

STUDY OF E-FILING TAX APPLICATION ACCEPTANCE IN YOGYAKARTA DURING THE COVID-19 PANDEMIC

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ABSTRACT

Purpose - This exploratory research purpose is to determine tax-payers acceptance of e-filing tax system during Covid-19 pandemic in Indonesia.

Design/methodology/approach-The research was conducted on individual taxpayers who live in Yogyakarta for their personal tax reporting using the e-filing tax application. from December 2020 to January 2021 using the google form. The analytical tool used is Smart PLS and using Unified Theory of Acceptance and Use of Technology as a research model.

Finding – Performance Expectancy have significant effect on Behavior Intention meanwhile Effort Expectancy and Social Influence have no effect on the intention of using E-filing taxes for individual taxpayers in Yogyakarta. Surprisingly, Facilitating Condition has a positive and significant effect on the intention to use the tax E-filing for personal taxes report and have a positive and significant effect on performance expectancy and effort expectancy, meanwhile social influence has no effect on effort expectancy.

Research limitation/implication-This study uses processed data from questionnaires. Differences in respondents' perceptions may occur when answering the questionnaire.

Originality - This study develops the UTAUT theory and provide evidence through empirical research to support the finding

Keyword - *Tax E-filing, Personal Income Tax Report, UTAUT*

1. INTRODUCTION

Tax reform in Indonesia volume III was proclaimed since 2017. This reform is the largest reform involving information technology as one of its pillars and moreover the purpose of this reform is to increase tax ratios and tax compliance rates [1]. Tax e-filing is required in Indonesia since 2017 through The Director General of Tax Regulation No. PER-01/PJ/2017.

Interesting to research and review the trend of acceptance of the e-filing system used in Indonesia at the time of the Covid-19 pandemic that attacked not only Indonesia but the world globally. This extraordinary event has a lot of influence on various joints of life. The Report of the Central Statistics

Agency [2] mentioned that Indonesia's economic growth in the second quarter of 2020 to minus 5.32% [3]. Slowing economic growth causes employers to try to make efficiencies so that there is also a crisis in the field of employment with increasing job cuts (layoffs).

Various models and research methods have been conducted to uncover the behaviour of taxpayers in using information technology systems. Research continues to be done because it is not enough with just one theory that can explain the behaviour of taxpayers in using tax information systems therefore many studies with various theories and research models continue to be done and developed [4]

. Research related to *Behavior Intention* or interest in using an information system technology and *use behavior* has been widely done using various approaches and research methods. Research [5] found that *usefulness*, *perceived ease of use* and *perceived subjective norm* have an effect on the *intention* of using *e-filing* tax applications in Malaysia. Research in developing countries related to the interest in adopting an *e-filing* tax system [6] found that *performance expectancy*, *effort expectancy*, *social influences* (except *descriptive norms*), and multi-dimensional significantly affect intentions, namely 84.9% while *facilitating conditions* only affect 47.7%.

Another study conducted in the US found the UTAUT model could explain *well intentions* in using a variety of *e-government* services. In particular, the three factor models (*performance expectancy*, *effort expectancy*, and *social influence*) have a significant effect on e-filing intentions. The study found *personal factors* (websitespecific self-efficacy (WSSE) and *perceived security control*, along with UTAUT factors had a significant effect on *e-file intentions* [7].

Tax research is also widely conducted in Indonesia, among others related to factors that affect and inhibit the use of *e-filing* taxes (Djajadikerta & Susan, 2017), the influence of tax amnesty and the administrative system on tax compliance [8]. Other research discusses the lack of data exchange between government agencies in Indonesia or *Extensively Business Reporting Language* (XBRL) to support tax compliance [9] and taxpayers' compensation for tax e-filing in terms of trust, experience, and quality. Meanwhile, in other countries such as Malaysia various aspects related to e-filing tax continue to be intensive and continuously conducted research given the low interest in using e-filing tax [10], [11]. Various research topics continue to be carried out such as the effect of rewards in the desire to use e-filing tax [12], taxpayer resistance to the e-filing tax system [13], the influence of risk in the adoption of *e-filing* taxes [14], [5].

Previous research results show that the theoretical constructs of the UTAUT model are perfect in explaining the intention to use a variety of e-government services. In particular, the results showed that three factors from the UTAUT model (*performance expectations*, *effort expectations*, and

social influence) played an important role in predicting intentions using *e-filing* by taxpayers. Personal factors and *perceived security controls*, along with the UTAUT factor, have a significant impact on taxpayers' intentions using *e-files* [15].

