliance is a serious problem in some developing countries (Das- Gupta et al., 2004). One important factor that raises taxpayers' spirit of voluntary compliance is tax service (Bournaris et al., 2013). To obtain a high level of user satisfaction, the aspects that must be improved are interaction and ease of access. It can be concluded the improvement of information system creates satisfactory results. Meanwhile, content and navigation are the next items of priority (Silvani, 1992).

One of the efforts of the Government of Indonesia to improve the satisfaction of taxpayers is by improving services which is represented by the e-filing application service. With the e-filing application, it is expected that taxpayers will easily report their taxes, as one of their tax obligations in addition to calculating and paying taxes. With improved service satisfaction, taxpayers are expected to be compliant because of the ease of the reporting process.

This study aims to analyze and identify the factors that influence taxpayer compliance. This study utilized the Delone and McLean information system success model to measure system quality, information quality, service quality, user satisfaction, net benefits consisting of individual and organizational performance, as well as additional variables namely facilitating conditions. The data used is primary data obtained from 200 questionnaires distributed to representatives of Taxable Entrepreneurs (PKP) registered at the Bekasi Tax Service Office, Indonesia. In fact, there are around 330 thousand taxpayers in Bekasi. By using the Slovin formula with an error rate of 10%, 100 samples were obtained, but the justification in this was set at 200 respondents who were expected to represent the total population so that the results of the study would be generalized to the data. This study utilized path analysis based on Structural Equation Modelling (SEM) as its data analysis technique. This study utilized path analysis based on Structural Equation Modelling (SEM) as its data analysis technique. This research was conducted in Bekasi, Indonesia by distributing questionnaires to taxpayers as respondents.

2.0 LITERATURE REVIEW

2.1 Successful Application of E-filing Information Systems

A system is a component or a mutually cooperative element that is formed in a sub-system, which has the same goal to produce predetermined output, while information is data that has been processed that can be addressed to someone, the organization also to anyone who needs (Istianingsih et al., 2020) said that an information system is a group of two or more interrelated components that interact to achieve a goal, while Information is data that has been organized and processed to provide meaning and improve the decision-making process (Romney & Steinbart, 2018). The information

system is a system that receives data input and instructions, processes the data in accordance with the instructions, and issues the results (Romney & Steinbart, 2018). The successful implementation of the information system in this study uses updated (DeLone, 1988), as shown in Figure 1.

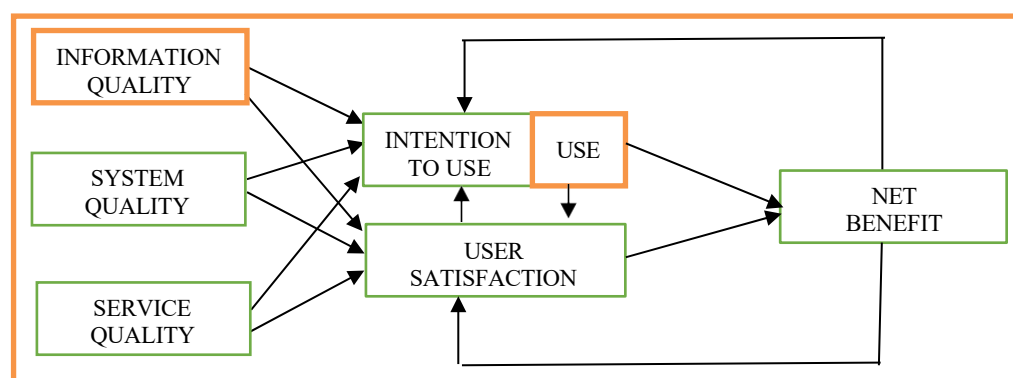


Figure 1 Updated D&M IS Success Model.

Proposed the measurement dimensions of the success of the Information System which are (Donelson et al., 2020) : (1) System quality, namely the success of the system in terms of technology, consisting of: convenience of access, system functionary, reliability, response time, sophistication, navigation ease, flexibility ; (2) Information quality consists of: accuracy, precisian currency (the information produced is up-to-date), timeliness, the speed of information produced, sufficiency (the information produced can fulfill what is desired), understandability (the information obtained is easily understood), conciseness (information in a concise form and not long-winded); (3) Service quality, namely the measurement of the success of the information system in terms of the quality of service provided by the information system department in all services, consisting of responsiveness (the speed of responding to user / customer complaints), empathy (the ability to sense user difficulties in order to easily overcome problems); (4) Intention to use, consisting of: attitude toward technology, subjective norm, self-efficacy; (5) Use, namely the level of use of information systems by users, consisting of: organizational competence, extrinsic motivation, IT infrastructure; (6) User satisfaction, is the level of user satisfaction on the use of the existing information system, consisting of: task compatibility, attitude toward technology, user invasion; (7) Net benefits, namely the level of profit gained by the organization with the use of information systems, consisting of: improvements of productivity, quality of decision making, work practice

Hall (2011) measures the success of information systems through 9 dimensions, which are: increasing customer satisfaction (the level of customer satisfaction after using an information system); increasing employee satisfaction (the level of customer satisfaction after using the information system); increased information novelty (the level of novelty of information that can be obtained after using the Information system); Increased decision making (the level of effectiveness of the quality of decisions made by leaders); Faster response to competitor actions (the level of speed of response to something done by competitors); Operating efficiency (the level of operating efficiency by users of information systems); Improved internal and external communication (the level of quality of internal and external communication systems), better planning effectiveness (the level of effectiveness of planning); Operational flexibility (the level of ease in operational changes).

