Strategy for Successful Use of the Directorate General of Taxes Portal Application on Performance of Account *Representative* at the Tax Service Office in South Jakarta Area I

Fitri Khaerani[1], Teuku Noerman[2]
Institut Keuangan Perbankan dan Informatika Asia, Perbanas Institute

Article Info

Abstract

This study aims to analyze the success strategy of using the Directorate General of Taxes (DGT) portal application on the performance of Account Representatives (AR) at the South Jakarta I Regional Tax Office (KPP) using the Delone and McLean Model approach (1992 & 2003). In the era of digitalization of tax administration, the use of DGT applications is a major factor in increasing the effectiveness of AR services and productivity. The estimation method used is Structural Equation Modeling (SEM) to test the relationship between the variables of System Quality (X1) and Information Quality (X2) as independent variables, User Satisfaction (Y1) as a moderating variable, and User Performance (Y2) as a dependent variable. The sampling method used is a saturated sample, with a total of 221 respondents, consisting of Account Representatives at the South Jakarta I Regional Tax Office. Data collection was carried out through a questionnaire-based survey, which was then analyzed using SEM to identify the direct and indirect effects of system quality and information quality on AR performance, with user satisfaction as a moderating factor. The results of the study indicate that system quality and information quality contribute significantly to improved AR performance, both directly and through increased user satisfaction. The Delone and McLean model confirms that a more efficient digital tax system and accurate information play a crucial role in improving Account Representative task effectiveness and taxpayer satisfaction. These findings provide strategic implications for the Directorate General of Taxes in designing policies for digitizing tax services and enhancing human resource capacity in the tax administration sector.

Corresponding Author:
Fitri Khaerani
Perbanas Institute
Email: fitrikhaerani1987@gmail.com

1. INTRODUCTION

The development of digital technology has brought significant changes to tax administration, particularly in increasing the efficiency and transparency of tax services. In Indonesia, the Directorate General of Taxes (DGT) has implemented various digital innovations, including the DGT portal application, to improve the performance of Account Representatives (ARs) in providing services to taxpayers. As part of tax reform, the use of information technology is key to ensuring effective tax administration and increasing taxpayer satisfaction (Gupta et al., 2020).

Although tax administration digitization has been widely implemented, the effectiveness of the use of DGT applications in improving AR performance remains a major challenge. Several studies have shown that the success of a digital tax system is influenced by the quality of the system and the quality of information provided to users (DeLone &

McLean, 1992, 2003). Therefore, this study focuses on analyzing how system quality and information quality in DGT applications influence user satisfaction and their impact on AR performance at the Tax Service Office in South Jakarta Region I.

The information system success model developed by DeLone and McLean (1992, 2003) serves as the conceptual framework for this research. This model emphasizes that information system success is determined by system quality, information quality, and user satisfaction, which ultimately influence user performance. Several previous studies have tested this model in various information system contexts, including e-government and e-taxation (Petter et al., 2008; Al-Sharaa et al., 2024).

Digital transformation in tax administration has attracted the attention of many researchers and practitioners. Kim et al. (2019) found that a digital tax system can improve efficiency and reduce the administrative burden on tax officials. Meanwhile, research by Wang et al. (2021) showed that the quality of a digital system is strongly correlated with increased taxpayer satisfaction. This study seeks to confirm these findings in the Indonesian context, specifically regarding Account Representative performance.

Account Representatives play a strategic role in ensuring taxpayer compliance and providing tax advisory services. In a digital environment, the effectiveness of ARs depends on easy access to information and the ability of technology to support their duties (Thong et al., 2016). A study by Mustapha and Jabar (2022) highlighted that a well-integrated digital system can increase tax officer productivity and reduce administrative errors.

System quality and information quality directly impact user experience in accessing and utilizing the digital tax system. According to Xu et al. (2020), a well-designed information system not only improves efficiency but also creates higher user satisfaction. Therefore, this study examines how the quality of the DGT application system and the quality of the information provided affect AR performance in carrying out tax administration tasks.

This study contributes to the digital tax literature by strengthening understanding of the factors determining the successful implementation of DGT applications in improving AR performance. By utilizing the DeLone and McLean Model, this research is expected to provide insights into DGT policies to improve the effectiveness of digital tax systems and strengthen the capacity of tax human resources.

Although the digitalization of tax administration has been widely implemented, research exploring the direct impact of system quality and information quality on Account Representative performance in the Indonesian tax context remains limited. Most previous studies have focused on the effectiveness of e-government in improving taxpayer compliance (Kim et al., 2019; Wang et al., 2021), but few studies have highlighted the role of the Directorate General of Taxes portal application in improving productivity and the quality of AR services. Furthermore, research on the use of the DeLone and McLean (1992, 2003) model in the tax system is still limited to the international context, while its application in the Indonesian tax system has not been widely studied empirically.

Furthermore, although several studies have examined user satisfaction as a moderating variable in information systems (Petter et al., 2008; Xu et al., 2020), there is still little research that specifically examines how user satisfaction moderates the relationship between system and information quality on AR performance in digital tax systems. This study attempts to fill this gap by analyzing the effect of system quality and information quality on AR performance through user satisfaction, using a Structural Equation Modeling (SEM) approach and a saturated sample of respondents from the South Jakarta Regional Tax Service Office. The purpose of this study is to analyze the effect of system quality (X_1) and information quality (X_2) on performance of Account Representative (AND_2) with the mediation of user satisfaction variables (Y_1). The novelty in this study lies in the application

of the DeLone and McLean Model (1992, 2003) in the context of Indonesian tax administration, which has rarely been studied empirically.

2. THEORETICAL BASIS

Grand Theory: Socio-Technical Theory

Socio-Technical Theory, first developed by Trist & Bamforth (1951) in the context of work systems in the mining industry, emphasizes that system effectiveness is determined not only by the technology used but also by how humans interact with that technology in their social environment. In tax administration, the implementation of digital systems such as the Directorate General of Taxes (DGT) portal application must take into account social factors, such as user adaptation to new technology, training provided to Account Representatives (AR), and how the interaction between humans and the system impacts the quality of tax services. A study by Roth & Farahmand (2023) confirms that the balance between social and technical elements in work systems is crucial to improving user effectiveness and satisfaction, especially in sectors undergoing digital transformation.