The variety of research results conducted related to *behavior intentions* and inconsistencies of research results related to *behavior intention* in the acceptance of information technology systems, especially *e-filing* taxes, are the background to the problems found by the authors in conducting this study. Research that also has inconsistencies results that examine the use of information systems in Thailand [16] states that *Expectancy effort* does not affect *intentions* in using information systems. Previous research [17] found that the significant effect on *behavior intention* is *performance expectancy*, *effort expectancy*, *social influence* so that other factors in the UTAUT model are *facilitating conditions* that have no effect on *behavior intentions*.

Inconsistency of results was also found in studies [18] in which the influence of *effort expectancy* on *intention to use* was not supported. Meanwhile, research conducted in Malaysia [19] found that the four factors in UTAUT, namely *performance expectancy*, *effort expectancy*, *social influence* and *facilitating conditions* have a positive effect and significant *behavior intention* in using tax *e-filing*. Studies conducted in other developing countries related to the use of information technology-based applications, namely Pakistan also found that the four factors that have a positive influence and significant use of web-based services [20].

Another problem in addition to the inconsistency of research results that support the conduct of this study is the lack of users of *e-filing* tax applications for private taxpayers in Indonesia, especially DIY. This is based on information obtained by researchers related to the number of private taxpayers in the Special Region of Yogyakarta who already have taxpayer registration number (NPWP) and the number of taxpayers who use e-filing in reporting their tax obligations. Table 1 below illustrates the use of tax e-filing in DIY territories for 2020.

Table 1. DIY Source Tax Data 2020

KPP Ratama	Number of Personal Tax Payer Report with application e-filing	Number of Registered Personal Taxpayers at DIY	Percentage (%)
Yogyakarta	42.876	136.669	31,37%
Sleman	78.621	278.411	28,24%
Bantul	55.372	208.478	26,56%
Wates	24.292	129.759	18,73%
Wonosari	24.149	129.759	18,62%
Sum	225.312	844.679	26,68%

models, which include Reasoned Action Theory (TRA), Planned Behavior Theory (TPB), Technology Acceptance Model (TAM), Motivational Model (MM), model that Combines Technology Acceptance Model and Planned Behavior Theory (C-TAM-TPB), Innovation Diffusion (DoI), Social Cognitive Theory (SCT) and PC Utilization Model (MPCU) [24].

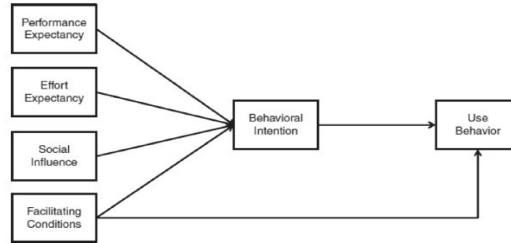


Figure 1. UTAUT Model

Another problem that supports this study is the low rating of *government e-payment* usage in Indonesia when compared to the nearest neighbours such as Malaysia and others. Indonesia is ranked 60th out of 73 countries, the Philippines is ranked 55th, Thailand is ranked 47th among Malaysia ranked 19th and Singapore is ranked 8th in the world. This is illustrated in the Government e-Payment Adoption Rank (GEAR) of 73 countries in the world [21].

The Global Covid-19 pandemic has had tremendous economic impact around the world. The increase in unemployment, the decline in people's purchasing power, the paralysis of many businesses, the economic recession of many countries and many other things are caused in accordance with the statement of the Minister of Finance that Indonesia entered the abyss of recession [22]. This research intends to conduct a review of the impact of the Covid-19 pandemic for private taxpayers in using the tax e-filing system during the Covid-19 pandemic situation.

2. LITERATURE REVIEW

2.1. Unified Theory Of Acceptance And Use Of Technology

UTAUT, the basic theory in this study has been widely used in various studies related to the acceptance of an information system [23]. UTAUT is a derivative of eight synthesized IS theoretical

2.2. E-GOVERNMENT

E-government is the government's use of ICT to improve information and service delivery to citizens and encourage them to participate in the decision-making process in making government more accountable, transparent, and effective [25]; [26]; [27].

2.3. E-Filing

In the Regulation of the Directorate General of Taxes No. 47 / PJ / 2008 stated that, e-Filing is a way of delivering annual tax statements (SPT) and submission of Annual Tax Return Notices conducted electronically online and *in real time* through the provider's application service. Figure 3 is a skeleton that was conceived and became a cornerstone in this study. Refers to the grand theory of *Unified Theory of Acceptance and Use of technology* (UTAUT) from research [24] and by exploring the relationships between variables as stated in figure 3.