Indonesia adheres to a self-assessment system in its tax collection which must be supported by a good taxation system. That system can facilitate taxpayers, both when calculating, paying, and reporting their tax obligations. One of the real forms is the

implementation of an e-filing information system. E-filing is an electronic-based tax reporting system where taxpayers do not need to come to the Tax Service Office (KPP) to report on their tax obligations but only must go online easily.

2.2 Taxpayers' Satisfaction

Ateş (2020) conceptualized customer satisfaction as a feeling that arises as a result of evaluating the experience of using a product or service. Rosser and Fahmi (2018) defined it as an emotional response to the evaluation of the consumption experience of a product or service. GAO (2019) emphasized that customer satisfaction is the level of one's feelings after comparing the perceived performance (or outcome) compared to their expectations. Quality of service is considered an important research subject and that means the customer evaluates the service. Service quality is defined as the difference between customer expectations for services performed prior to service delivery and their perception of services received (Bournaris et al., 2013). Mardinan et al. (2018) explained the quality of service as an effort to meet customer needs and desires, which provides accuracy in balancing customer expectations. Service quality measures the dimensions of tangibles, reliability, responsiveness, assurance, and empathy. The quality of tax services can be referred to as the taxpayer's assessment of the level of tax administration. In the context of taxation, many (Faúndez-Ugalde et al., 2020b) have studied the concept of service quality as an antecedent for compliance taxes. Montalvo et al. (2020) determined service quality as a factor that contributes to taxpayer compliance behavior and is measured in terms of responsiveness, informativeness, and reliability. Rezvani et al. (2017) tried to measure service quality from a practitioner's tax perspective. Faúndez-Ugalde et al. (2020b) found that the perceived quality of tax services had a significant negative effect on tax non-compliance behavior.

2.3 Taxpayer Compliance

Taxpayer compliance is a multifaceted measure and can be defined as the attitude or willingness of taxpayers who carry out all tax obligations and enjoy all tax rights in accordance with the provisions of the applicable legislation (Andreas & Savitri, 2015). According to (Bahtiar and Saragih (2019) taxpayer compliance has the understanding as a compliance climate and awareness of compliance with tax obligations, reflected in the situation where taxpayers understand and try to understand all the provisions of taxation legislation, namely to complete the tax form and clear, calculate the amount of tax owed correctly and pay the tax owed on time. According to Errard and Feinstein, the notion of tax compliance is guilt and shame, the perception of taxpayers on the fairness and fairness of the tax burden they bear, and the influence of satisfaction on government services.

The pioneer of the study of taxpayer compliance (Montalvo et al., 2020) use the expected utility concept to explain taxpayer compliance behavior, where the taxpayer's decision on the level of reported income is determined solely by the actual income level, detected probability, penalty structure and tax structure (all assumed to be exogenously determined variables), and the taxpayer's attitude to risk.

According to Yozi et al. (2019) there are two approaches to the theory of compliance, namely the theoretical approach to economics and the approach to psychological theory. Economic theory approaches emphasize incentives, while psychology-based theories emphasize attitudes. Based on the theory of economics on compliance, it is implied that tax compliance is influenced by several considerations of how likely they are to be affected by the economic consequences of various compliance alternatives, such as whether to avoid taxes or not, the probability of action is known and the consequences, then choose various alternatives that will maximize the expected tax return (expected after-tax return). Whereas based on psychological theory assumes that there are various psychological factors, including moral obligations and ethical issues, and honesty, which are also important for taxpayers.

The tax compliance literature provides evidence that compliance is influenced by various factors that are broadly classified as economic, individual, institutional, political, and psychological (GAO, 2019). Based on this classification, variables such as tax awareness, tax knowledge, taxpayer satisfaction, demographic factors, and the quality of service for tax officers are important antecedents for tax compliance in a narrow scope (Nuryati et al., 2020). There is also a positive correlation between taxpayer response and tax amnesty program to taxpayer Compliance (Nuryati & Hasbi, 2017).

Faúndez-Ugalde et al. (2020) in his study on thirty countries, measured the level of tax compliance. New Zealand was ranked the second most compliant after Singapore. This was followed by Australia, the United Kingdom (UK), and Hong Kong. Malaysia was ranked eighth, after the US, while Italy was the least compliant. A review of the above-mentioned studies provides useful information to the researcher on the level of compliance behavior.

2.4 Hypotheses

Handayani dan Kusmuriyanto (2017) examines that Taxpayer satisfaction system users are influenced by variables of perceived usefulness and quality of information. The service quality of the electronic taxing system had a positive effect on taxpayer satisfaction (Wulanjayanti & Usman, 2017). Information quality, system quality, and service quality influence the satisfaction of e-filing system users (Pramanita & Rasmini, 2020).