Furthermore, research by Roth & Farahmand (2023) shows that information systems developed using Socio-Technical Theory principles can improve work efficiency and user satisfaction by optimizing the interaction between humans and technology. In the context of Indonesian taxation, Account Representatives act as a liaison between taxpayers and the increasingly digitalized tax administration system. Therefore, the successful implementation of DGT applications is determined not only by technical aspects such as system quality and information quality, but also by social factors such as user satisfaction and workforce readiness to face technological changes (Keleher, 2023). Therefore, understanding Socio-Technical Theory in this study provides a broader perspective on how digitalization of tax administration can be optimized through a balance between technology and social aspects that support its effective use.

Middle-Range Theory: DeLone and McLean IS Success Model

The DeLone and McLean IS Success Model (1992, 2003) is used to evaluate the success of information systems based on system quality, information quality, and user satisfaction, which contribute to organizational performance. A study by Petter, DeLone, & McLean (2008) demonstrated the validity of this model in various sectors, including e-government and e-taxation. In this study, the model is used to understand the impact of the Directorate General of Taxes (DGT) portal application on user satisfaction and Account Representative (AR) productivity in tax administration in Indonesia. Research by Wang, Xu, & Li (2021) shows that e-taxation system quality increases taxpayer satisfaction and speeds up administration, while information quality encompasses data accuracy, relevance, and completeness. Using Structural Equation Modeling (SEM), this study explores the relationships between variables and examines how user satisfaction moderates the influence of technology on AR performance, generating academic insights and policy implications for the DGT in developing a more effective and user-oriented digital tax system.

Account Representative Performance

Account Representative (AR) performance in tax administration plays a crucial role in ensuring taxpayer compliance and the effectiveness of fiscal services, as defined by Robbins & Judge (2019) as an individual's effectiveness in carrying out organizational tasks. Mathis & Jackson (2015) asserted that information system quality and data accuracy directly influence work productivity, especially in a digital environment, while DeLone & McLean (2003) emphasized that the success of information systems supports user

performance. A study by Thong et al. (2016) showed that digital tax systems reduce administrative burdens, while research by Mustapha & Jabar (2022) highlighted the importance of digital skills and technology adaptation in e-taxation systems. Furthermore, Wang, Xu, & Li (2021) identified that user satisfaction with digital tax systems strengthens the effectiveness of AR performance, suggesting that system and information quality directly impact tax officer motivation and productivity. Using Structural Equation Modeling (SEM), this study examines user satisfaction as a moderating variable in the relationship between technology and AR performance. This study not only enriches the digital tax literature, but also provides insights for the Directorate General of Taxes in improving the effectiveness of technology-based tax administration to support the efficiency and quality of tax services.

User Satisfaction

User satisfaction is a key factor in evaluating system success. User satisfaction in digital tax administration serves as a key indicator of system effectiveness, as explained in the IS Success Model by DeLone and McLean (2003), which demonstrates the close relationship between system quality, information quality, and user experience. A study by Petter, DeLone, & McLean (2008) confirmed that user satisfaction supports technology adoption, work effectiveness, and productivity in organizational information systems. Research by Wang, Xu, & Li (2021) found that a reliable e-taxation system and accurate information directly increase user satisfaction. In this study, user satisfaction also serves as a moderating variable that strengthens or weakens the influence of system and information quality on Account Representative (AR) performance. Consistent with the findings of Mustapha & Jabar (2022), a digital tax system that considers user experience can improve work efficiency and accelerate the tax administration process. Therefore, this study confirms that user satisfaction not only influences the effectiveness of the digital tax system but also plays a role in optimizing AR performance, ensuring that tax technology truly supports productivity and the quality of tax services.

System Quality

System quality plays a crucial role in the successful implementation of a digital tax system, encompassing aspects of reliability, ease of use, processing speed, and accessibility, as described in the IS Success Model by DeLone and McLean (2003). A stable and intuitive system enables Account Representatives (ARs) to access information quickly and accurately, improving tax administration efficiency (Petter, DeLone, & McLean, 2008). Furthermore, research by Wang, Xu, & Li (2021) found that system quality in e-taxation platforms increases tax personnel productivity and taxpayer satisfaction, while a study by Mustapha & Jabar (2022) identified that technical factors such as data security and system scalability play a role in building user trust in the digital tax system. Therefore, this study confirms that system quality is an independent variable in measuring its impact on user satisfaction and AR performance, and offers strategic policy implications for optimizing technology-based tax administration.

Information Quality

Information quality plays a crucial role in the success of a digital tax system, ensuring that Account Representatives (ARs) have access to accurate, relevant, and up-to-date data, as outlined in the IS Success Model by DeLone and McLean (2003), which demonstrates that information quality directly impacts user satisfaction and work effectiveness. A study by Petter, DeLone, & McLean (2008) confirmed that complete, timely, accurate, and easily understandable information increases user productivity, while research by Xu, Li, & Zhang

(2020) indicates that inaccurate or difficult-to-access information can decrease satisfaction and lead to errors in decision-making. Furthermore, Wang, Xu, & Li (2021) found that improving information quality in the e-taxation system improves work efficiency and taxpayer satisfaction, while a study by Mustapha & Jabar (2022) confirmed that poor information quality hinders work effectiveness, making improved data management a priority in a digital tax system. In this study, information quality is an independent variable measuring the extent to which information in the DGT application contributes to user satisfaction and AR performance, as well as offering strategic policy implications in optimizing technology-based tax administration.

