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Analysis of the Acceptance of the Local Tax Administration System Using the Technology Acceptance Model (TAM)

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ABSTRACT: Local governments continuously strive to provide the best public services to their citizens, one of which is tax administration services through digital platforms. Each region faces unique challenges in developing an online system for local tax administration, making it crucial to understand the factors influencing the effectiveness of these services. This study uses the Technology Acceptance Model (TAM) as a conceptual framework and Partial Least Squares Structural Equation Modelling (PLS-SEM) using the Smart PLS application to analyze the factors affecting the acceptance of the Local Tax Administration System (SiPAD) by 131 taxpayers in Boyolali Regency. The results of hypothesis testing reveal that experience, compatibility, complexity, perceived ease of use, and perceived usefulness have varying impacts on the acceptance of SiPAD, with three hypotheses accepted and seven rejected. These findings underscore the importance of making SiPAD user-friendly, compatible, and perceived as useful to enhance the efficiency and effectiveness of tax administration and increase local tax revenue. The study also highlights the need for adequate training and socialization for taxpayers to keep pace with rapid technological developments. A well-implemented system is expected to expand the taxpayer base and support the success of local tax administration reforms.

Keywords: Local Tax Administration, Digital Tax Services, Technology Acceptance Model (TAM), Partial Least Squares Structural Equation Modelling (PLS-SEM), Taxpayer Adoption.

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INTRODUCTION

The Online Service Index, Telecommunications Index, and Human Capital Index are the three indices that make up the E-Government Development Index (EGDI). Indonesia was rated 107th out of all countries in 2018. In comparison to other ASEAN nations like Singapore, Malaysia, Brunei Darussalam, Thailand, the Philippines, and Vietnam, Indonesia is ranked far lower. Enhancing knowledge and proficiency in information and communication technology (ICT) and ICT infrastructure is severely hampered by this circumstance (Maulana, 2020).

E-government has been applied in various contexts, ranging from online government services to the electronic exchange of information and services with citizens, businesses, and other governmental entities. Historically, e-government has been viewed as the implementation of

information and computer technology to improve the efficiency of government institutions and deliver online public services(Nations, 2023)

Evidence shows that e-government can enhance equity, accountability, and transparency in delivering public services. Moreover, it improves bureaucratic efficiency and effectiveness and encourages stakeholder participation in public policy formulation. Since enacting Presidential Instruction No. 3 of 2003 on National Policy and Strategy, Indonesia has implemented e-government for almost twenty years. However, its implementation has not achieved optimal results, as it has not been evenly applied and remains below the average level in ASEAN (R. A. Nugroho & Purbokusumo, 2020).

In implementing e-government at the local government level, three crucial issues arise: first, local autonomous governments' initiatives and understanding regarding e-government implementation tend to be isolated. Second, the implementation through regional websites is hindered by ineffective management systems and workflows due to regulatory, procedural, and human resource limitations. Third, many local governments identify e-government implementation merely as the creation of government websites (web presence), causing the process to stall at the maturation stage without progressing to subsequent stages (Wirawan, 2020)

To improve the performance of internet-based government service delivery, the government must identify and address obstacles that reduce user satisfaction with electronic services. To increase consumer willingness to continue using electronic services offered by the government, it is essential to effectively address barriers such as website design, online service quality, and privacy assurance (Chen et al., 2015). The primary goal of implementing online government services is to enhance accessibility and convenience in delivering essential government services to users (Carter & Bélanger, 2005). However, citizens exhibit lower satisfaction levels with electronic services due to various factors, including inadequate digital literacy, distrust in the system, and confusion arising from unclear instructions (Lee et al., 2011).

A total of 2,088 accessibility violations were found on 34 provincial government websites in Indonesia, indicating a lack of attention to accessibility in e-government services. These violations were categorized as severe, critical, and minor, with 24 types of errors based on WCAG 2.1 (Web Content Accessibility Guidelines) (Amaliah et al., 2023). As local governments compete to develop sophistication, the information provided is effectively accessible to all segments of society.

This study focuses on Boyolali Regency, one of the regencies in Central Java Province, Indonesia, which has implemented the Local Tax Information System (SIPAD) in its Government processes. The primary objective of this research is to examine the variables influencing SIPAD acceptance by local taxpayers using TAM as a conceptual framework. Key elements to be determined include perceived usefulness, perceived ease of use, and social and environmental factors that may affect SIPAD acceptance by local taxpayers.

In measuring the performance of local tax revenue, Tax Ratio and Tax Effort are two leading indicators. Tax Ratio is the percentage of local tax revenue to GRDP, showing the contribution of taxes to the local economy. At the same time, Tax Effort measures the efficiency of the government in collecting taxes compared to its potential. In the 2015-2019 period, Boyolali Regency's Tax

Effort was 0.488, placing it 48th out of 113 districts/cities in Java, far below Surakarta City, which ranked 8th with a value of 0.732 and a Tax Ratio of 0.92%. Although the efficiency of tax collection in Boyolali is still low, the level of tax revenue is not that bad with a Tax Ratio of 0.69%, ranking it 28th. The Boyolali District Government is known for its progressive initiatives and policies in local tax management, making it an informative case study for tax administration best practices.

The outcomes of this study are anticipated to furnish the Boyolali Regency Financial Agency and relevant stakeholders with critical insights necessary for formulating effective strategies and policies aimed at enhancing taxpayer engagement with SIPAD. Widespread implementation of SIPAD is expected to increase tax administration efficiency and broaden the taxpayer base. Taxpayers' use of SIPAD will facilitate the achievement of these objectives by reducing administrative burdens, enhancing accessibility, and streamlining tax administration procedures. Therefore, identifying the determining factors that influence SIPAD acceptance by taxpayers is crucial for developing approaches to increase its usage.