H₁: The successful implementation of the e-filing information system gives a positive effect on taxpayers' satisfaction.

Online tax applications, especially e-filing applications will greatly help the taxpayer when implemented in carrying out his tax obligations, in addition to being simple and easy will also save time, effort, and cost. Putra et al.,(2018) and Permatasari et al. (2015) examine that e- filling system has a significant effect on taxpayer compliance levels. Meanwhile, the results of research (Handayani & Noviari, 2016) concluded that the implementation of the e-filing system had no significant effect on taxpayer compliance. The e-filing program is proven to increase the compliance level of taxpayers (Qadri & Darmawan, 2021; Husnurrosyidah, 2017; Tarmidi et al., 2017).

H₂: The successful implementation of the e-filing information system gives a positive effect on taxpayers' compliance

A higher level of life satisfaction may increase the proportion of individuals who report the highest tax morale in Azerbaijan(Nadirov et al., 2021 ; Hadiwijaya, 2019 ; Khakim et al., 2015) state that there is a positive and significant influence between service satisfaction

and tax compliance at the UPTD Palembang Regional Revenue Office, South Sumatra Province, Indonesia. Taxpayer satisfaction has a positive and significant effect on taxpayer compliance (Sinaga et al, 2021).

H3: Taxpayer satisfaction can improve taxpayer compliance

3.0 METHOD

This study was conducted to test the proposed hypothesis using research methods that have been designed in accordance with the variables to be studied to obtain accurate results. This type of research is quantitative. According to Sinulingga (2014) that quantitative research is a type of research that aims to describe systematically, factually, and accurately the facts and characteristics of a particular object or population.

This research is carried out through data collection and quantitative analysis (questionnaires) and testing using path analysis. The nature of this research is research that explains the causal relationship between variables through hypothesis testing. This is in accordance with the research objective, namely, to explain the causal relationship that occurs between exogenous variables and endogenous variables by testing hypotheses. The data used are primary data obtained directly from respondents, amounting to 200 people namely taxpayers in Bekasi, Indonesia by filling out the questionnaire. The results of data processing will then be used as a basis for analysis and answering the proposed research hypothesis. The data analysis used is Structural Equation Modeling (SEM).

In accordance with the purpose of the study, to examine the effect of the successful implementation of tax information systems on the satisfaction of taxpayers and their impact on taxpayer compliance, the researcher used covariance-based structural equation modeling. The research model path diagram using structural equation modeling is described as follows.

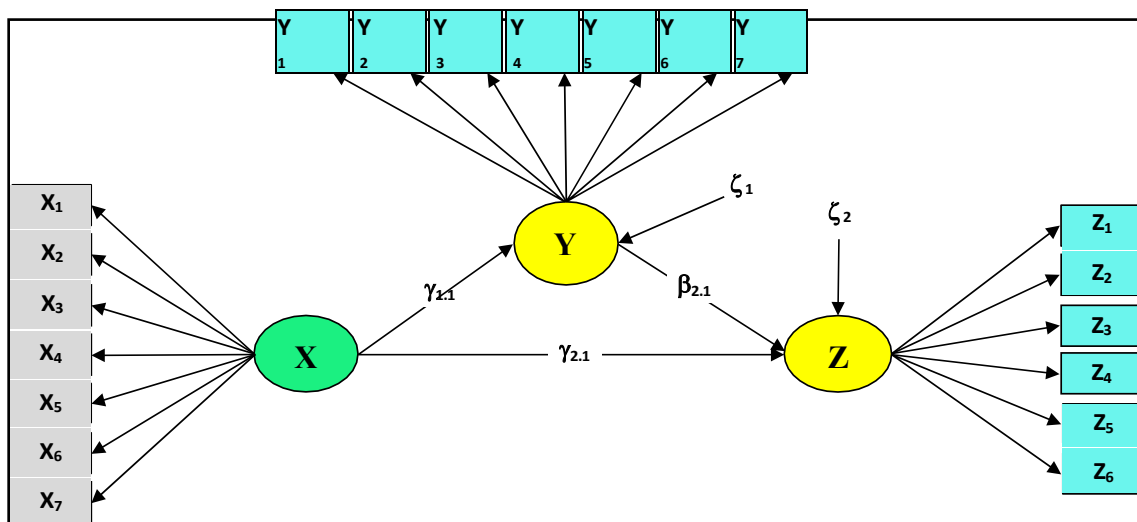


Figure 2 Research Model Path Diagram

Remark:

X = The successful implementation of taxation information systems Y = Taxpayer Satisfaction

Z = Taxpayer Compliance

γ = Exogenous variable influence coefficient with the endogenous variable

β = Endogenous variable influence coefficient with the endogenous variable

ζ = Other factors' effects

The number of samples in this study was 200 people, namely taxpayers in Bekasi, Indonesia.

4.0 RESULTS AND DISCUSSION

The results of the study will be presented in two parts. In the first part, the results of the descriptive analysis of respondents' responses will be presented. In the second part, a verification analysis will be presented in the form of hypothesis testing.