Hypothesis Development
1. The Effect of System Quality (X1) on User Satisfaction (Y1)

System quality plays a crucial role in determining user satisfaction with information systems, as described in the DeLone and McLean (1992, 2003) model, which encompasses reliability, ease of use, accessibility, and responsiveness. A study by Petter, DeLone, & McLean (2008) showed that a stable, fast-processing, and easily accessible system increases user satisfaction, while a study by Xu, Li, & Zhang (2020) found that intuitive design and minimal technical glitches accelerate decision-making in a digital work environment. In the context of digital taxation, the Directorate General of Taxes (DGT) application with a high-quality system contributes to the effectiveness of Account Representatives (ARs), enhancing user satisfaction in completing tax administration. Furthermore, a study by Wang, Xu, & Li (2021) identified that high-quality systems create positive perceptions of technology, increasing user adaptability and productivity. Furthermore, a study by Mustapha & Jabar (2022) showed that ARs working with efficient technology-based systems are more confident and capable of providing optimal services to taxpayers, enhancing overall user satisfaction. Therefore, improving system quality is a top priority in optimizing digital tax administration to enhance productivity and user experience.

H1:   The better the quality of the system, the higher the user satisfaction.

2. The Influence of Information Quality (X2) on User Satisfaction (Y1)

Information quality is a key factor in the success of information systems, particularly in digital tax administration, as explained in the IS Success Model by DeLone and McLean (2003), which emphasizes standards of accuracy, relevance, completeness, and timeliness as crucial elements in enhancing user satisfaction. A study by Petter, DeLone, & McLean (2008) showed that accurate and accessible information enables Account Representatives (ARs) to work more efficiently, accelerates decision-making, and improves the user experience in digital tax systems. Furthermore, a study by Wang, Xu, & Li (2021) identified that high-quality information in e-taxation systems strengthens user trust and satisfaction, while a study by Xu, Li, & Zhang (2020) showed that access to clear and reliable data increases productivity and work effectiveness. Conversely, a study by Mustapha & Jabar (2022) highlighted that inaccurate information can lead to administrative errors and decrease user satisfaction, making improving data management strategies crucial. Therefore, this study proposes the hypothesis that information quality (X2) has a positive effect on user satisfaction (Y1), with the assumption that more accurate, complete, and relevant information will strengthen users' positive perceptions of digital tax applications, ensuring effectiveness and compliance in tax administration.

H2: The better the quality of information, the higher the user satisfaction.

3. The Influence of System Quality (X1) on Performance of Account Representative (Y2)

   System quality plays a crucial role in supporting the effectiveness of Account Representative (AR) work in tax administration, as explained in the DeLone and McLean (2003) Model, which includes reliability, ease of use, accessibility, and processing speed as key factors in increasing user productivity. A study by Petter, DeLone, & McLean (2008) showed that a stable and responsive system enables users to work more efficiently by reducing technical barriers, while research by Wang, Xu, & Li (2021) confirmed that optimal system quality improves the efficiency of tax personnel in carrying out their duties. Conversely, a study by Mustapha & Jabar (2022) highlighted that poor system quality contributes to decreased tax personnel performance due to technical errors, limited access to information, and a lack of system support in handling complex tax transactions. Therefore, this study hypothesizes that system quality (X1) has a positive effect on AR performance (Y2), assuming that the better the quality of the digital tax system, the higher the productivity and accuracy of AR work in handling tax administration.

   H3: The better the quality of the system, the higher the performance of the Account Representative.

4. The Effect of Information Quality (X2) on Performance of Account Representative *(Y2)*

   Information quality plays a crucial role in supporting the effectiveness of Account Representative (AR) work, particularly in digital tax administration. DeLone and McLean (2003) emphasized that good information quality must meet the criteria of accuracy, relevance, completeness, and timeliness, which directly impact user efficiency in carrying out their duties. A study by Xu, Li, & Zhang (2020) showed that a digital tax system with clear and accurate information enables users to make faster decisions and reduces the risk of administrative errors. Furthermore, research by Wang, Xu, & Li (2021) found that information quality in e-taxation significantly impacts tax personnel productivity, particularly in improving their responsiveness to taxpayer inquiries and needs. In the context of the Directorate General of Taxes (DGT) application, incomplete or inaccurate information can hinder AR work efficiency, causing delays in completing tax administration (Mustapha & Jabar, 2022).

   H4: The better the quality of information, the higher the Account Representative's performance will be.

5. The Effect of User Satisfaction (Y1) on Performance *Account Representative*

   User satisfaction plays a crucial role in determining the effectiveness and productivity of digital tax information systems, as explained in the DeLone and McLean (2003) model, which identifies satisfaction as a factor influencing user performance, improving efficiency and work quality. A study by Petter, DeLone, & McLean (2008) showed that users satisfied with the reliability and ease of use of the system had higher productivity levels and experienced fewer administrative obstacles. In the context of the Directorate General of Taxes (DGT), Account Representatives (ARs) who were satisfied with the system were more effective in assisting taxpayers and improving tax compliance. Furthermore, research by Wang, Xu, & Li (2021) confirmed that user satisfaction with the e-taxation system improved the efficiency of tax personnel, particularly in terms of accuracy and speed of service. A study by Mustapha & Jabar (2022) found that a digital tax system designed with user experience in mind improved tax personnel's motivation and work quality. Therefore, this study proposes the hypothesis that user satisfaction (Y1) has a positive effect on AR performance (Y2), with the assumption that a digital tax system that meets user expectations will

strengthen the effectiveness of AR's work in providing taxpayer services and completing tax administration tasks.

H5: The better the user satisfaction, the higher the Account Representative performance.

6. The Influence of User Satisfaction as a Mediator of System Quality on Account Representative Performance

User satisfaction has an important role in bridging the relationship between system quality and Performing Account Representative (AR) in digital tax administration. In DeLone and McLean (2003) model, system quality includes aspect's reliability, ease of use, speed of access, and scalability, all of which contribute to the user experience in using information systems. Studies byPetter, DeLone, & McLean (2008). This study demonstrates that an intuitive and stable system not only improves work efficiency but also impacts user satisfaction, ultimately leading to increased productivity. In the context of the Directorate General of Taxes (DGT) application, good system quality enables AR to complete tax administration faster and with fewer errors, which can increase user satisfaction with the system.