The Technology Acceptance Model (TAM), created by Davis in 1987, is a conceptual framework used to study technology acceptance. TAM states that technology adoption is influenced by individuals' perceptions of usefulness and ease of use. Perceived usefulness refers to individuals' assessments of the benefits obtained from using the technology, while perceived ease of use relates to individuals' evaluations of the simplicity of using the technology (Dorasamy et al., 2010).

The object of this research is the local taxpayers' perception of using the Local Tax Administration System. The Local Tax Administration System was officially introduced and launched in 2018. This system is expected to help taxpayers fulfill their tax obligations, such as calculating, paying, and printing documents related to local tax obligations. Five years after the Local Tax Administration System was implemented, it is time to evaluate its usage based on responses from local taxpayers in Boyolali.

This study employs the Technology Acceptance Model (TAM) to explore and analyze the behavior of taxpayers in accepting and using the Local Tax Administration System. TAM helps identify the main factors influencing users' intentions and behaviours when receiving and using technology. The primary constructs of TAM include actual system use, attitude toward using, perceived usefulness, and perceived ease of use. This study adopts the technology acceptance model and expands it with other factors tested in previous research: experience, compatibility, and complexity, providing practical insights into taxpayer behavior that can be applied in the field of public administration.

Experience, the experience variable in the Technology Acceptance Model (TAM) considers users' previous experiences with technology and how this influences their attitudes and intentions toward new technology. Positive previous experiences with similar technology can increase perceptions of usefulness and ease of use of new technology, affecting the intention to use it (Dishaw & Strong D M, 1999). Previous user experiences can influence users' intentions to adopt a new system or technology because users with positive experiences tend to be more open to new technology and have more positive attitudes toward it (Jackson et al., 1997). Based on the theory above, the hypotheses in this study are as follows:

H1: Experience has a positive and significant influence on perceived usefulness.

H4: Experience has a positive and significant influence on perceived ease of use.

Compatibility, in the acceptance of IT innovation, the "compatibility" variable refers to the extent to which users perceive IT innovation as consistent with their task needs or work environment. The "compatibility" factor significantly influences users' perceptions and acceptance of IT innovation. If users feel that the IT innovation fits their needs, they are more likely to accept and adopt the technology. Conversely, incompatibility can be a barrier to the acceptance of IT innovation (Xia & Lee, 2000). Based on the theory above, the hypotheses in this study are as follows:

H2: Compatibility has a positive and significant influence on perceived usefulness.

H5: Compatibility has a positive and significant influence on perceived ease of use.

Complexity, complexity refers to the level of difficulty or intricacy in learning and using technology. In TAM, complexity is a factor that influences the perceived ease of use of a technology. The more complex a technology is, the more difficult it is for users to learn and use, which in turn can reduce the likelihood of technology adoption. Research has shown that the easier users can master technology and the more intuitive the user interface, the higher the likelihood of adoption. Based on the theory above, the hypotheses in this study are as follows:

H3: Complexity has a positive and significant influence on perceived usefulness.

H6: Complexity has a positive and significant influence on perceived ease of use.

Perceived Ease of Use, perceived ease of use encompasses the extent to which consumers feel it is easy or difficult to use information services (Davis, 1989). The perceived ease of use construct is only significant during the initial period of adopting and using the system and becomes insignificant during extended and continuous usage (Venkatesh et al., 2003). Based on the theory above, the hypotheses in this study are as follows:

H7: Perceived ease of use has a positive and significant influence on perceived usefulness.

H9: Perceived ease of use has a positive and significant influence on attitude toward using.

Perceived Usefulness, in a broad sense, perceived usefulness relates to the extent to which consumers believe using the information system services will enhance their performance (Seddon, 1997). Consumers can use e-filing services if they believe that using the system can improve their efficiency or save time when performing various transactions. Based on the theory above, the hypotheses in this study are as follows:

H8: Perceived usefulness has a positive and significant influence on attitude toward using.

Attitude Toward Using is a positive or negative evaluation of performing the related behavior. These attitudes are shaped by beliefs, social norms derived from normative beliefs, motivation to comply, and perceived behavioral control, which is influenced by beliefs regarding the availability of opportunities and resources required to perform the behavior(Ajzen, 1985). Based on the theory

above, the hypotheses in this study are as follows:

H10: Attitude toward using has a positive and significant influence on actual system use.

Actual System Use. The actual system use variable in the original Technology Acceptance Model (TAM) refers to users' real actions in using the system or technology under consideration after they form the intention to use it. Actual system use measures the extent to which users apply the technology or system in their daily activities after developing the intention to do so based on their perceptions of usefulness and ease of use (Davis, 1987).

METHOD

The research method used in this study is a quantitative method based on positivism philosophy. This approach is employed to test hypotheses with a focus on a specific population or sample. Data is collected using research instruments, and the subsequent analysis is performed using quantitative and statistical techniques (Sugiyono, 2016). The research data was collected through purposive sampling, with sample criteria being in Boyolali District and having used the Online Tax System. The questionnaire was distributed online via Google Forms to local taxpayers in Boyolali District.

Data testing includes validity tests (construct validity) through convergent validity and discriminant validity and reliability tests using Cronbach Alpha and Composite Reliability (Ghozali, 2008). The data analysis involves descriptive statistics to describe respondent identities and variables in percentages. Further analysis uses the PLS (Partial Least Square) model with the Smart PLS application, which includes structural model design, construct measurement, path diagram estimation, parameter evaluation, goodness of fit evaluation, and hypothesis testing using the Bootstrap method (Wiyono, 2011).