4.1 Descriptive Analysis

The Directorate General of Taxes (DGT) is echelon I under the auspices of the Ministry of Finance of the Republic of Indonesia. As echelon I, DGT has the task of formulating and implementing policies and technical standardization in the field of taxation. To coordinate the implementation of tasks in the regions, several offices of the Regional Tax Inspectorate (ItDa) were formed, namely in Jakarta and several regions such as Sumatra, Java, Kalimantan, and Eastern Indonesia. This Regional Inspectorate later became the Regional Office of the Directorate General of Taxes (Regional Office) as it is today. The Regional Office is a DGT vertical unit that oversees the Tax Service Office (KPP) and the Tax Counseling and Consultation Service office (KP2KP).

In this study, 200 questionnaires were collected from respondents who are registered taxpayers in all KPP Pratama in Bekasi, Indonesia, namely Tax Service Office (KPP) Pratama North Bekasi, South Bekasi, Pondok Gede, South Cikarang and Cibitung Tax Service Office. Respondents age 30-40 years are the most that are by 44%, with female respondents at 52% and 48%, which means there is no gender issue. Based on the last education, bachelor graduates are the most respondents that are equal to 71%. Bekasi is located on the eastern border city of the capital city of Jakarta, where the economic level of the population is relatively the same as Jakarta.

In this analysis, an overview of the results of respondents' responses to each indicator of the variables studied will be presented. In order to make it easier to provide an assessment of the respondent's answers, categorization of the average score of respondents' answers through the inter-quartile distribution range (Malhotra et al., 2014) On questionnaires that use a scale of 1 to 5, minimum value = 1, maximum value = 5, first quartile (Q1) = 2, second quartile (Q2) = 3 and third quartile (Q3) = 4. Thus the average score of answers from respondents can be categorized as follows.

Average Score Criteria

- 4.1.1 - < 2 Very Low / Bad
- 4.1.2 - < 3 Low / Bad
- 4.1.3 - < 4 High / Good
- 4.1.4 - 5 Very High/Very Good

4.1.1 Descriptive Analysis of Tax Information System Information

The application of the taxation information system is measured using 3 dimensions and operationalized into 7 indicators. The following is the average score of respondents' responses regarding the application of the tax information system.

Table 2 Respondents' Response Mean Score on Variables of Tax Information System Implementation

No.	Indicator	Mean Score	Criteria
1	Convenience of Access	3,98	Easy
2	Response Time	3,76	Fast
3	Accuracy	4,43	Very Accurate
4	Timeless	3,32	High
5	Understandability	2,97	Low
6	Improvement of Productivity	3,29	High
7	Work Practice	4,32	Very Easy
	Grand Mean	3,72	Good

Based on the results, the grand mean of the respondent's score for the tax information system implementation variable is 3.72, and at intervals 3 - 4 which are included in either category. This means that the application of the taxation information system has been successful. The taxation information system is easy to access, and the response time is also fast. The information presented is also very accurate, but unfortunately, it is not easy to be understood by taxpayers. Tax information systems can also save taxpayers' time so that they are able to increase productivity because it facilitates work.

4.1.2 Descriptive Analysis of Taxpayers' Satisfaction

Taxpayers' satisfaction is measured using 3 dimensions and operationalized into 7 indicators. The following tab presents the average score of respondents' responses to the satisfaction of taxpayers.

Table 3 Respondents' Response Mean Scores on Taxpayer Satisfaction Variables

No.	Indicator	Mean Score	Criteria
1	Product Suitability	4,15	Very Suitable
2	Suitability of services received	4,01	Very Suitable
3	Interest in reusing e-filing services due to convenience	4,11	Very High
4	Interest to reuse because of the benefits obtained.	3,59	High
5	Revisit because the supporting facilities provided are adequate	4,01	Very Adequate
6	Inform the ease of use of e-filing services.	3,35	Willing
7	Advise others to do tax reporting because of the ease of service	3,81	Willing
	Grand Mean	3,86	High

Based on the results, the grand mean response score of respondents for the variable Taxpayer satisfaction is 3.86, and at intervals 3 - 4 which are included in the high category. This means that most taxpayers are satisfied with the existing tax services. Taxpayers feel that the products that are available are suitable with their needs, then the services received are also as good as promised. Taxpayers also have a very high interest in reusing e-filing

services because of the convenience and are interested in reusing because of the benefits. Taxpayers will revisit because the supporting facilities provided are very adequate. Besides that, taxpayers, are also willing to inform the ease of use of e-filing services and advise others to do tax reporting because of the ease of service.

4.1.3 Descriptive Analysis of Taxpayers' Compliance

Table 4 Mean Score of Response on Taxpayer's Compliance Variable

No.	Indicator	Mean Score	Criteria
1	Continuity of reporting	4,12	Always
2	Timeliness of reporting	4,62	Always
3	Timeliness of tax payments	3,91	On time
4	Calculate tax liabilities correctly	4,05	Very carefully
5	Fill out the tax return correctly	4,46	Very carefully
6	Never received any tax penalties	3,37	Rarely
	Grand Mean	4,09	Very Compliant

Based on the results of the answers of 200 respondents, the grand mean score of respondents for the variable of taxpayers' compliance is 4.09 and is at intervals 4 - 5 which are categorized as very compliant. This means that most taxpayers have been very obedient to the regulations. Taxpayers regularly report and are always on time in reporting. Taxpayers also pay taxes on time and calculate tax liabilities correctly. In addition, taxpayers also fill tax returns carefully and rarely receive tax penalties.