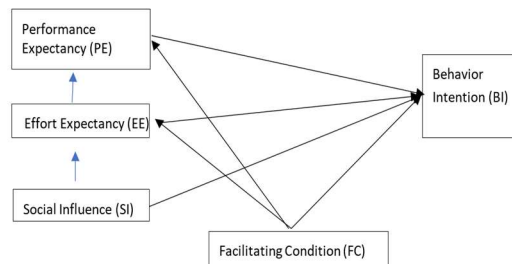


Figure 3. Research Model

Performance expectancy refers to where a person believes that using technology will improve his performance [28]. Research performed [29] also found that *performance expectancy* has a positive influence in the *intention* to use e-government. *Performance expectancy* also has a positive effect on behavior *intentions* for corporate tax *e-filing* in Malaysia [30].

H1: *Performance Expectancy* has a positive effect on Behavior *Intention*

A person's intention in using an information system depends on the *effort expectancy* that shows the level of ease in using information technology systems [31]. Previous research that also proved that *effort expectancy* has a positive effect on the intention to use an information technology is on the intention of adopting *e-government* in Pakistan [32].

H2: *Expectancy efforts* have a positive effect on behavior *intentions*

H3: *Expectancy Efforts* have a positive effect on Performance *Expectancy*

Social influence is the extent to which a person feels the importance of people believing that he or she is using information systems technology [24]. Research conducted [32] confirms this, his research found that *social influence* has a positive effect on the adoption of *e-government* in Pakistan and Malaysia [12].

H4: *Social Influence* positively affects Behavior *Intention*

H5: *Social Influence* positively affects Effort *Expectancy*

Facilitating conditions to the extent to which one believes that organizational and technical infrastructure supports the use of an information system technology [24]. *Facilitating conditions* in e-government related literature are significant factors that influence the intention to use information technology [33].

H6: *Facilitating Condition* positively affects Behavior *Intention*

H7: *Facilitating Condition* positively affects Effort *Expectancy*

H8: *Facilitating Condition* positively affects Performance *Expectancy*

3. METHODOLOGY

3.1. Sample

The samples in this study were taken based on the *purposive sampling method* technique. This method was chosen to limit respondents to the criteria of certain people who can provide the required information [34]. The target population is taxpayers who work and live in DIY as a sample region. Taxpayer data is confidential data so that the DIY Tax District Office can only provide the number of taxpayers in DIY along with the number of taxpayers who report with tax *e-filing*. Sampling time is carried out from December 2020 to January 2021. The Likert scale is designed to examine how strongly the subject agrees or disagrees with statements on a scale 5. The following arrangements: are 1 = strongly disagrees, 2= Disagrees, 3= Disagrees, 4= Agrees, and 5= strongly agrees [35].

The basis of sampling methods is where a person is sampled because he is considered to have the information needed for research [36]. The minimum sample size in the study was 100 respondents. The sample size should be 5-10 times the number of parameters to be estimated. The estimated number of samples required in SEM testing with the *Maximum Likelihood Estimate* (MLE) technique is 100-150 samples [37].

3.2 Operational Definition And Variable Measurement

The following is a definition of each variable and indicator that measures the UTAUT model based on previous research [38]; [39] :

Performance Expectancy (X1)

Performance expectancy is the extent to which an individual believes that using information technology will improve his performance or performance. The full indicator is contained in Table 5.

Effort Expectancy (X2)

Effort expectancy refers to the level of ease in using an information technology system in this case an *e-filing* tax system. The indicator used to measure is contained in Table 5.

Social Influence (X3)

Social influence indicates the degree to which the person important to him believes that he or she is using an information technology system or taxing *e-filing*. The indicator used to measure is contained in Table 5.

Facilitating Condition (X4)

Facilitating conditions indicate the degree to which a system user believes that the organization and infrastructure technically support the use of the information technology system or *the e-filing* tax he or she uses. The indicator used to measure is contained in Table 5.

Behavior Intention (Y)

Behavior intention is defined as a person's readiness to use information technology [40] indicating the rate at which a person is prepared to use *an e-filing* tax application. Indicators for measuring are contained in Table 5.

3.3. Testing The Validity And Reliability Of Research Instruments

The validity and reliability test with SmartPLS 3.0 can be seen in table 2 which describes the *Rule of Thumb* used to measure research [41]; [42].