In addition, research byWang, Xu, & Li (2021) found that user satisfaction plays a mediating role in the relationship between technology and user performance in the e-taxation system. Users who are satisfied with the system they use will be more motivated, own better level of adaptation, and are able to utilize system features optimally, thereby increasing their work effectiveness. Study by Mustapha & Jabar (2022) also confirmed that user satisfaction not only improves work efficiency but also strengthens the positive impact of technology on employee productivity.

H6: The better the quality of the system, the higher the Account Representative's performance will be, with user satisfaction as a mediating variable.

7. The Influence of User Satisfaction as a Mediator of Information Quality on Account Representative Performance

User satisfaction acts as a mediating factor that can strengthen or weaken the influence of information quality to kinerja Account Representative (AR)in the digital tax system. In the Model DeLone and McLean (2003), the quality of information includes accuracy, relevance, completeness, and timeliness, which directly impacts the effectiveness of the system user's work. Studies by Petter, DeLone, & McLean (2008). This demonstrates that the information presented in a digital tax system must meet high-quality standards to enable users to make faster and more accurate decisions. In the context of the Directorate General of Taxes (DGT) application, ARs who receive clear and accurate information are more likely to be satisfied with the system and can work more efficiently in handling tax administration.

In addition, research byWang, Xu, & Li (2021) found that user satisfaction acts as a mediating variable that strengthens the relationship between information quality and the effectiveness of tax personnel in the e-taxation system. The study byMustapha & Jabar (2022) confirmed that systems that provide accurate and complete information not only directly improve user performance but also increase their satisfaction, which then impacts productivity and the quality of tax services.

H7: The better the quality of information, the higher the Account Representative's performance will be, with user satisfaction as a mediating variable.

3. METHOD

This study uses a quantitative approach with the Structural Equation Modeling (SEM) method to analyze the relationship between the variables System Quality (X1), Information Quality (X2), User Satisfaction (Y1) as a moderating variable, and Account Representative

Performance (Y2) as a dependent variable. The DeLone and McLean (1992, 2003) model is used as a conceptual framework to evaluate the success of the digital tax information system implemented by the Directorate General of Taxes (DGT).

The population of this study consisted of Account Representatives (AR) who worked at the South Jakarta I Regional Tax Service Office (KPP). The saturated sampling method was used in selecting respondents with a population of 286 ARs, and the returned questionnaires were 76.74%, so the number of respondents in the study was 221 people.

The data collected was analyzed using *Structural Equation Modeling (SEM)*with the help of SmartPLS software which includes two main things, namely Outer Model analysis, and Inner Model analysis, including Moderation Test, namely analyzing how user satisfaction (Y1) strengthens or weakens the relationship between system quality and information quality on AR performance.

The main instrument in this study was a survey questionnaire, which was tested for validity and reliability through instrument testing before being distributed to respondents. Several indicators in this study adapted instruments from previous studies, such as those by Petter, DeLone, & McLean (2008) and Wang, Xu, & Li (2021) on system quality and user satisfaction in e-taxation systems.

4. RESULTS AND DISCUSSION

The SEM method in this study consists of two main stages, namely *Measurement Model (Outer Model)* and *Model Structural* (*Inner Model*). In the evaluation of the outer model, several tests are carried out, such as *Convergent Validity, which* measured by value *loading factor* as well as *Average Variance Extracted* (AVE), *Discriminant Validity*with the method of *Fornell-Larcker Criterion* and *Reliability Test* to ensure the consistency of measurement results. Meanwhile *Model Structural* (*Inner Model*) includes *Path Coefficient* Analysis, *Coefficient of Determination* (R^2), *Effect Size*(f^2) and *Predictive Relevance* (Q^2) to evaluate how much influence the independent variable has on the dependent variable.

1. *Measurement Model (Outer Model)*
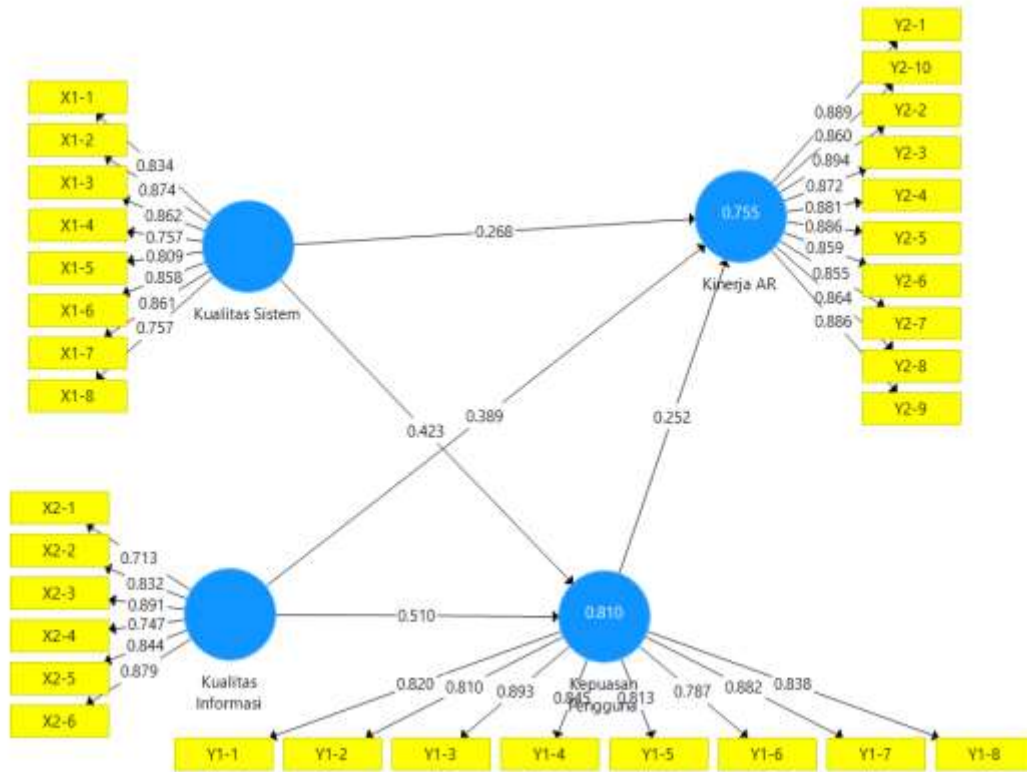
Source: *Output SmartPLS* (2025)
Figure 1. Results*Loading Factor*

Convergent Validity in this study was measured using *loading factor*, which shows the extent to which the indicators can explain the latent variables accurately. Based on the analysis results, all indicators have a value *of loading factor above* 0.70, which indicates that convergent validity is well met (Figure 1).