4.2 Hypothesis Testing

In this section, the results of the study will be presented regarding the effect of successful tax information system (X) implementation on Taxpayer satisfaction (Y) and its impact on Taxpayer compliance (Z) using structural equation modeling. In structural equation modeling, there are two types of models that are formed, namely measurement models and structural models. The measurement model explains the proportion of variance in each manifest variable (indicator) that can be explained through latent variables. Through the measurement, the model will be known which indicators are more dominant in reflecting latent variables. After the measurement model of each latent variable is described later, the structural model will be elaborated which will examine the effect of the exogenous latent variable on the endogenous latent variable.

1) Goodness of Fit Test Results

A goodness of fit test is required to find out whether the model obtained has been appropriate in describing the relationship between the variables being studied so that it can be categorized into a good model. Match test results using the χ^2 test (chi-square) for the model studied obtained a value of 329.99 with a p-value <0.001. According to (Hair et al., 2014) in structural equation modelling, a small p-value is not desired (smaller than 0.05). Back to the test results, the p-value is smaller than 0.05 which indicates that test χ^2 is significant. So when referring to test result χ^2 then the model obtained does not meet the criteria of a good model overall. Then the RMSEA (Root Mean Square Error of Approximation) value is 0.073. Criteria of a good RMSEA value is still debated, but according to (Hair et al., 2014) if the value of RMSEA is lower than 0.08, then it

is still acceptable. Furthermore, it can be seen from the GFI (Goodness of Fit Index) value for the model studied that 0.858 shows that the model obtained does not meet the criteria. (Hair et al., 2014) the GFI value greater than 0.90 shows that the model can be accepted. The Root Mean Square Residual (RMR) in the model studied is 0.076, as well as the standardization value (SRMR) of 0.077. According to (Hair et al., 2014) the value of Standardized Root Mean Square Residual (SRMR) is less than 0.08, meets the criteria of a good model. The results of the measurement of absolute suitability show that the model obtained meets the criteria of goodness of fit on the size of RMSEA (0.073 < 0.08), and SRMR (0.077 < 0.080) so it can be concluded that the estimation results of the model can be accepted, meaning that the empirical model obtained in accordance with the theoretical model.

2) Measurement Model

The measurement model is a model that connects latent variables and manifest variables. In this study, there are 3 latent variables with a number of manifest variables as much as 20. The latent variable of the successful implementation of the tax information system consists of 7 manifest variables, the taxpayer satisfaction latent variable consists of 7 manifest variables, and the taxpayer compliance latent variable consists of 6 manifest variables. Using the maximum likelihood estimation method is obtained a full path diagram model that influences the success of the implementation of the tax information system on the satisfaction of taxpayers and their impact on taxpayer compliance as presented in Figure 3 below

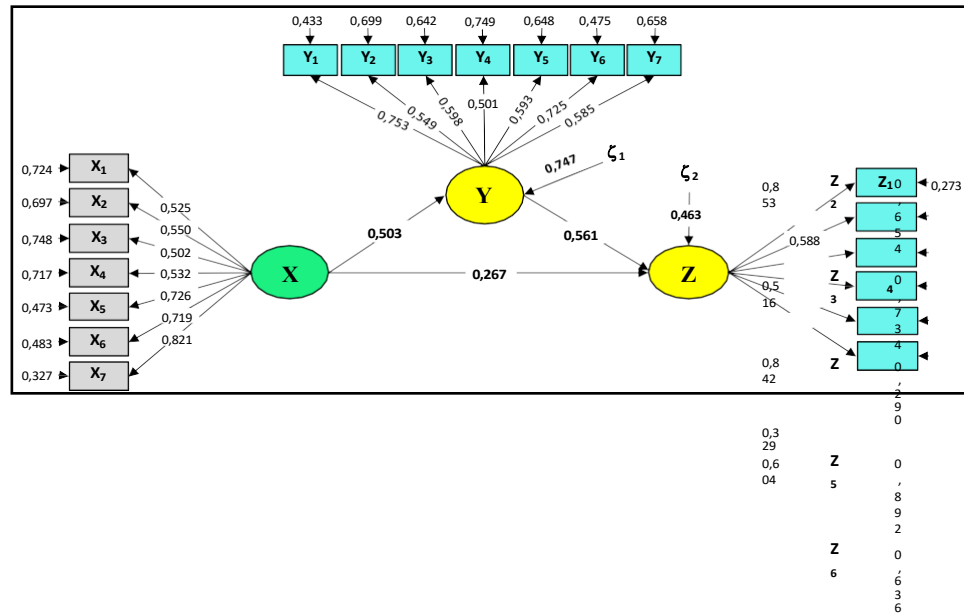


Figure 3 Standardized Coefficients Structural Equation Modeling

Based on the weighting of the factors contained in Figure 2, the latent variable of the successful implementation of the taxation information system (X), the indicator X₅ (Understandability) is the strongest in reflecting the latent variable of product attributes. On the contrary, the X₃ (Accuracy) indicator is the weakest in reflecting the latent variable of successful application tax information system. In the Taxpayer satisfaction variable latent variable (Y), the Y₁ (Product Suitability) indicator is the strongest in reflecting the satisfaction