Table 3. Summary of Rule of Thumb Evaluation of Measurement Model (Mode A)

Validity and Reliability	Parameter	Rule of Thumb
Convergent Validity	<i>Loading Factor</i>	>0.70 for <i>Confirmatory Research</i> >0.60 for <i>Exploratory Research</i>
	<i>Average Variance Extracted (AVE)</i>	> 0,50 for <i>Confirmatory and Exploratory Research</i>
	<i>Communality</i>	> 0,50 for <i>Confirmatory and Exploratory Research</i>
Discriminant Validity	<i>Cross Loading</i>	> 0.70 for each variable

Reliability	Square root of AVE and Correlation between Latent Constructs	> Square Root of AVE > Correlation between Latent Constructs
	<i>Cronbach's Alpha</i>	>0.70 for <i>Confirmatory Research</i> >.60 is still acceptable for <i>Exploratory Research</i>
	<i>Composite Reliability</i>	>0.70 for <i>Confirmatory Research</i> 0.60 - 0.70 is still acceptable for <i>Exploratory Research</i>

3.4. Data Analysis Techniques

This research uses SmartPLS analysis tools because it has many advantages. PIs-SEM, among others, can be used on small samples, does not require normal distributed data, requires theory even if it is not with a solid basis, appropriate for research that tests and/or develops theories and can be used for very complex models [36].

The basic equation model for the *Inner Model* as follows:

$$\eta = \beta_0 + \beta_1 \eta + \Gamma \zeta + \zeta$$

η = endogenous construct vector
 β = endogenous construct vector coefficient
 Γ = exogenous construct vector coefficient
 ζ = inner residual matrix model coefficient
 ξ = exogenous construct vector

While the relationship between exogenous latent variable to each endogenous latent variable called *causal chain system* can be specified with the following equation:

$$\eta_j = \sum_i \beta_{ji} \eta_i + \sum Y_{ji} \xi_i + \zeta_j$$

While the *outer model* for reflective constructs can be arranged as follows:

$$X = \hat{x} \xi + \epsilon_x$$

$$Y = \hat{y} \eta + \epsilon_y$$

x and y = indicators for independent and dependent variables

ξ dan η = independent and dependent latent construct matrix

λ^x and λ^y = matrix loading regression coefficients linking latent variables and their indicators

ϵ_x dan ϵ_y = error rate (*error*) measurement

The next stage is to evaluate *the outer model*. Researchers tested a concept and predictive model of relational and causal relationships after passing the purification stage of the measurement model [36]. The validity test is conducted to determine the ability of the research instrument to measure what should be measured while the rehabilitation test to measure the consistency of the measuring instrument.

The final step is to evaluate the inner model. Evaluation of *structural* models with R^2 is performed for dependent constructs, *path* coefficient values or *t-values* of each *path* for the significance test between constructs in structural models. The higher R^2 value indicates the better the prediction model.

The level of significance in hypothesis testing is indicated from *the path* coefficient value or *inner model* with the *T-statistic* value. Hypothesis testing was conducted by the *Resampling Bootstrap* method. The *two-tailed* hypothesis must have a *T-statistic* above 1.96 and for *one-tailed* above 1.64.

4. RESULTS AND DISCUSSIONS

4.1. Characteristics Of Respondents

Questionnaires were distributed through *the google form* application to taxpayers in the DIY Tax Area Office area according to the object in the study. The number of respondents in this study after being selected as many as 139 respondents from 167 *Google forms* that are fully filled and can be processed. Data from eight respondents was not processed because they did not have an NPWP, incomplete data and did not live in the Yogyakarta region. Respondent demographic data can be seen in table 4.

Table 4. Respondent Demographic Data

Demographic Respond	Sum	Percentage
Age Under 40 years	44	32%

	Over 4 0years	95	68%
Gender	Man	65	47%
	Woman	74	53%
Work	Private	65	47%
	Employees	40	29%
	Civil Servants	12	8%
	Entrepreneurial	22	16%
	Others		

4.2. Data Analysis

Before testing the hypothesis first conducted an evaluation on the measurement model (*outer model*) to find out whether or not the model is fit. In this study the latent variables / exogenous constructs / independent variables and endogenous variables / dependent variables are outlined in table 5.

Table 5. List Of Variables And Indicators

Variable	Label	Question
Performance Expectancy (PE)	PE1	I think the tax <i>e-filing</i> application is very useful for reporting my personal tax return
	PE2	Tax <i>e-filing</i> apps increase my chances of achieving the things that matter
	PE3	<i>E-filing</i> app helps speed up my personal tax return reporting
	PE4	<i>E-filing</i> apps increase my productivity
Effort Expectancy (EE)	EE1	Learning tax <i>e-filing</i> apps is easy for me
	EE2	Interacting with tax <i>e-filing</i> applications is very clear and easy to understand
	EE3	Tax <i>e-filing</i> applications are not easy to use
	EE4	It is easy to become skilled at using tax <i>e-filing</i> apps
Social Influence (SI)	SI1	The people who are important to me think that I should be using a tax <i>e-filing</i> app.
	SI2	People who influence my behaviour think that I should have used a tax <i>e-filing</i> app.
	SI3	People whose opinion I appreciate prefer it when I use a tax <i>e-filing</i> application
Facilitating Condition (FC)	FC1	I have the resources (internet connection, computer, or smartphone) needed to use the tax <i>e-filing</i> application
	FC2	I have enough knowledge to use tax <i>e-filing</i> applications
	FC3	<i>E-filing</i> tax application in line with other information technology I use
	FC4	I get help from others when I'm having trouble using an <i>e-filing</i> tax app.
Behaviour Intention (BI)	BI1	I am likely to use <i>e-filing</i> tax apps in the future
	BI2	I will always use the <i>e-filing</i> tax application in my tax return report
	BI3	I plan to use <i>e-filing</i> tax apps frequently