The application of Partial Least Squares Structural Equation Modelling (PLS-SEM) and the TAM in this research is warranted by their appropriateness for investigating intricate interactions among variables in prediction frameworks. PLS-SEM is especially beneficial for examining smaller samples and non-normally distributed data commonly found in practical public administration research, such as taxpayer behavior. The TAM, extensively utilized in technology adoption research, provides a comprehensive framework for analyzing how perceived ease of use and usefulness affect the acceptability of digital tax systems such as SiPAD. This methodology offers insights into local tax administration systems while enabling greater adaptation and comparison in global contexts, rendering it helpful for both theoretical and practical consequences. The parameters tested are as follows:

Table 1. Parameter Test

Parameter Test	Value
Validity Test	
Convergence Validity:	
Loading Factor	> 0,7
Average Variance Extracted (AVE)	> 0,5
Discriminant Validity:	

Fornell Larcker Criterion or HTMT Cross Loading	AVE > correlation between constructs loading factor value> cross loading value
Reliability Test	
Composite Reliability Cronbach's Alpha	> 0.7 correlation between constructs 0.7
Testing the Significance of the Direction of Relationship based on the t-statistic value or p-value	t-statistic > 1,96, or p-value < 0,05

Source: processed by the author (2023)

Based on the theoretical review above, the following table shows the indicators for this study:

Table 2. Measurement scales

Constructs	Items	Measures
Experience	EXP1	I often use the Boyolali Regency Local Tax Information System (SiPAD)
	EXP2	I have a lot of experience in resolving errors in the Boyolali Regency Local Tax Information System (SiPAD). I master the Boyolali Regency Local Tax Information System (SiPAD) based on previous experience
	EXP3	I mastered the Boyolali Regency Local Tax Information System (SiPAD) based on previous experience
	EXP4	I have experience in using technology similar to the Boyolali Regency Local Tax Information System (SiPAD)
Compatibility	COM1	The features of the Boyolali District Local Tax Information System (SiPAD) system suit my needs.
	COM2	Using the Boyolali District Local Tax Information System (SiPAD) matches my work style
	COM3	The development of the Boyolali Regency Local Tax Information System (SiPAD) is very suitable for my current situation
Complexity	COMP1	The development of the Boyolali Regency Local Tax Information System (SiPAD) is very suitable for my current situation
	COMPL2	The visual display (user interface) of the Boyolali District Local Tax Information System (SiPAD) is confusing
	COMPL3	There are many features of the Boyolali District Local Tax Information System (SiPAD) that I do not use
	COMPL4	I need a lot of time and effort that you need to use the Boyolali Regency Regional Tax Information System (SiPAD)
Perceived Ease of Use	PE1	It is easy for me to learn and use the Boyolali District Local Tax Information System (SiPAD)
	PE2	User manuals, error catalogs, and auxiliary functions of the Boyolali Regency Local Tax Information System (SiPAD) are easy to understand and clear

Constructs	Items	Measures
	PE3	In general, the Boyolali Regency Online Regional Tax Information System (SiPAD) application is very user-friendly or easy to use
Perceived Usefullnes	PU1	The use of the Boyolali Regency Regional Tax Information System (SiPAD) system can improve my tax reporting performance
	PU2	The use of the Boyolali District Local Tax Information System (SiPAD) system can increase the effectiveness of my tax reporting
	PU3	The use of the Boyolali District Local Tax Information System (SiPAD) can improve simplify my tax reporting
	PU4	I often encounter errors in the Boyolali Regency Regional Tax Information System (SiPAD) system
Attitude Toward Using	ATU1	I feel comfortable using the Boyolali Regency Local Tax Information System (SiPAD)
	ATU2	I believe that the Boyolali Regency Local Tax Information System (SiPAD) helps me carry out tax obligations more efficiently
	ATU3	I feel frustrated when using the Boyolali Regency Local Tax Information System (SiPAD)
Actual System Use	ASU1	Compared to other tax administration systems, I use the Boyolali Regency Local Tax Information System (SiPAD) as my first choice for reporting and paying taxes.
	ASU2	I always use the Boyolali District Local Tax Information System (SiPAD) to fulfill my tax administration obligations.
	ASU3	I understand and have utilized the features/functions of the Boyolali District Local Tax Information System (SiPAD) in carrying out my tax administration.

RESULT AND DISCUSSION

Demographic Profile of Respondents.

The study collected a total of 131 valid responses; the characteristics of the study respondents are summarized in Table 3. Of these respondents, 84 people (64.1%) were female, while 47 people (35.9%) were male. The education level of most respondents was senior high school, with a total of 93 people (71.0%). Furthermore, there were 26 respondents with a diploma/graduate/master/doctorate level of education (19.8%) and 12 respondents with a junior high school level of education (9.2%). A total of 121 respondents (92.4%) were business owners, and 10 respondents (7.6%) were employees. Regarding the type of business, 67 respondents (51.1%) were involved in trading businesses, 42 respondents (32.1%) were in culinary businesses, and the rest came from service, industry, agriculture, livestock, and fishery businesses.

Table 3. Demographic Profile of Respondents

Variable	Category	Frequency	Percentage
Gender	Male	47	35,9%
	Female	84	64,1%
Level of Education	Elementary School	0	0,0%
	Junior High School	12	9,2%
	Senior High School	93	71,0%
	University	26	19,8%
Position	Employee	10	7,6%
	Owner	121	92,4%
Type of Business	Service	9	6,9%
	Culinary	42	32,1%
	Trade	67	51,1%
	Industry	6	4,6%
	Agriculture, Farm, Fisheries	7	5,3%

Source: processed by the author (2023)

Measurement Model Results

The two-stage PLS-SEM procedure involves assessing the measurement model for validity and reliability, followed by assessing the structural model for hypothesis testing. Construct validity consists of two parts: convergent validity and discriminant validity.