of Taxpayers, whereas the Y_4 (Interests to Reuse) indicator is the weakest in reflecting the taxpayers' latent satisfaction variable. In the latent variable of Taxpayer compliance (Z), the Z_1 indicator (Continuity of reporting) is strongest in reflecting the latent variable of Taxpayer compliance, on the contrary, the Z_5 dimension (Filling SPT correctly) is weakest in reflecting the latent variable of Taxpayer compliance. Furthermore, the results of the calculation of construct reliability and variance extracted from each latent variable are presented in the following table.

Table 1 Construct Reliability (CR) and Variance Extracted (VE)

Latent Variable	CR	VE
Implementation of Taxation Information System	0,821	0,404
Taxpayers' Satisfaction	0,811	0,385
Taxpayers' Compliance	0,800	0,420

In the latent variable of the successful implementation of the taxation information system, the extracted variance value of 0.404 shows that on average 40.4% of the information contained in each indicator can be represented through the latent variable of successful tax information system implementation. Then the value of construct reliability, the latent variable, the success of the implementation of the taxation information system (0.821) is still greater than the recommended one is 0.70. Furthermore, on the taxpayer satisfaction latent variable, the extracted variance value of 0.385 indicates that on average 38.5% of the information contained in each indicator can be represented through the taxpayers' satisfaction variable latent. Then the value of the construct reliability latent variable of Taxpayer satisfaction (0.811) is still greater than the recommended one is 0.70. Finally, in the taxpayer compliance latent variable, the extracted variance value of 0.420 indicates that on average 42.0% of the information contained in each indicator can be represented through the latent variable of taxpayer compliance. Then the value of construct reliability from the latent variable of Taxpayer compliance (0,800) is still greater than the recommended one is 0,70.

1) Structural Model

The structural model is a model that connects exogenous latent variables with endogenous latent variables. Based on the results of the data processing obtained structural equation is as follows.

$$Y = 0.503 X, \quad Errorvar. = 0.747, R^2 = 0.253 \quad (1)$$

$$\begin{array}{cc} se : (0.0855) & (0.137) \\ t : 5.886 & 5.450 \end{array}$$

$$Z = 0.561 Y + 0.267 X, \quad \text{Errorvar.} = 0.463, R^2 = 0.537 \quad (2)$$

$$\begin{array}{ccc} se : (0.0891) & (0.0782) & (0.0781) \\ t : 6.289 & 3.412 & 5.931 \end{array}$$

Through the R^2 value, the successful implementation of the taxation information system gives an effect of 25.3% on the satisfaction of taxpayers. Then the success of the implementation of taxation information systems and Taxpayer satisfaction simultaneously has an effect of 53.7% on the satisfaction of taxpayers. Furthermore, the significance test of each path was carried out using the t-test with a critical value of 1.96.

Effect of Successful Implementation of Taxation Information Systems on Taxpayer Compliance

$$H_o : \gamma_{1.1} = 0 \quad (3)$$

The success of tax information system implementation does not affect the satisfaction of taxpayers.

$$H_a : \gamma_{1.1} \neq 0 \quad (4)$$

The success of the tax information system implementation affects the satisfaction of taxpayers.

Based on the structural equation above, it can be seen the $t_{\text{statistic}}$ value of the variable X to Y (5,886) and greater than the critical (1,96). Because the $t_{\text{statistic}}$ value is greater than critical, then at the 5% error rate it is decided to reject H_o so H_a is accepted. So based on the test results it can be concluded that the successful implementation of the tax information system affects the satisfaction of taxpayers. The results of this study provide empirical evidence that better implementation of the tax information system will increase the satisfaction of taxpayers.

Effect of Successful Implementation of Taxation Information Systems on Taxpayer Compliance

$$H_o : \gamma_{2.1} = 0 \quad (5)$$

The successful implementation of the tax information system does not affect taxpayer compliance.

$$H_a : \gamma_{2.1} \neq 0 \quad (6)$$

The successful implementation of the tax information system affects taxpayer compliance. Based on the structural equation above, the $t_{\text{statistic}}$ value of the variable X against Z (3,412) and greater than the t_{critical} (1.96). Because the $t_{\text{statistic}}$ value is greater than t_{critical} , at the 5% error rate it is decided to reject H_o so H_a is accepted. So based on the test results it can be concluded that the successful implementation of the tax information system affects taxpayer compliance. The results of this study provide empirical evidence that the better implementation of tax information systems will improve taxpayer compliance.

Effect of Taxpayer Satisfaction on Taxpayer Compliance

$$H_o : \beta_{2.1} = 0 \quad (7)$$

Taxpayers' satisfaction does not affect taxpayer compliance.

$$H_a : \beta_{2.1} \neq 0 \quad (8)$$

Taxpayers' satisfaction affects taxpayer compliance.