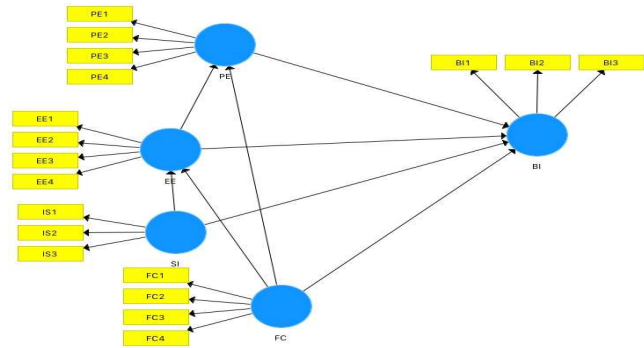


Figure 4. Structural Model (Inner Model)

While figure 5 is the result of the evaluation of the structural model. In the reliability indicator the loading value must be above 0.7 so the researcher must evaluate for indicators that have a loading factor value below the standard value.

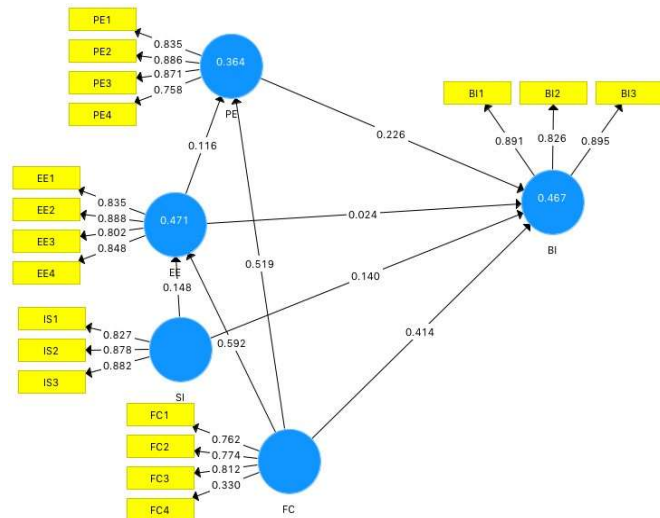


Figure 5. Path Diagram With Factor Loading Value

In figure 5, it can be seen there is one indicator in the Facilitating Condition that has a loading factor value below 0.7. Such indicators must be eliminated from the research model so that the model in this research can be processed as a research model that is in accordance with standards.

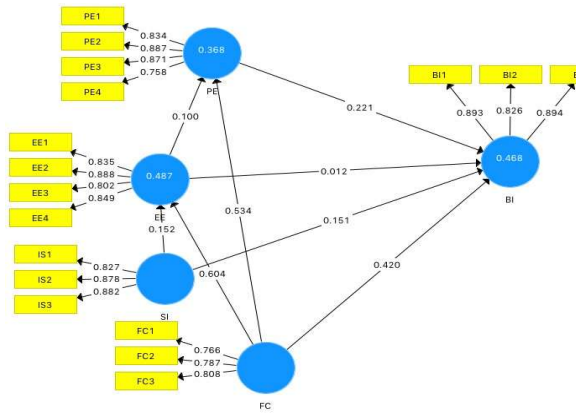


Figure 6. Path Diagram After Indicator Elimination

Based on figure 6 it is known that the indicators of each latent variable have qualified the minimum loading value because the loading value of all indicators is above 75%. The overall number of each latent variable of credibility can explain the variance of each indicator that measures it.

1. Evaluation of Measurement Model (Outer Model)

2.1. Convergent Validity Test

Convergent validity occurs if scores obtained from two different instruments measuring the same construct have a high correlation [36]. Convergent validity test in PLS with reflective indicators assessed based on loading factors (correlation between item scores / component scores with construct scores) indicators that measure The construct. *The rule of Thumb* for convergent validity is outer loading > 0.7. Table 6 indicates that the outer loading value already meets the testing criteria of above 0.7.