Discriminant validity is used to assess the extent to which indicators of a latent variable differ from indicators of other latent variables. If the squared AVE of each exogenous construct is greater than the correlation between constructs, then the model has good discriminant validity. *Average Variance Extracted* (AVE) measures the extent to which a latent variable can explain the variance of its indicators. An AVE value > 0.50 indicates that the construct has good convergent validity, ensuring that the indicators in the model truly represent the concept being measured (Table 1). This step indicates that the model not only has good convergent validity but also meets discriminant validity in research data processing (Ghozali, 2016).

Table 1. Mark *Average Variance Extracted* (AVE)

Variables	*Average Variance Extracted* (AVE)	Criteria	Information
System Quality	0.739	>0,5	Valid
Information Quality	0.685	>0,5	Valid
User Satisfaction	0.688	>0,5	Valid
AR Performance	0.783	>0,5	Valid

Source: *Output SmartPLS* (2025)

Table 2. Values of *Fornell-Larcker Criterion*

Variables	User Satisfaction	AR Performance	Information Quality	System Quality
User Satisfaction	0.830			
AR Performance	0.842	0.885		
Information Quality	0.881	0.848	0.827	
System Quality	0.869	0.800	0.839	0.860

Source: *Output SmartPLS* (2025)

The discriminant validity test based on the Fornell-Larcker criteria shows that the square root of the AVE value for each construct is greater than the correlation value between other latent constructs. Based on Table 1, it states that the AVE value has met the criteria of >0.5, and based on Table 2, the square root of the AVE value for all variables is also greater than the correlation value with other latent constructs *cross loading* has met the criteria of a value >0.7. Therefore, it can be said that all variables are considered to meet discriminant validity.

Collinearity testing was conducted using the Variance Inflation Factor (VIF). The four research variables (32 indicators) had VIF values ranging from 1.353 to 4.931. Thus, all VIF values were <5.00, thus concluding that there was no collinearity in the model.

In this study, the test results showed that Cronbach's Alpha and *Composite Reliability*. The four research variables had values above 0.70, indicating the model met the reliability criteria. Thus, all variables in the research model are considered reliable and consistent, allowing them to be used in further analysis.

Table 3.. Value of *Cronbach's Alpha, Composite Reliability* and rho_A

Variables	Cronbach's Alpha	Composite Reliability	rho_A	Criteria	Information
System Quality	0.949	0.958	0.950	>0,7	Reliable
Information Quality	0.906	0.928	0.908	>0,7	Reliable
User Satisfaction	0.935	0.946	0.938	>0,7	Reliable
AR Performance	0.969	0.973	0.970	>0,7	Reliable

Source: *Output SmartPLS* (2025)

Model Fit in PLS-SEM is used to assess the extent to which a research model fits the analyzed data. The Model Fit evaluation is presented in Table 4 below.

Table 4. Test Values of *Model Fit*

Test	Saturated Model	Estimated Model	Criteria	Information
SRMR	0.076	0.076	<0,10	*Model Fit*
d_ULS	3.043	3.043	< 5	*Model Fit*
d_G	10.736	10.736	< 15	*Model Fit*
Chi-Square	5361.613	5361.613		*Model Fit*
NFI	0.493	0.493	0 - 1	*Model Fit*

Source: *Output SmartPLS* (2025)

Based on the Model Fit results above, overall, the model has a good fit.

2. Structural Model (Inner Model)

Structural Model (*Inner Model*) in PLS-SEM is used to evaluate the causal relationship between latent variables in a research model. This model describes how exogenous variables influence endogenous variables based on the theory that has been developed.

a. Path Coefficient

Path coefficient (*path coefficient)* in PLS-SEM is used to measure the direct and indirect relationships between latent variables in the research model, as presented in the following table, and Figure 1.

Table 5. *Direct Effect, Indirect Effect dan Total Effect Path Coefficient*

	Direct Effect		Indirect Effect	Total Effect
	KP	WHAT	WHAT	WHAT
System Quality (KS)	0.423	0.268	0.147	0.415
Information Quality (IP)	0.510	0.389	0.172	0.561
Customer Satisfaction (KP)		0.252		0.252

Source: *Output SmartPLS* (2025)

1) **Direct effect of Equation 1:**
   User Satisfaction = 0.423 System Quality + 0.510 Information Quality
   User satisfaction in this research model is positively influenced by both System Quality and Information Quality, with Information Quality having a greater impact (coefficient 0.510) than System Quality (coefficient 0.423). A reliable, stable, and easily accessible system increases user efficiency, while accurate, relevant, and clear information is more significant in supporting the analysis and decision-making process. Information ambiguity can reduce user satisfaction even if the system is functioning well, so improving information quality is a key factor in strengthening the user experience. The implication of this model is the need to develop systems that not only focus on technical aspects but also ensure the information provided is more transparent, easily accessible, and meets user needs.

2) **Direct effect of Equation 2:**
   AR Performance = 0.268 System Quality + 0.389 Information Quality + 0.252 Satisfaction
   Account Representative (AR) performance at the South Jakarta I Regional Tax Office is influenced by System Quality, Information Quality, and User Satisfaction, with Information Quality having the greatest influence (coefficient 0.389) because accurate and clear information increases AR's effectiveness in managing taxpayer compliance and conducting fiscal policy analysis. System Quality (coefficient 0.268) contributes to AR's work efficiency through reliability and ease of access, while User Satisfaction (coefficient 0.252) plays a role in facilitating tax communication and administration, ensuring that responsive services increase AR productivity. Thus, improving information quality, systems, and user satisfaction are key factors in optimizing AR performance in tax administration.