Convergent validity test results with loading factor values

Based on the data taken from the sample data in Table 2 above, the results of the convergent validity test with the loading factor value of each indicator are more than 0.7, so the sample data is valid as shown in Table 4 below:

Table 4. Factor loadings for measurements

Variable	Indicator	Outer Loadings
Actual System Use (ASU)	ASU1	0,955
	ASU2	0,889
	ASU3	0,894
Attitude Toward Using (ATU)	ATU1	0,955
	ATU2	0,934
	ATU3	0,880
Compatibility (COM)	COM1	0,834
	COM2	0,908
	COM3	0,940
Complexity (COMP)	COMP1	0,879
	COMP2	0,853
	COMP3	0,852
	COMP4	0,859
Experience (EXP)	EXP1	0,865

	EXP2	0,822
	EXP3	0,874
	EXP4	0,826
Perceived Ease of Use (PE)	PE1	0,914
	PE2	0,915
	PE3	0,922
Perceived Usefulness (PU)	PU1	0,896
	PU2	0,871
	PU3	0,865
	PU4	0,904

Source: processed by the author (2023)

Convergent validity test results with average variance extracted (AVE) values

AVE values are obtained through PLS algorithms for valid indicators. As illustrated in Table 4 below, all AVE values exceed the 0.5 threshold, as required by the established criteria. This result further confirms the convergent validity of the construct.

Table 5. Results of average variance extracted (AVE), Composite Reliability (CR), Cronbach's Alpha (CA)

	Cronbach's alpha	**Composite reliability (rho_a)**	**Composite reliability (rho_c)**	**Average variance extracted (AVE)**
Asu	0,902	0,959	0,938	0,834
Atu	0,914	0,926	0,946	0,854
Com	0,875	0,879	0,923	0,801
Com	0,884	0,893	0,920	0,741
Exp	0,869	0,880	0,910	0,717
Pe	0,907	0,907	0,935	0,782
Pu	0,906	0,906	0,941	0,841

Source: processed by the author (2023)

Table 6. Results of average variance extracted (AVE), Composite Reliability (CR), Cronbach's Alpha (CA)

	Cronbach's alpha	**Composite reliability (rho_a)**	**Composite reliability (rho_c)**	**Average variance extracted (AVE)**
Asu	0,902	0,959	0,938	0,834
Atu	0,914	0,926	0,946	0,854
Com	0,875	0,879	0,923	0,801
Com	0,884	0,893	0,920	0,741
Exp	0,869	0,880	0,910	0,717
Pe	0,907	0,907	0,935	0,782
Pu	0,906	0,906	0,941	0,841

Source: processed by the author (2023)

Discriminant Validity using Fornell-Larcker.

The criteria for Discriminant Validity Test using Fornell-Larcker is that the AVE value must be higher than the correlation between constructs. In table 7 below, it is explained that the root AVE value is listed at the highest value in each column. For example, in the first column (ASU column), the root AVE value is 0.913, and the correlation value between constructs is 0.213; 0.213; 0.174; 0.123; 0.147; 0.168; 0.422. The correlation value between these constructs is still smaller than the root AVE value. Then, we continued the test on the ATU column until the PU column found the same results. So, it can be concluded that the research data has good divergent validity, or it is inevitable that each concept of each latent model (construct) is different from other variables. The test results are shown in Table 7 below:

Table 7. Fornell-Larcker Criterion

	Asu	Atu	Com	Comp	Exp	Pe	Pu
Asu	0,913						
Atu	0,213	0,924					
Com	0,174	0,499	0,895				
Comp	0,123	0,358	0,511	0,861			
Exp	0,147	0,093	0,400	0,573	0,847		
Pe	0,168	0,605	0,714	0,534	0,360	0,884	
Pu	0,422	0,627	0,650	0,472	0,406	0,629	0,917

Source: processed by the author (2023)

Discriminant Validity Test Results with Cross Loading Value

A validity test with cross-loading is a method in PLS-SEM analysis that is used to evaluate the extent to which the indicators used to measure a construct have a strong relationship with the intended construct. In this test, each indicator is tested against constructs in the model other than the one they are supposed to measure. Suppose the cross-loading value of the indicators is low or insignificant against other constructs. In that case, it indicates better construct validity because the indicator is more correlated with the intended construct than with other constructs in the model.

Table 8. Correlation among latent variables and cross loadings

	Asu	Atu	Com	Comp	Exp	Pe	Pu
Asu1	0,955	0,236	0,145	0,083	0,084	0,067	0,392
Asu2	0,889	0,141	0,144	0,081	0,177	0,181	0,378
Asu3	0,894	0,184	0,191	0,176	0,167	0,245	0,390
Atu1	0,240	0,955	0,419	0,256	0,028	0,486	0,579
Atu2	0,247	0,934	0,472	0,357	0,139	0,628	0,624
Atu3	0,087	0,880	0,494	0,380	0,082	0,553	0,526
Com1	0,143	0,412	0,834	0,505	0,441	0,614	0,596

	Asu	Atu	Com	Comp	Exp	Pe	Pu
Com2	0,184	0,453	0,908	0,390	0,292	0,619	0,531
Com3	0,143	0,473	0,940	0,472	0,340	0,682	0,614
Comp1	0,125	0,340	0,518	0,879	0,544	0,523	0,457
Comp2	0,078	0,289	0,449	0,853	0,516	0,477	0,433
Comp3	0,143	0,336	0,416	0,852	0,424	0,433	0,370
Comp4	0,075	0,261	0,352	0,859	0,477	0,385	0,346
Exp1	0,099	0,117	0,430	0,533	0,865	0,381	0,363
Exp2	0,099	0,066	0,291	0,472	0,822	0,285	0,347
Exp3	0,183	0,093	0,389	0,494	0,874	0,310	0,353
Exp4	0,116	0,023	0,210	0,428	0,826	0,218	0,307
Pe1	0,407	0,590	0,575	0,391	0,314	0,601	0,914
Pe2	0,430	0,585	0,594	0,462	0,400	0,561	0,915
Pe3	0,324	0,549	0,621	0,445	0,404	0,569	0,922
Pu1	0,224	0,591	0,544	0,419	0,269	0,896	0,577
Pu2	0,138	0,539	0,609	0,393	0,299	0,871	0,553
Pu3	0,103	0,473	0,697	0,524	0,380	0,865	0,555
Pu4	0,130	0,537	0,674	0,549	0,322	0,904	0,541

Source: processed by the author (2023)

Based on the table above, in the Actual System Use (ASU) column, there are 3 indicators, namely ASU1, ASU2, and ASU1. This is the loading factor value. Other indicators outside the ASU indicator are cross-loading values. The criterion for this test is that the loading factor value must be higher than the cross-loading value. The value of ASU1, ASU2, ASU3 is 0.955; 0.889; 0.894. While the value of other indicators outside the highest ASU indicator is PE2 worth 0.430. Then, the test on other variables results in the loading factor value being higher than the cross-loading value, so it can be concluded that the research data has met the criteria in the validity test with cross-loading.