Table 6. Outer Loading

BI	EE	FC	PE	SI
BI1	0.893			
BI2	0.826			
BI3	0.894			
EE1		0.835		
EE2		0.888		
EE3		0.802		
EE4		0.849		
FC1			0.766	
FC2			0.787	
FC3			0.808	
IS1				0.827
IS2				0.878
IS3				0.882
PE1				0.834
PE2				0.887
PE3				0.871
PE4				0.758

Table 7. Nilai Average Variance Extracted (Ave)

Variable	Average Variance Extracted (AVE)
BI	0,53
EE	0,49
FC	0,43
PE	0,49
SI	0,52

The rule of thumb for making an initial examination of the matrix factor ± 0.30 is considered to have met the minimum level, ± 0.40 is considered better while the > 0.50 is considered better [37]. Table 7 describes the AVE value where everything has reached the minimum required value.

2.2. Discriminant Validity Test

The discriminant validity test is assessed based on cross loading measurements with its construct. An indicator is said to be valid if it has the highest loading value factor on the intended construct compared to the loading factor value against other constructs. Table 8 below shows the correlation value of the construct with its indicator is greater than the correlation value with other constructs.

Table 8. Cross Loading Output

	BI	EE	FC	PE	S
BI1	0.893	0.435	0.566	0.494	0
BI2	0.826	0.346	0.475	0.392	0
BI3	0.894	0.450	0.625	0.518	0
EE1	0.298	0.835	0.525	0.336	0
EE2	0.453	0.888	0.644	0.411	0
EE3	0.436	0.802	0.507	0.412	0
EE4	0.399	0.849	0.624	0.406	0
FC1	0.532	0.380	0.766	0.461	0
FC2	0.414	0.708	0.787	0.441	0
FC3	0.576	0.512	0.808	0.519	0
IS1	0.471	0.441	0.525	0.416	0
IS2	0.356	0.394	0.473	0.281	0
IS3	0.390	0.398	0.396	0.362	0
PE1	0.479	0.488	0.601	0.834	0
PE2	0.439	0.368	0.454	0.887	0
PE3	0.528	0.360	0.507	0.871	0
PE4	0.349	0.328	0.434	0.758	0

In SmartPLS as part of the discriminant validity test, there is also a validity test with the Fornel-Larker criteria. Fornel-Larker is the correlation value between the variable with the variable itself and the correlation value between other variables where the correlation value between the variables themselves must be higher. this is compared to the correlation value with other variables. Table 9 below shows that the criteria have been met.

Table 9. Validity Of The Fornell-Larcker Criterion Discriminant

	BI	EE	FC	PE	SI
BI	0.872				
EE	0.475	0.844			
FC	0.643	0.686	0.787		
PE	0.542	0.466	0.602	0.839	
SI	0.477	0.480	0.544	0.415	0.862

2.2. Reliability Test

The Alpha Cronbach and composite reliability tests were conducted on the researcher variable with the aim of measuring the internal consistency of multiple item scales [36]. Reliability test results are presented in Table 10 below, Cronbach Alpha value can be seen in accordance with the provisions of ≥ 0.70 and Alpha Cronbach Alpha value > 0.6 for exploratory research. This suggests that the variables in the study are reliable.

Table 10. Cronbach's Alpha Value, Composite Reliability

	Cronbach's Alpha	Composite Reliability	Description
EE	0.865	0.908	Reliable
PE	0.860	0.905	Reliable
BI	0.843	0.904	Reliable
SI	0.828	0.897	Reliable
FC	0.693	0.830	Reliable

2. Evaluation of Inner Model

The structural model in PLS is evaluated using R² for dependent constructs, path coefficient values or t-values of each path for the significance test between constructs in structural models [36]. The higher the R² value, the better the prediction model of the research model. Meanwhile, the value indicated by the t-statistic must be more than 1.96 for the two-tailed hypothesis and more than 1.64 for the one-tailed hypothesis.

The R² value can be used to explain the effect of exogenous latent variables on endogenous latent variables having a substantive effect. The value of R squares 0.75 indicates a strong model while the value of 0.5 indicates a moderate model and 0.25 model is weak [41]. Table 11 below shows the R² value of this research model is moderate.

Table 11. R Square Value

	R Square	R Square Adjusted	Description
BI	0.468	0.452	Moderate
EE	0.487	0.479	Moderate
PE	0.368	0.359	Moderate

A. HYPOTHESIS TESTING

Hypothesis testing in SmartPLS is done by bootstrapping so that it can be known the effect of

exogenous variables on endogenous variables. The hypothesis is considered insignificant if the coefficient value is between -0.1 to 0.1 between the coefficient value > 0.1 or < -0.1 is significant. If the *path coefficient* value > 0.1 and *p-value* < 0.05 then this means that the hypothesis is accepted. This study uses the *two tailed* hypothesis and the value of the *t-statistical* $\alpha = 5\%$ dan *a* value > 1.96 then the hypothesis in this study is accepted and vice versa [41].