Based on the structural equation above, the $t_{\text{statistic}}$ value of the variable Y to Z (6,298) and greater than the critical (1,96). Because the $t_{\text{statistic}}$ value is greater than t_{critical} , then at the 5% error rate it is decided to reject H_0 so H_a is accepted. So based on the results of the test it, can be concluded that the satisfaction of taxpayers influences taxpayer compliance. The results of this study provide empirical evidence that higher Taxpayer Satisfaction will increase taxpayer compliance.

5.0 CONCLUSION

The results of this study provide empirical evidence that the successful implementation of the e-filing information system increases taxpayer satisfaction. the application of the taxation information system has been successful. The taxation information system is easy to access, and the response time is also fast. The information presented is also very accurate, but unfortunately, it is not easy to be understood by taxpayers. Tax information systems can also save taxpayers' time so that they are able to increase productivity because it facilitates work.

The successful implementation of the e-filing information system will improve taxpayer compliance. Taxpayers feel that the products that are available are suitable with their needs, then the services received are also as good as promised. Taxpayers also have a very high interest in reusing e-filing services because of the convenience and are interested in reusing because of the benefits. Taxpayers will revisit because the supporting facilities provided are very adequate. Besides that, taxpayers are also willing to inform the ease of use of e-filing services and advise others to do tax reporting because of the ease of service. E-filing makes taxpayers no longer need to come to the tax service office (KPP) because all activities can be easily carried out anywhere, meaning that everything becomes efficient.

This study provides empirical evidence that taxpayer satisfaction will increase taxpayer compliance. This means that if they feel satisfied, they will become an obedient taxpayer. Most taxpayers have been very obedient to the regulations. Taxpayers regularly report and are always on time in reporting. Taxpayers also pay taxes on time and calculate tax liabilities correctly. In addition, taxpayers also fill tax returns carefully and rarely receive tax penalties

Based on the results of the research and discussion that has been done, it can be concluded that the successful implementation of the e-filing information system affects taxpayers' compliance, both directly and through the Taxpayer's satisfaction variable. The results of this study provide empirical evidence that the better the e-filing information system that is implemented, the more taxpayers' satisfaction increases, and the taxpayer's compliance is increasingly enhanced.

From the results of the research that has been discussed and concluded, it is suggested to improve taxpayers' compliance, with the and quality of the tax information system, especially e-filing. By increasing the e-filing information system, it will increase taxpayers' satisfaction, which in turn will be followed by an increase in taxpayers' compliance.

REFERENCES

- Andreas, & Savitri, E. (2015). The effect of tax socialization, tax knowledge, expediency of tax id number and service quality on taxpayers compliance with taxpayers awareness as mediating variables. *Procedia - Social and Behavioral Sciences*, 211, 163–169. <https://doi.org/10.1016/j.sbspro.2015.11.024>
- Ateş, H. (2020). Merging theory of planned behavior and value identity personal norm model to explain pro-environmental behaviors. *Sustainable Production and Consumption*, 24, 169–180. <https://doi.org/https://doi.org/10.1016/j.spc.2020.07.006>
- Bahtiar, R. A., & Saragih, J. P. (2019). Efforts to increase tax revenue and minimize tax shortfall / upaya meningkatkan penerimaan pajak dan meminimalkan shortfall pajak. *Jurnal Akuntansi*, 6(24), 19–24
- Bournaris, T., Manos, B., Moulogianni, C., Kiomourtzi, F., & Tandini, M. (2013). Measuring users satisfaction of an e-Government portal. *Procedia Technology*, 8(Haicta), 371– 377. <https://doi.org/10.1016/j.protcy.2013.11.049>
- Das-Gupta, A., Ghosh, S., & Mookherjee, D. (2004). Tax administration reform and taxpayer compliance in India. *International Tax and Public Finance*, 11(5), 575–600. <https://doi.org/10.1023/B:ITAX.0000036692.95048.00>
- DeLone, W. H. (1988). Determinants of success for computer usage in small business. *Management Information Systems Research Center*, 12(1), 51–6
- Donelson, D. C., Ege, M., Imdieke, A. J., & Maksymov, E. (2020). The revival of large consulting practices at the Big 4 and audit quality. *Accounting, Organizations and Society*, 87, 101157. <https://doi.org/10.1016/j.aos.2020.101157>
- Evita Sari Sinaga¹, Endang Sulistya Rini², B. K. F. S. (2021). *Effect of service quality, satisfaction and awareness on taxpayer compliance with financial conditions as moderating variables at the Tax Service Office (KPP) Pratama Deli Serdang*. <https://doi.org/10.52403/ijrr.20210737>
- Faúndez-Ugalde, A., Mellado-Silva, R., & Aldunate-Lizana, E. (2020a). Use of artificial intelligence by tax administrations: an analysis regarding taxpayers' rights in Latin American Countries. *Computer Law and Security Review*, 38, 1–3. <https://doi.org/10.1016/j.clsr.2020.105441>
- Faúndez-Ugalde, A., Mellado-Silva, R., & Aldunate-Lizana, E. (2020b). Use of artificial intelligence by tax administrations: an analysis regarding taxpayers' rights in Latin American Countries. *Computer Law & Security Review*, 38, 105441. <https://doi.org/10.1016/j.clsr.2020.105441>
- GAO. (2019). *Performance and Accountability Report: Fiscal Year 2019*.
- Hadiwijaya, Hendra, F. . (2019). The effect of service quality and tax sanctions on service satisfaction. *Jurnal Ekonomi*, 18
- Hair, J. F. J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2014). *A primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)* . Sage Publications, Inc.
- Hall, JameJames(2011). *Accounting Information Systems* (7th ed.). Cengage Learning.
- Handayani, M., & Noviari, N. (2016). Pengaruh persepsi manajemen atas keunggulan penerapan E-Billing dan E-SPT pajak pertambahan nilai pada kepatuhan perpajakan. *E-Jurnal Akuntansi*, 15(2)
- Istianingsih, Trireksani, T., & Manurung, D. T. H. (2020). The impact of corporate social responsibility disclosure on the future earnings response coefficient (Asean banking analysis). *Sustainability(Switzerland)*, 12(22), 1–16. <https://doi.org/10.3390/su12229671>
- Kementerian Keuangan Republik Indonesia. (2022). *APBN kita: kinerja dan fakta*.
- Khakim, Lukman, Azis Fathoni, M. M. M. (2015). Pengaruh kualitas pelayanan, harga dan