Reliability Test Results with Cronbach's Alpha and Composite Reliability values

Based on Table 4 above, the results of the reliability test with Cronbach's Alpha (CA) and Composite Reliability (CR) produce values greater than 0.7 for all variables, so it can be stated that the indicators used met good reliability.

Structural Model Results

Following the PLS-SEM procedure, the bootstrapping method was used to simulate each relationship hypothesis. Testing the significance of the direction of the relationship is based on the t-statistic or p-value. If the t-statistic value > 1.96 or the p-value < 0.05.

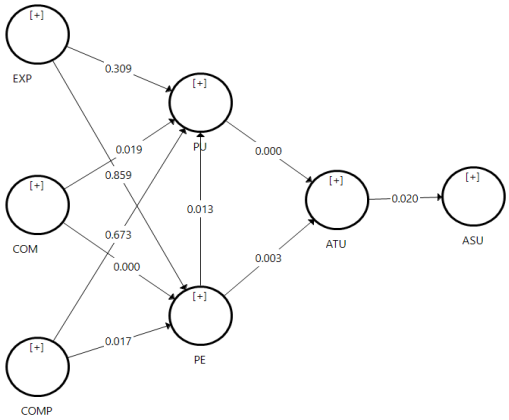

Figure 1. T-Statistic Test Results with P Value Source: processed by the author

Table 9. of T-Statistic Test Results

No	Hypothesis	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
1	EXP -> PU	0,121	0,131	0,119	1,018	0,309
2	COMP -> PU	0,061	0,042	0,144	0,423	0,673
3	COM -> PU	0,359	0,356	0,153	2,351	0,019
4	EXP -> PE	-0,017	-0,008	0,093	0,178	0,859
5	COMP -> PE	0,237	0,229	0,099	2,389	0,017
6	COM -> PE	0,600	0,602	0,074	8,055	0,000
7	PE -> PU	0,297	0,305	0,119	2,491	0,013
8	PU -> ATU	0,408	0,409	0,101	4,027	0,000
9	PE -> ATU	0,348	0,341	0,118	2,960	0,003
10	ATU -> ASU	0,213	0,232	0,091	2,338	0,020

Source: processed by the author (2023)

Based on the results of the t-statistic test on 10 (ten) hypotheses, 7 (seven) hypotheses have been generated whose p-value is <0.05 (significant). From the table above, the results of hypothesis testing can be described as follows;

H1: [EXP->PU] Taxpayer experience may not significantly affect SiPAD's perceived usefulness due to rapid developments in the tax administration system, including changes in interface and features that can confuse users. This finding contrasts with earlier studies, such as in Uganda, where education and IT proficiency significantly influenced the perception of the usefulness of e-tax systems. However, as technological advancements accelerate, prior experience becomes less relevant, highlighting the need for continuous training to improve user competence and ease of system adoption. (Maiga & Asianzu, 2013).

These findings also differ from previous research in South Africa, which shows that computer self-efficacy and information access have a positive influence on the perceived ease of use of the tax e-filing system in South Africa. These results support the idea that direct experience with the system and access to the right information can increase perceived usefulness (Mpinganjira, 2015).

Another study in Nigeria also showed different results, including that the integration of user feedback into system design has been shown to improve compliance rates. This indicates that a responsive approach to taxpayer needs is essential for successful digital tax administration (Adeyeye, 2019). This suggests that as tax systems evolve, prior experiences may not adequately prepare users for new interfaces and functionalities, necessitating ongoing training and support.

H2: [COMP->PU] The complexity profoundly impacts Perceived Usefulness. The test findings indicate that complexity heavily impacts Perceived Usefulness (p-value = 0.673) for SiPAD. This shows that the more complete the features in SiPAD, the more valuable it is for taxpayers. Compared with previous research, the same results were found for the hypothesis Complexity exhibits a substantial association with behavioral intention to use e-filing in Malaysia. The result indicated that simplifying complex systems led to greater perceived usefulness and user engagement (Dorasamy et al., 2010). This result is also consistent with findings in Malaysia, where the complexity of the e-filing system negatively affected its adoption (Adeyeye, 2019). Research in Kenya similarly identified system complexity as a barrier to practical usage (Lhassan et al., 2022). Therefore, simplifying SiPAD's features and user interface can significantly improve its perceived usefulness, much like the recommendations from (Rakhmawati et al., 2020), which advocate for user-friendly designs to enhance adoption rates. These insights underscore the importance of simplifying tax administration systems to improve user engagement globally.

H3: [COM->PU] Compatibility profoundly impacts Perceived Usefulness. The test outcomes indicate that compatibility has a significant role in perceived ease of use (p-value = 0.019) on SiPAD. This shows that compatibility is the main factor in determining the use of SiPAD. The present results align with prior research, with the hypothesis that Compatibility has a significant effect on Perceived Ease of Use (Fu et al., 2006).