Table 12. Bootstrapping Calculation Results

	Original Sample	Sample Mean	Standard Deviation	T Statistics	P Values
EE -> BI	0.012	0.004	0.137	0.086	0.932
EE-> PE	0.100	0.098	0.088	1.131	0.258
SI -> BI	0.151	0.151	0.087	1.736	0.083
SI -> EE	0.152	0.154	0.094	1.619	0.106
PE -> BI	0.221	0.215	0.081	2.720	0.007
FC -> BI	0.420	0.435	0.120	3.495	0.001
FC-> PE	0.534	0.539	0.111	4.795	0.000
FC->EE	0.604	0.608	0.096	6.268	0.000

1. Hypothesis 1 Test Results

In hypothesis 1 it is stated that *Performance Expectancy* influences on *Behavior Intention*. The *t-statistical* value is 2.720 greater than 1.96 and P Values is 0.007 smaller than 0.05 and the original sample coefficient value is 0.221. Judging from the original sample value, the direction of the relationship is positive. This means hypothesis 1 in this study is positive and significant. So, hypothesis 1 is supported.

2. Hypothesis 2 Test Results

Hypothesis 2 states that *expectancy* has a positive effect on *behavior intention*. The *t-statistical* value for this hypothesis is 0.086 which means less than 1.96 as the reference standard and P Values 0.932 which means greater than 0.05 minimum requirement. This shows that hypothesis 2 is not supported.

3. Hypothesis 3 Test Results

Hypothesis 3 states that *Effort Expectancy* positively affects *Performance Expectancy* on the use of e-

filing tax applications. The calculation results with SmartPLS show that the *T-statistical* value is 1.131 ineligible must be above 1.96 and P Values of 0.258 which means above the minimum value of 0.05 then Hypothesis 3 is not supported.

3. Hypothesis 4 Test Result

Hypothesis 4 states that *Social Influence* has a positive effect on *behavior intentions*. Test results with Smart PLS showed *t-statistics* of 1,736 and P values of 0.083. This means that hypothesis 4 is not supported because the resulting probability value is greater than 0.05 and the significance value is less than 1.96 than the required standard value.

4. Hypothesis 5 Test Results

Hypothesis 5 states that *Social Influence* has a positive effect on *Effort Expectancy*. The *T-statistical* value is 1.619 and the probability value is 0.106. Both of these values do not meet the standard requirements to support this hypothesis so hypothesis 5 is not supported.

5. Hypothesis 6 Test Results

Hypothesis 6 states that *facilitating conditions* have a positive effect on *behavior intentions*. The *T-statistical* value is 3.495 which means greater than 1.96 and the Probability value of 0.001 is below 0.05. Judging from the original sample value, the direction of the relationship is positive and significant. This means that hypothesis 6 of this study is supported.

6. Hypothesis 7 Test Results

Hypothesis 7 states that *facilitating conditions* have a positive effect on *effort expectancy*. T-Statistics of 4.795 and P Values of 0.000 both values qualify a supported hypothesis. Judging from the original sample value of 0.534, the direction of the relationship is positive and significant. This suggests that hypothesis 7 of this study is supported.

7. Hypothesis 8 Test Results

Hypothesis 8 states that the *Facilitating Condition* has a positive effect on *Performance Expectancy*. The *T-statistical* value of the SmartPLS test result is 6,628 and the probability value is 0.000. Both of these values indicate that hypothesis 8 is supported. Judging from the original sample value of 0.604, the direction of the positive relationship is positive and significant.

B. DISCUSSION

1. Test Results of Hypothesis 1

The results of the study found that *performance expectancy* positively affected behavior *intentions* towards the use of *e-filing* tax applications. The results of this test are presented in Table 12 which shows that H1 is supported. This proves that a person's interest in using e-filing tax applications relates positively to the extent to which an individual believes that using information technology will be improved their performance.

The results of this study also support previous research [43] that *performance expectancy* has a significant role in participation using tax *e-filing* in Malaysia, and research that performed in the US [44] and [45].

2. Test Results of Hypothesis 2

This research did not succeed in proving that *effort expectancy* has a positive influence on behavior *intentions* on the use of *e-filing* tax applications. The data in table 12 shows that H2 is not supported. The results of this study are not in line with previous research [43] that *effort expectancy* has a positive effect in using tax e-filing.

This means that *effort expectancy* which *describes* the level of ease in using e-filing tax applications has no effect on the interest of Yogyakarta taxpayers in using tax applications e-filing. This means there are other factors that affect the behavior *intention* or interest of taxpayers to use e-filing tax applications.