3) **Indirect Effect**
   User Satisfaction has a value of 0.147, indicating that a better tax system increases taxpayer satisfaction, which ultimately has a positive impact on AR performance. A responsive, efficient, and accessible system helps users complete tax obligations more quickly, reduces administrative barriers, and improves AR work

effectiveness. While system quality has a positive contribution to AR performance, user satisfaction plays a key role in strengthening this impact.

Meanwhile, Information Quality has a higher indirect effect of 0.172, indicating that accurate, transparent, and complete information contributes more to increasing user satisfaction, which ultimately has a positive impact on AR's work effectiveness. With clearer information, taxpayers better understand tax procedures and regulations, thereby reducing errors and increasing compliance. This allows AR to focus more on monitoring and evaluation, rather than handling administrative questions resulting from unclear information. Overall, User Satisfaction acts as a key mediator, ensuring that improvements in system and information quality truly produce optimal impacts on AR performance.

4) Total Effect

In this research model, Information Quality has the greatest influence on Account Representative (AR) Performance with a value of 0.561, indicating that accurate, relevant, and easily accessible information increases AR's effectiveness in tax administration and taxpayer compliance. System Quality also contributes to increased operational efficiency with a value of 0.415, ensuring a stable, responsive, and easy-to-use system helps AR complete tasks more quickly and accurately. Meanwhile, User Satisfaction has an influence of 0.252, indicating that taxpayer experience in using the tax system contributes to AR's work effectiveness, facilitating communication, consultation, and tax compliance. Thus, improving the quality of information, systems, and user experience become a key factor in optimizing AR performance at the DJP South Jakarta Region I.

b. *R-square (R^2)*

Mark *R-square* (R^2) or the coefficient of determination value is used to assess the quality criteria of the model and shows how much variation in the value of a variable influences other variable. Criteria in the test *R-square* (R^2) is a value of more than 0.67 meaning a strong model, a value of 0.33-0.67 meaning a moderate model or moderate and a value of 0.19 – 0.33 means the model is weak, and less than 0.19 means it is very weak. (Ghozali, 2016; Chin, 1988). The following are the results of the data testing of *R-square* (R^2) obtained:

Table 6. Mark *R-square (R^2)*

Variables	R-square	R-square adjusted	Information
User Satisfaction	0.810	0.808	Strong
Performance of Account Representative	0,755	0.751	Strong

Source: *Output SmartPLS* (2025)

The R-square (R²) value in this study shows that User Satisfaction has an R² of 0.810 and Account Representative Performance has an R² of 0.755, with adjusted R² of 0.808 and 0.751, respectively. Both variables have relatively strong values, indicating that System Quality and Information Quality are able to explain variations in User Satisfaction quite highly, and User Satisfaction plays a significant role in influencing AR Performance at the DJP South Jakarta Region I. These results confirm that the research model has a good level of accuracy in explaining the relationship between variables, strengthening the finding that optimization of tax systems and information should be a priority to improve AR satisfaction and performance.

c. F-square (F^2)

F-Square (f^2) in PLS-SEM is used to assess the effect size (*effect size*) of exogenous variables to endogenous variables.

Table 4.7.Mark *F-square* (F^2)

Variables	User Satisfaction	Effect	AR Performance	Effect
System Quality	0.340	Currently Big	0.022	Small
Information Quality	0.464		0.154	Currently
User Satisfaction			0.080	Small

Based on the F-square (F^2) value in this study, Information Quality has the largest effect on User Satisfaction (0.464, large category), indicating that accurate, relevant, and transparent information contributes significantly to taxpayers' experience in using the tax system. System Quality has a moderate effect on User Satisfaction (0.340), confirming that reliability, ease of access, and system efficiency play an important role in increasing user satisfaction, although still lower than the impact of information quality.

On Account Representative (AR) Performance, Information Quality has a moderate effect (0.154), indicating that the clarity and accuracy of information support AR productivity in managing taxpayer compliance. User Satisfaction has a small effect on AR Performance (0.080), indicating that although satisfied users are more cooperative, the main factors influencing AR effectiveness still come from the system and the information provided. System Quality has a very small effect on AR Performance (0.022), confirming that system improvements need to be optimized in conjunction with information quality improvement strategies to strengthen the impact on AR effectiveness.

d. Predictive Relevance (Q^2)

Predictive Relevance(Q^2) in PLS-SEM is used to assess the model's ability to predict endogenous variables based on the blindfolding procedure. With an R-square of 0.810 for User Satisfaction and 0.755 for Performance *Account Representative*, then Q^2 can be calculated using the formula:

$$Q^2 = 1 - (1 - R_1^2)(1 - R_2^2)$$
$$1 - (1 - 0.810)*(1 - 0.755) = 0.953$$

Mark **Q^2 = 0.953** shows that the exogenous variables provide a very good contribution in explaining the endogenous variables, so that the model not only has a strong fit but also has very high predictive power for the sample data used.

3. Hypothesis Testing

With a significance level of 5%, or a t-table value of 1.96, it is a reference in determining whether a relationship in the research model is significant or not.

Table 8. Hypothesis Testing

Variables	Original sample (O)	T statistics (|O/STDEV|)	P-values	Information	Hypothesis Testing
KS ☐ KP	0.510	4.833	0.000	+ dan Say.	H1: Accepted
TO ☐ KP	0.423	6.516	0.000	+ dan Say.	H2: Accepted

KS □ WHAT	0.268	2.781	0.009	+ dan Say.	H3: Accepted
TO □ WHAT	0.389	3.613	0.001	+ dan Say.	H4: Accepted
KP □ WHAT	0.252	2.644	0.013	+ dan Say.	H5: Accepted
KS□ KP □ WHAT	0.147	6.146	0.000	+ dan Say.	H6: Accepted
TO□ KP □ WHAT	0.172	5.102	0.000	+ dan Say.	H7: Accepted

Source: *Output SmartPLS* (2025)

Information:
KS   =   System Quality
TO   =   Information Quality
KP   =   User Satisfaction
WHAT   =   AR Performance

Based on the research objectives, namely to determine the influence of system quality (X_1), and information quality (X_2) to user satisfaction (Y_1) and performance of Account Representative (AND_2) as explained in the research paradigm chart can be stated as shown in the following figure. Based on the image of the relationship between the variables, the hypothesis testing and structural equation model can be stated that Hypothesis 1 to Hypothesis 7 is accepted, as described in the following discussion.