Similar results were found in research in East Java, Indonesia, that compatibility and perceived usefulness have a positive effect on tax compliance. Similar results were found in a study in 2023 that e-filing system quality has a positive effect on user satisfaction and perceived usefulness, confirming that system compatibility is important for high perceived usefulness, with perceived usefulness acting as a mediating variable (Rakhmawati et al., 2020).

This suggests that ensuring compatibility with users' current systems can significantly enhance the effectiveness of digital tax solutions.

H4: [EXP->PE] The test results show that taxpayer experience does not have a significant effect on the Perceived Ease of Use of SiPAD, namely with a p-value = 0.859. This indicates that taxpayer experience is not a substantial factor in determining the use of SiPAD. This finding is different from the findings of previous research in India in 2015, which found that computer and web skills had a significant effect on perceived ease of use (Mustapha & Obid, 2015a). He asserts that it is insufficient for the government only to offer effective website design and easy navigation; it is also

essential to establish a learning process to enhance customer proficiency, thus facilitating taxpayers in managing tax administration more efficiently.

The findings of this study differ from those of previous research. With the results of hypothesis testing, computer self-efficacy has a positive effect on perceived ease of use (Wang, 2003). The findings of a study conducted in 2003 revealed that system experience and computer playfulness significantly influenced perceived ease of use. In a broader context, research in various developing countries suggests that as tax systems become more complex, the relevance of prior experience diminishes, necessitating targeted training programs to enhance user proficiency. This highlights the need for continuous education in the face of rapid technological changes.

H5: [COMP->PE] Complexity possesses a considerable effect on effect on Perceived Ease of Use. The test results show that complexity is having a significant impact on SiPAD's perceived usefulness (p-value = 0.017).

The findings of this study are similar to previous research, namely, perceived ease of use has a significant positive relationship with user satisfaction, emphasizing the importance of system quality in influencing perceived ease of use (Ghanifia et al., 2021).

The study's findings align with other research, demonstrating that perceived ease of use strongly influences the link between tax service quality and online tax systems. This mediation leads to increased tax compliance and revenue generation in Nigeria, as confirmed by hypothesis testing results (Mustapha & Obid, 2015b). This suggests that addressing complexity can lead to improved user experiences across different contexts.

H6: [COM->PE] Compatibility possesses a considerable effect on Perceived Ease of Use. The test results show that compatibility is having a significant impact on SiPAD's perceived usefulness (p-value = 0.000). This indicates that the more compatible SiPAD is with the existing system, the easier it is for users to use it. These results are consistent with previous research, with the hypothesis that Compatibility has a significant effect on Perceived Usefulness (Fu et al., 2006).

The findings of this study align with previous research, indicating that perceived ease of use is affected by factors such as control, intrinsic motivation, and emotion, all of which can be influenced by system compatibility (Venkatesh, 2000).

This reinforces the idea that compatibility is a critical factor in the successful adoption of digital tax solutions.

H7: [PE->PU] Perceived Usefulness has a significant effect on Perceived Ease of Use. The test results show that Perceived Usefulness has a considerable influence on SiPAD's Perceived Ease of Use (p-value = 0.013). This indicates that the more valuable the SiPAD features are, the easier it is for taxpayers to use SiPAD.

This finding is similar to the results of previous research, which showed that perceived ease of use has an influence that varies depending on the nature of the task, with perceived usefulness having a more significant effect on IT adoption (Gefen & Straub, 2000). Perceived ease of use has an essential influence on perceived usefulness in the context of Enterprise Resource Planning (ERP)

system implementation (Muliati, 2019). This highlights the interconnectedness of these constructs in fostering user engagement.

H8: [PU->ATU] Perceived Usefulness has a significant effect on Attitude Toward Using. The test results show that perceived usefulness has a considerable influence on attitude toward using (p-value = 0.000) SiPAD. This indicates that the more useful SiPAD is for users, the more positive the user's attitude towards using SiPAD.

This finding is the same as the results of previous research, which found that perceived usefulness significantly influences user intention to use the Internet tax system, emphasizing the importance of perceived usefulness in influencing user attitudes (Chang et al., 2005).

This study's findings corroborate previous research, which demonstrates a significant positive relationship between the quality of tax services and the online tax system, mediated by perceived ease of use. This suggests that perceived usefulness plays a crucial role in fostering positive attitudes towards using the system (Mustapha & Obid, 2015b). Promoting the benefits of digital tax systems can significantly improve user acceptance.

H9: [PE->ATU] Perceived Ease of Use has a significant effect on Perceived Usefulness. The test results show that perceived ease of use does not have a substantial impact on SiPAD's perceived usefulness (p-value = 0.003). This indicates that the easier it is for users to use SiPAD, the more positive the user's attitude toward using SiPAD is.

This finding is the same as the results of previous research, which showed that perceived ease of use has a significant influence on user attitudes, which in turn affects user satisfaction with electronic taxation systems (Chang et al., 2005)

These findings align with previous research, demonstrating that e-filing, perceived ease of use, and perceived usefulness positively influence corporate taxpayer compliance. This indicates that perceived ease of use is crucial for fostering a positive attitude toward the system's use(Amalia & Fahrudi, 2021).

Another study in Indonesia in 2023 showed different results. It found that perceived ease of use and self-efficacy significantly affected the actual use of the web e-invoicing system, but perceived usefulness had no significant effect (Zahra et al., 2023).

H10: [ATU -> ASU] Attitude Toward Using has a significant effect on Actual System Use. The test results show that attitude toward using SiPAD is having a substantial impact on SiPAD's actual system use (p-value = 0.020). This indicates that the more positive the user's attitude towards using SiPAD, the higher the level of SiPAD use.

This finding is similar to the results of previous research, which showed that perceived usefulness and perceived ease of use do not affect student performance in the mandatory use of e-learning, emphasizing the importance of attitudes and behavioral intentions in actual system use (M. A. Nugroho et al., 2018).