3. Hypothesis 3 Test Result

The results of this study do not support hypothesis 3. In table 12 it can be seen that H3 in this study is not supported. This means that there is no positive relationship between *effort expectancy* or the level of ease in using e-filing tax applications against *performance expectancy* or performance improvement.

4. Hypothesis 4 Test Result

The study investigated whether *social influence* had a positive influence on behavior *intentions* on the use of *e-filing* tax applications. Unfortunately, this study did not find a positive association of social influence to behavior intentions in taxpayers in Yogyakarta in using e-filing tax applications.

Hasil test hypothesis 4 can be seen in table 12 which illustrates that H4 is not supported.

This study does not match the results of previous studies [46] and [47] which found that *social influence* is one of the factors that influence behavior *intentions* in the use of information technology. The results of hypothesis 3 tests are also not in accordance with the results of research [48] which found that *social influence* has a positive and significant effect on behavior *intentions* in information systems.

5. Test Results of Hypothesis 5

The study tried to investigate whether there was a positive relationship between *social influence* to *effort expectancy* in using e-filing tax applications. It turns out that the results of this study did not find a positive relationship of *social influence* to *effort expectancy* in taxpayers in using e-filing tax applications. In table 12 it can be seen that hypothesis 5 in this study is not supported.

6. Hypothesis 6 test results

The study investigated whether *facilitating conditions* positively affected behavior *intentions* in the use of *e-filing* tax applications. The results of this study prove that *facilitating conditions* have a positive and significant influence on the behavior intention of taxpayers in using e-filing tax applications. Table 12 shows that hypothesis 6 is supported.

The results of this study are in line with previous research [49] which found that *facilitating conditions* are one of the factors that affect behavior *intentions* in the use of information technology. *Facilitating condition* is a factor that supports taxpayers to use e-filing tax applications.

7. Hypothesis 7 test results

The study investigated whether there was a positive influence on taxpayers' *efforts* in using e-filing tax applications. It turned out that the results of the study found a positive and significant influence *facilitating condition* on *effort expectancy* in the use of *e-filing* tax applications. Table 12 shows the results of the study data stating that H7 is supported. The study found a positive and significant relationship between these two variables that had never been studied before.

8. Hypothesis 8 Test Result

The study investigated whether *facilitating condition* had a positive effect on *performance expectancy* on the use of *e-filing* tax applications. The study found a positive influence on *performance expectancy*. This research managed to find a positive relationship between variable *facilitating conditions* in *performance expectancy* in the UTAUT theory used as a grand theory in this study.

5. CONCLUSIONS, LIMITATIONS AND SUGGESTIONS

For users of e-filing tax applications in DIY during the *global pandemic covid19* when this study was conducted, *performance expectancy* and *facilitating condition* are factors that support DIY regional taxpayers to use *e-filing* tax applications. Meanwhile, *effort expectancy* and *social influence* in this study are not factors that influence taxpayers to use *e-filing* tax applications. It can be understood that *facilitating conditions* and *performance expectancy* or things that facilitate or help tax mandatory in using tax *e-filing* application and improved *performance* or performance of users of the e-filing system tax is a thing it is expected by the taxpayer to continue using the application. This is very understandable considering the extraordinary conditions due to the impact of the Covid-19 pandemic not only impact on health and economy but also the entire joint of life. So if anyone facilitates taxpayers to be able to use the system properly, quickly and smooth of course will be very preferred by taxpayers to increase the performance.

If *facilitating condition* is a significant thing in the use of tax application system in Indonesia then it would be nice for this system to be more focused on *facilitating conditions* that accompany it. For example, it would be nice if the e-filing tax system is more equipped with *real-time* guidelines such as *online chat* rooms with admin officers in the *e-filing* tax system. This facility will make users feel helped at that time while they find difficulties in using. As well as other information technology system applications that are currently widely used to provide *online chat* facilities in their applications, for example, online financial statement applications that are there in the market

provides an *online chat* menu on the system so that users feel directly helped at that time and also encounter problems or do not understand the menu which is in the application. This can be used as input and consideration for decision makers in providing assistance in filling out annual tax returns not only deploying officer assistance on a regular basis. Physical such as the person deployed in the making of tax returns but from within the tax e-filing system itself. Especially during the Covid-19 Pandemic as it is today where many things are done online. This is the right moment to improve the performance of information systems, especially *e-filing* tax applications.

A. LIMITATIONS OF RESEARCH AND ADVICE

The study used data from questionnaires and respondents as primary data sources to process. Differences in perception can occur given the lack of socialization before the questionnaire is distributed to equalize perception. The study also did not consider the level of education and income of its respondents.

Further research will be better when doing socialization first to prospective respondents. Socialization can be done online or with the information included on the questionnaire. Income and education levels should be included in the questionnaire.

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