Discussion
1. The Influence of System Quality on User Satisfaction

System quality plays a crucial role in determining user satisfaction with information systems, as explained in the DeLone and McLean (2003) model, which encompasses aspects of reliability, ease of use, accessibility, and processing speed. A study by Petter, DeLone, & McLean (2008) confirmed that an intuitive, responsive, and stable system enhances the user experience in accessing technology. In the context of digital taxation, a user-friendly and well-integrated system enables Account Representatives (ARs) to complete tax administration more efficiently, reducing work barriers, and increasing taxpayer satisfaction (Wang, Xu, & Li, 2021). Conversely, technical barriers such as limited data access or frequent system disruptions can reduce user satisfaction and hinder work effectiveness (Mustapha & Jabar, 2022). Therefore, this study emphasizes that improving system quality is a top priority in optimizing digital tax services, as a more reliable, faster, and easier-to-use system will increase user productivity and strengthen the effectiveness of tax administration.

2. The Influence of Information Quality on User Satisfaction

Information quality plays a crucial role in improving user satisfaction in digital tax systems, as explained in the IS Success Model by DeLone and McLean (2003), which emphasizes standards of accuracy, relevance, completeness, and timeliness. A study by Petter, DeLone, & McLean (2008) confirmed that inaccurate or incomplete information can reduce user trust and hinder decision-making, while research by Xu, Li, & Zhang (2020) showed that Account Representatives (ARs) who receive clear and accurate information are more likely to have positive perceptions of the system, increasing user satisfaction. Furthermore, Wang, Xu, & Li (2021) found that high-quality information in e-taxation systems accelerates tax administration and increases trust in the digital system, while a study by Mustapha & Jabar (2022) showed that accurate information in the tax system helps reduce administrative errors and increases tax personnel productivity. Therefore, improving information quality should be a top priority, as the better the information provided, the higher the level of user satisfaction in carrying out tax administration tasks.

3. **The Influence of System Quality on Account Representative Performance**

System quality in a digital environment plays a significant role in improving Account Representative (AR) performance in tax administration, as explained in the IS Success Model by DeLone and McLean (2003), which emphasizes reliability, responsiveness, and ease of access as key factors. A study by Petter, DeLone, & McLean (2008) showed that a well-integrated system helps users complete administrative tasks more quickly and accurately, while research by Xu, Li, & Zhang (2020) found that poor system quality can hinder tax personnel productivity due to limited data access and technical disruptions. Furthermore, Wang, Xu, & Li (2021) emphasized that data security, scalability, and a user-friendly interface in an e-taxation system contribute to AR work efficiency, while a study by Mustapha & Jabar (2022) showed that a digital tax system that focuses on user experience can improve AR work motivation and accuracy. Therefore, this study confirms that a more stable and reliable system plays a role in increasing productivity and the quality of tax services, making it an essential factor in optimizing tax administration.

4. **The Influence of Information Quality on Account Representative Performance**

System quality in a digital environment plays a significant role in improving Account Representative (AR) performance in tax administration, as explained in the IS Success Model by DeLone and McLean (2003), which emphasizes reliability, responsiveness, and ease of access as key factors. A study by Petter, DeLone, & McLean (2008) showed that a well-integrated system helps users complete administrative tasks more quickly and accurately, while research by Xu, Li, & Zhang (2020) found that poor system quality can hinder tax personnel productivity due to limited data access and technical disruptions. Furthermore, Wang, Xu, & Li (2021) emphasized that data security, scalability, and a user-friendly interface in an e-taxation system contribute to AR work efficiency, while a study by Mustapha & Jabar (2022) showed that a digital tax system that focuses on user experience can improve AR motivation and work accuracy. Therefore, this study confirms that a more stable and reliable system plays a role in increasing productivity and the quality of tax services, making it an essential factor in optimizing tax administration.

5. **The Influence of User Satisfaction on Account Representative Performance**

User satisfaction in the digital tax system has **significant impact** on Account Representative (AR) performance, as explained in the IS Success Model by DeLone and McLean (2003), which emphasizes that user satisfaction not only reflects system success but also contributes to the motivation and productivity of tax personnel. A study by Petter, DeLone, & McLean (2008) confirmed that high user satisfaction increases their work effectiveness by encouraging optimal system utilization and reducing operational barriers. In the context of the Directorate General of Taxes (DGT), ARs who are satisfied with the system are able to provide faster and more accurate services, improving the quality of tax administration (Wang, Xu, & Li, 2021). Research by Mustapha & Jabar (2022) found that satisfaction with the e-taxation system positively impacts work efficiency and the accuracy of tax transactions, and contributes to increased adaptation to technology and optimization of available features in the system. Furthermore, a study by Xu, Li, & Zhang (2020) showed that satisfied users are more productive and experience lower levels of work stress than those who encounter technical difficulties. Therefore, this study confirms that user satisfaction plays a role in increasing AR work motivation and the effectiveness of tax

administration, with the assumption that a more responsive system that meets user expectations will strengthen the performance of tax personnel in providing optimal services.

6. User Satisfaction Mediates the Effect of System Quality on Account Representative Performance

User satisfaction acts as a mediating variable in the relationship between system quality and Account Representative (AR) performance in digital tax administration, as explained in the DeLone and McLean (2003) model, which includes reliability, ease of use, access speed, and scalability as key factors in user experience. A study by Petter, DeLone, & McLean (2008) showed that a stable, responsive, and intuitive system increases user satisfaction, which directly impacts their productivity in carrying out administrative tasks. In the context of the Directorate General of Taxes (DGT), a system designed according to user needs not only improves work efficiency but also strengthens positive perceptions of digital tax technology. Furthermore, research by Wang, Xu, & Li (2021) confirms that user satisfaction acts as a mediating variable that strengthens the relationship between system quality and work effectiveness in the e-taxation system, while a study by Mustapha & Jabar (2022) shows that satisfied users are more motivated, adaptable to technology, and able to optimize system features, ultimately improving their work effectiveness. Therefore, this study confirms that a more reliable and user-friendly system will improve user experience, strengthening the positive impact of system quality on AR productivity in digital tax administration.