This finding is the same as the results of previous research, which found that positive attitudes toward the use of technology systems, including ERP systems, strongly influence users' intentions

to use these systems effectively (Muliati, n.d.). This highlights that by promoting positive attitudes toward SiPAD through effective communication and continuous improvements, the Boyolali Financial Agency can increase the actual system usage among taxpayers.

The findings from this research provide crucial insights for the Boyolali Regency Financial Agency and related stakeholders to enhance taxpayers' SIPAD usage. Specifically, the lack of significant influence of taxpayer experience on perceived usefulness and ease of use suggests the need for comprehensive training and socialization programs to help taxpayers adapt to the evolving system. Additionally, the significant impact of complexity and compatibility on perceived usefulness and ease of use underscores the importance of simplifying and enhancing system features to ensure user-friendliness and seamless integration with existing platforms. Promoting the benefits of SIPAD through effective communication strategies can improve user attitudes and increase adoption rates. Monitoring and evaluating user feedback will ensure continuous improvement, and leveraging successful practices from regions like Surakarta can guide Boyolali in implementing effective initiatives.

CONCLUSION

This research examines the determinants affecting the adoption of the Regional Tax Administration System (SiPAD) in Boyolali Regency using the lens of the Technology Acceptance Model (TAM) and Partial Least Squares Structural Equation Modelling (PLS-SEM). The findings indicate that experience, compatibility, complexity, perceived ease of use, and perceived utility had differing influences on the acceptability of SiPAD. Out of the 10 hypotheses examined, seven were affirmed and three were dismissed. These findings underscore the essential need to enhance system compatibility, user-friendliness, and perceived utility in promoting the increased use of SiPAD. Moreover, ongoing training and socialization initiatives are crucial for assisting taxpayers in acclimating to swift technology advancements. The effective execution of SiPAD is anticipated to improve tax administration efficiency, boost local tax income, and strengthen regional tax reform efforts. These findings provide essential information for policymakers, especially in areas or nations encountering identical difficulties with the implementation of digital tax systems. The wider implications indicate that resolving user experience and system integration challenges, together with ongoing taxpayer education, might be crucial factors for the effective worldwide adoption of digital tax systems.

REFERENCES

Adeyeye, G. B. (2019). Improving Tax Administration Through Technology Innovation in Nigeria (A Study of Federal Inland Revenue Service). *Annals of Spiru Haret University Economic Series*, *1*(1), 31–64. https://doi.org/10.26458/1913

Ajzen, I. (1985). *From Intentions to Actions: A Theory of Planned Behavior BT - Action Control: From Cognition to Behavior* (J. Kuhl & J. Beckmann, Eds.; pp. 11–39). Springer Berlin Heidelberg. https://doi.org/10.1007/978-3-642-69746-3_2

Amalia, A. G. R., & Fahrudi, A. N. L. I. (2021). *The Relationship Between Perceived Ease of Use, Perceived Usefulness and Perceived Loss of Control with User Satisfaction in Mandatory Setting BT - Proceedings of the 3rd Annual International Conference on Public and Business Administration (AICoBPA 2020*. 171–173. https://doi.org/10.2991/aebmr.k.210928.034

Amaliah, St. M., Hafiar, H., & Dewi, R. (2023). Analisis Aksesibilitas Website Pemerintah Provinsi Indonesia Sebagai Implementasi Corporate Digital Responsibility terhadap E-Government. *Prologia*, *7*(2), 473–486. https://doi.org/10.24912/pr.v7i2.24456

Carter, L., & Bélanger, F. (2005). The utilization of e-government services: citizen trust, innovation and acceptance factors. *Information Systems Journal*, *15*(1), 5–25.

Chang, I. C., Li, Y. C., Hung, W. F., & Hwang, H. G. (2005). An empirical study on the impact of quality antecedents on taxpayers' acceptance of Internet tax-filing systems. *Government Information Quarterly*, *22*(3), 389–410. https://doi.org/10.1016/j.giq.2005.05.002

Chen, J. V., Jubilado, R. J. M., Capistrano, E. P. S., & Yen, D. C. (2015). Factors affecting online tax filing–An application of the IS Success Model and trust theory. *Computers in Human Behavior*, *43*, 251–262.

Davis, F. D. (1987). *User Acceptance of Information Systems : The Technology Acceptance Models (TAM)* (Working Paper 529). Wiley. https://quod.lib.umich.edu/b/busadwp/images/b/1/4/b1409190.0001.001.pdf

Davis, F. D. (1989). Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, *13*(3), 319–340. https://doi.org/https://doi.org/10.2307/249008

Dishaw, M. T., & Strong, D M. (1999). Extending the technology acceptance model with task-technology fit constructs. *Information \& Management*, *36*(1), 9–21.

Dorasamy, M., Marimuthu, M., Raman, M., & Kaliannan, M. (2010). E-Government Services Online: An Exploratory Study on Tax E-Filing in Malaysia. *International Journal of Electronic Government Research (IJEGR)*, *6*(4), 12–24. https://doi.org/10.4018/jegr.2010100102

Fu, J.-R., Farn, C.-K., & Chao, W.-P. (2006). Acceptance of electronic tax filing: A study of taxpayer intentions. *Information & Management*, *43*(1), 109–126. https://doi.org/https://doi.org/10.1016/j.im.2005.04.001

Gefen, D., & Straub, D. (2000). The Relative Importance of Perceived Ease of Use in IS Adoption: A Study of E-Commerce Adoption. *Journal of the Association for Information Systems*, *1*(1), 1–30. https://doi.org/10.17705/1jais.00008

Ghanifia, A., Amalia, R., Nugroho, A., & Fahrudi, L. I. (2021). *The Relationship Between Perceived Ease of Use, Perceived Usefulness and Perceived Loss of Control with User Satisfaction in Mandatory Setting*.

Ghozali, I. (2008). *Structural equation modeling: Metode alternatif dengan partial least square (pls)*. Badan Penerbit Universitas Diponegoro.