- kepercayaan terhadap loyalitas pelanggan dengan variabel kepuasan pelanggan sebagai variabel intervening pada Pizza Hut Cabang Simpang Lima. *Journal of Management*, 1
- Wulanjayanti, T., & Usman, D. (2017). The effect of service quality of electronic taxing system and tax employee competence on taxpayer satisfaction. *Jurnal Akuntansi*, 7(2), 87-100
- .Malhotra, N., Lopes, E., & Veiga, R. (2014). Structural Equation Modeling with Lisrel: An initial vision. *REMark: Revista Brasileira de Marketing*, 13(2), 28–43. <https://doi.org/10.5585/bjm.v13i2.2698>
- Mardinan, T., Dahlan, M., & Fitriyah, F. K. (2018). Effect of human resources, leadership style, the use of information technology and internal control on the quality of financial statements (Study at Directorate General of Construction, Ministry of Works and Public Housing). *Journal of Accounting Auditing and Business*, 1(1), 47. <https://doi.org/10.24198/jaab.v1i1.18795>
- Montalvo, J. G., Piolatto, A., & Raya, J. (2020). Transaction-tax evasion in the housing market. *Regional Science and Urban Economics*, 81, 103526. <https://doi.org/https://doi.org/10.1016/j.regsciurbeco.2020.103526>
- Nadirov, O., Aliyev, K., Dehning, B., Sharifzada, I., & Aliyeva, R. (2021). Life satisfaction and tax morale in Azerbaijan: Mediating role of institutional trust and financial satisfaction. *Sustainability (Switzerland)*, 13(21), 1–10. <https://doi.org/10.3390/su132112228>
- Nuryati, T., & Hasbi, M. (2017). Pengaruh respon dan keikutsertaan wajib pajak dalam program tax amnesty terhadap kepatuhan wajib pajak di Bekasi. *Jurnal STEI Ekonomi*, 26(2), 275–299. <https://doi.org/10.36406/jemi.v26i2.228>
- Nuryati, T., Mulyani, S., Poulus, S., & Dahlan, M. (2020). The effect of organization characteristics on optimal leadership decision. *Polish Journal of Management Studies*, 22(2), 345–361. <https://doi.org/10.17512/pjms.2020.22.2.23>
- Putra, P. dwi, Syah, D. husrizal, & Sriwedari, S. (2018). tax avoidnce: evidence of as a proof of agency theory and tax planning. *International Journal of Research & Review*, 5(9), 52–60
- Qadri, R. A., & Darmawan, E. E. (2021). E-filing implementation, tax compliance, and technology authority. *Journal of Applied Accounting and Taxation*, 6(1), 23–36. <https://doi.org/10.30871/jaat.v6i1.2822>
- Rezvani, A., Dong, L., & Khosravi, P. (2017). Promoting the continuing usage of strategic information systems: The role of supervisory leadership in the successful implementation of enterprise systems. *International Journal of Information Management*, 37(5), 1–20. <https://doi.org/10.1016/j.ijinfomgt.2017.04.008>
- Romney, M. B., & Steinbart, P. J. (2018). *Accounting Information Systems-Pearson*. Pearson Education Limited
- Rosser, A., & Fahmi, M. (2018). The political economy of teacher management reform in Indonesia. *International Journal of Educational Development*, 61, 72–81
- Silvani, C. A. (1992). *Improving tax administration in developing countries*. *International Monetary Fund*. <https://doi.org/10.5089/9781557753175.071>
- Tarmidi, D., Fitria, G. N., & Purwaningsih, S. (2017). *Tax compliance: impact of implementation online tax application*. 14(1), 65–73
- Yozi, V., Mulyani, S., Sukmadilaga, C., & Pertama, H. A. (2019). Developing business management strategy based on the factors that affecting willingness to pay tax : Evidence from Indonesia. *Industrial Engineering & Management Systems*, 18(3), 551–562