7. User Satisfaction Mediates the Effect of Information Quality on Account Representative Performance

User satisfaction acts as a mediating variable in the relationship between information quality and Account Representative (AR) performance in digital tax systems, as explained in the DeLone and McLean (2003) model, which includes accuracy, relevance, completeness, and timeliness as key factors in information system effectiveness. A study by Petter, DeLone, & McLean (2008) showed that accurate and reliable information not only improves decision-making but also increases user satisfaction with the system. Meanwhile, research by Xu, Li, & Zhang (2020) confirmed that ARs who receive complete and relevant tax information are more productive in handling administration and provide better services to taxpayers. Furthermore, a study by Wang, Xu, & Li (2021) found that user satisfaction not only influences acceptance of the digital tax system but also strengthens the relationship between information quality and AR work efficiency. Research by Mustapha & Jabar (2022) showed that relevant and easily accessible data in digital tax systems increases the motivation and effectiveness of tax personnel, which has a positive impact on overall tax administration. Therefore, this study confirms that user satisfaction mediates the influence of information quality on AR performance, with the assumption that a system that provides high-quality information will strengthen the productivity and effectiveness of tax personnel in carrying out their administrative tasks.

5. CONCLUSION

This research confirms that digitizing tax administration through the Directorate General of Taxes (DGT) portal application plays a crucial role in improving the performance of Account Representatives (ARs). In the era of digital transformation,

utilizing high-quality information systems is key to creating efficiency and effectiveness for ARs in handling tax administration and providing services to taxpayers.

The research results show that system quality and information quality have a positive and significant impact on user satisfaction and AR performance. A digital tax system designed with reliability, accessibility, and processing speed allows users to work more optimally. Furthermore, information quality, including data accuracy, relevance, and completeness, directly contributes to AR productivity in handling tax administration.

User satisfaction has been shown to play a mediating role, strengthening the relationship between system quality and information quality on AR performance. Users who are satisfied with the digital tax system are more likely to be highly motivated, improve their technology adaptation, and be more productive in carrying out their tasks. This aligns with the DeLone and McLean (2003) model, which states that user satisfaction is a crucial factor in optimizing technology-based information systems.

The findings of this study have strategic implications for the Directorate General of Taxes (DGT) in improving the effectiveness of its digital tax system. By improving system and information quality, the DGT can increase user satisfaction and tax personnel efficiency. Therefore, the DGT needs to conduct regular evaluations, improve data security, and ensure the information available in the system remains relevant and accurate to optimize AR performance.

This study contributes to the digital taxation literature by testing the DeLone and McLean (2003) model in the context of Indonesian tax administration, a previously understudied empirical context. Furthermore, the use of Structural Equation Modeling (SEM) provides a more comprehensive methodological approach to analyzing the relationships between research variables.

Overall, this study shows that system quality and information quality in the DGT application contribute significantly to user satisfaction and Account Representative performance. Effective digitalization of tax administration depends not only on the technology itself but also on how users interact with the system. Therefore, achieving optimal digital transformation requires an interdisciplinary approach encompassing technical, policy, and user experience aspects of the digital tax system.

While this study provides in-depth insights into tax digitalization, several limitations warrant consideration. This study focused solely on Account Representatives at the South Jakarta I Tax Office (KPP), so the results require further testing in other regions to ensure the study's external validity. Furthermore, a quantitative approach using a perception-based survey may have limitations in capturing the operational dynamics of the digital tax system in greater depth.

6. BIBLIOGRAPHY

Al-Sharaa, M. H. A., Iahad, N. A., & Abu Yazid, M. H. (2024). Research in Strategic Information Systems (SIS): Review and Future Research Opportunities. *International Journal of Academic Research in Business and Social Sciences, 14*(12), 250–267. https://doi.org/10.6007/IJARBSS/v14-i12/24125

Roth, K., & Farahmand, K. (2023). A study of current socio-technical design practices in the Industry 4.0 context among small, medium, and large manufacturers in Minnesota and North Dakota. *Sustainability, 15*(23), 16438. https://doi.org/10.3390/su152316438

DeLone, W. H., & McLean, E. R. (1992). Information systems success: The quest for the dependent variable. *Information Systems Research, 3*(1), 60–95.

DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems, 19*(4), 9–30.

Gupta, A., Yadav, A., & Saini, M. (2020). Digital taxation transformation: Challenges and benefits. *International Journal of Business and Economics, 5*(2), 112–130.

Kim, Y., Lee, J., & Choi, S. (2019). Impact of e-taxation on taxpayer satisfaction and compliance. *Journal of Public Administration and Policy Research, 11*(1), 22–34.

Keleher, M. (2023). Exploring privacy implications of devices as social actors. *Carleton University, Master's Thesis*. https://chorus.scs.carleton.ca/wp-content/papercite-data/pdf/keleher2023thesis-carleton.pdf

Mustapha, S., & Jabar, A. (2022). The effectiveness of e-tax administration and revenue generation. *International Journal of Tax Policy, 7*(3), 55–68.

Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: Models, dimensions, measures, and interrelationships. *European Journal of Information Systems, 17*(3), 236–263.

Thong, J. Y. L., Hong, W., & Tam, K. Y. (2016). Understanding user acceptance of digital taxation systems. *Information & Management, 53*(4), 451–466.

Trist, E., & Bamforth, K. (1951). Some social and psychological consequences of the longwall method of coal-getting. *Human Relations, 4*(1), 3-38.

Wang, H., Xu, Y., & Li, Z. (2021). The relationship between e-government services and taxpayer satisfaction. *Journal of Digital Public Services, 9*(2), 98–115.

Xu, Y., Li, H., & Zhang, L. (2020). Evaluating the performance of electronic tax systems: A user satisfaction approach. *Computers in Human Behavior, 106*, 106268.