Jackson, C. M., Chow, S., & Leitch, R. A. (1997). Toward an understanding of the behavioral intention to use an information system. *Decision Sciences*, *28*(2), 357–389.

Lee, J., Kim, H. J., & Ahn, M. J. (2011). The willingness of e-Government service adoption by business users: The role of offline service quality and trust in technology. *Government Information Quarterly*, *28*(2), 222–230.

Lhassan, I. A., Bedraoui, O., & Akhannich, O. (2022). The Impact of Digital Transformation on the Satisfaction of Tax Administration Users in Morocco During the Covid-19 Pandemic: An Empirical Study. *European Journal of Management Issues*, *30*(1), 48–57. https://doi.org/10.15421/192205

Maiga, G., & Asianzu, E. (2013). Adoption of e–tax services in Uganda: a model of citizen–based factors. *Electronic Government, an International Journal*, *10*(3–4), 259–283.

Maulana, R. Y. (2020). Collaborative Governance in the Implementation of E-Government-Based Public Services Inclusion in Jambi Province, Indonesia. *Journal of Governance*, *5*(1), 91–104. https://doi.org/10.31506/jog.v5i1.7317

Mpinganjira, M. (2015). Perceived ease of use: Examining its influence on personal use of the tax e-filing system. *International Journal of Innovation and Technology Management*, *12*(1). https://doi.org/10.1142/S0219877015500030

Muliati, N. (n.d.). *PENGARUH PERCEIVED USEFULNESS, PERCEIVED EASE OF USE, ATTITUDE TOWARD USING DAN BEHAVIOR INTENTION TO USE TERHADAP ACTUAL SYSTEM USE DALAM IMPLEMENTASI TEKNOLOGI ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM (STUDI PADA END USER ERP SYSTEM DI PT SEMEN GRESIK).*

Muliati, N. (2019). Pengaruh Perceived Usefulness, Perceived Ease Of Use, Attitude Toward Using Dan Behavior Intention To Use Terhadap Actual System Use Dalam Implementasi Teknologi Enterprise Resource Planning (ERP) System (Studi Pada End User ERP System Di PT Semen Gresik). *Jurnal Manajemen Dan Inovasi (MANOVA)*, *2*(2), 31–46. https://doi.org/10.15642/manova.v2i2.191

Mustapha, B., & Obid, S. N. Bt. S. (2015a). Tax Service Quality: The Mediating Effect of Perceived Ease of Use of the Online Tax System. *Procedia - Social and Behavioral Sciences*, *172*, 2–9. https://doi.org/10.1016/j.sbspro.2015.01.328

Mustapha, B., & Obid, S. N. Bt. S. (2015b). Tax Service Quality: The Mediating Effect of Perceived Ease of Use of the Online Tax System. *Procedia - Social and Behavioral Sciences*, *172*, 2–9. https://doi.org/10.1016/j.sbspro.2015.01.328

Nations, U. (2023). *UN E-Government Knowledgebase*. Department of Economic and Social Affairs. https://publicadministration.un.org/egovkb/en-us/Overview

Nugroho, M. A., Dewanti, P. W., & Novitasari, B. T. (2018). The Impact of Perceived Usefulness and Perceived Ease of Use on Student's Performance in Mandatory E-Learning

Use. *2018 International Conference on Applied Information Technology and Innovation (ICAITI)*, 26–30. https://doi.org/10.1109/ICAITI.2018.8686742

Nugroho, R. A., & Purbokusumo, Y. (2020). E-Government Readiness: Penilaian Kesiapan Aktor Utama Penerapan E-Government di Indonesia. *Iptek-Kom*, *22*(1), 1–17.

Rakhmawati, H., Sutrisno T, S., & Khoiru Rusydi, M. (2020). Influence of TAM and UTAUT models of the use of e-filing on tax compliance. *International Journal of Research in Business and Social Science (2147- 4478)*, *9*(1), 106–111. https://doi.org/10.20525/ijrbs.v9i1.576

Seddon, P. B. (1997). A Respecification and Extension of the DeLone and McLean Model of IS Success. *Information Systems Research*, 240–253.

Sugiyono, S. (2016). Metode penelitian kuantitatif, kualitatif, R\&D. *Bandung: Alfabeta*.

Venkatesh, V. (2000). Determinants of Perceived Ease of Use: Integrating Control, Intrinsic Motivation, and Emotion into the Technology Acceptance Model. *Information Systems Research*, *11*(4), 342–365. https://doi.org/10.1287/isre.11.4.342.11872

Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User Acceptance of Information Technology: Toward a Unified View. *MIS Quarterly*, *27*(3), 425–478. https://doi.org/10.2307/30036540

Wang, Y.-S. (2003). The adoption of electronic tax filing systems: an empirical study. *Government Information Quarterly*, *20*(4), 333–352. https://doi.org/https://doi.org/10.1016/j.giq.2003.08.005

Wirawan, V. (2020). Penerapan E-Government dalam Menyongsong Era Revolusi Industri 4.0 Kontemporer di Indonesia. *Jurnal Penegakan Hukum Dan Keadilan*, *1*(1), 1–16. https://doi.org/10.18196/jphk.1101

Wiyono, G. (2011). Merancang penelitian bisnis dengan alat analisis SPSS 17.0 & Smart PLS 2.0. *Yogyakarta: Upp Stim Ykpn*, *8*.

Xia, W., & Lee, G. (2000). *The influence of persuasion, training, and experience on user perceptions and acceptance of IT innovation*.

Zahra, L., Salsabila, Z., & Meiryani. (2023). Assessing Perception and Actual Usage of the E-Tax System as a VAT Periodic Tax Return Reporting System: An Empirical Study in Indonesia. *Proceedings of the 2023 14th International Conference on E-Business, Management and Economics*, 216–221. https://doi.org/10.1145/3616712.3616772