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EFFECTS OF USAGE E-FILING APPLICATIONS IN PUBLIC TRUST IN THE INDONESIAN GOVERNMENT

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ABSTRACT

As information and communication technology (ICT) rapidly developed, government are rearranging the way they work and iteract both internally and externallly. One of the communication ways between the government and citizen are the annual tax reporting services. e-Filing are the personal tax report application in Indonesia that provided by the Directorate General of Taxes under the Ministry of Finance, Republic of Indonesia. This system plays an important role in the government's efforts to reduce the queue in the reporting tax. This research aimed to find the correlations between trust and the usage of e-Filing application. Collected data are 61 respondents where 39 respondents experienced in using the e-Filing will be

analyzed using the method of Partial Least Square – Structural Equation Model (PLS-SEM). The evaluation results of the measurement model found that the usage of the application is weakly unaffected by 26% of public trust in the government.

Keywords e-Filing, PLS-SEM, trust, government, usage
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1. INTRODUCTION

In this era of technology, government are using technology in delivering access and services to the citizen [1]. There are some definitions of e-government, such as an application that connect the government and citizen [2]. Another definition is that e-Filing is one of the personal tax administrations in Indonesia that provided by the Directorate General of Taxes for individual to report the taxes every year. Directorate General of Taxes is under the Ministry of Finance. e-Filing consider as e-government application that launched on 2007.

Even e-Filing has started from 2007, the adoption of the tax payer in using the e-Filing is still very low. It needs almost 10 year to reach an 80% of adoption rate. The initial subjective findings from the observation of researcher where the trust of the citizen to the government is the main point why the adoption of e-Filing is very low. Citizens are afraid being tracked by the government regarding their income every year.

Previous research on "e-Filing Indonesia" found only two articles related between e-Filing and e-Billing. e-Filing are the Individual Tax Report application while the e-Billing are the corporate tax reporting application [3]. Waluyo [3] tried to figure out the implementation of the Tax Amnesty policy that affected people's compliance in using e-Filing and e-Billing applications.

The research is aims to answer the following research question "Are the usage of e-Filing Application will be affecting perception of trust to the Government?" To tackle this issue, the research models used are combined that used by [1][2][4].

2. METHODOLOGY

2.1. Research Model

The research model used in study was proposed by Alsaghier[1] and could be presented in Figure 1 [1]. This research model consists of nine constructs that delineate the conceptual model of citizens' trust in e-government. The Alsaghier model attempts to formulate an important number of factors that have been observed to affect citizens' trust in e-government by utilizing the Q methodology. While this research are focusing on the usage of e-Filing application and therefore researcher tries to crosscheck with the model proposed by Liu & Zhou [2].

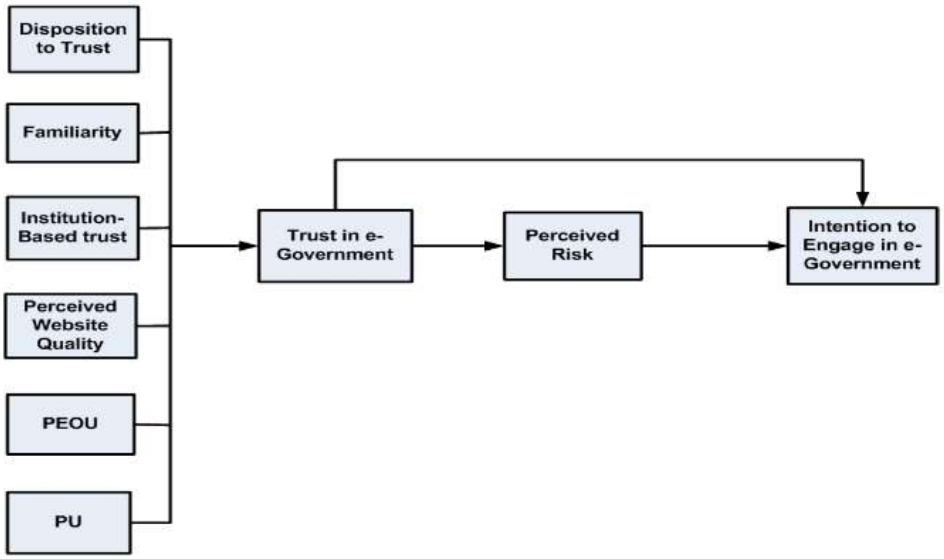

Figure1 Proposed Research Model by Alsaghier [1]

In the article *"A Citizen Trust Model for E-government"* , Liu and Zhou [2] explained the research model that mixed between the Technology Acceptance Model by Davis and The CRM Model. The final model that used by Liu and Zhou are shown in Figure 2. Liu and Zhou [2] found that Perceived Usefulness (PU), Perceived Ease of Use (PEOU), Perception Risk (PR) is positively increased citizen trust in the government. The three variables are the same as Alsaghier [1]. Therefore, the researcher chose three variables as the research model to confirm that the variables had a positive impact on public trust in the Indonesian government in the context of using the e-Filing application.

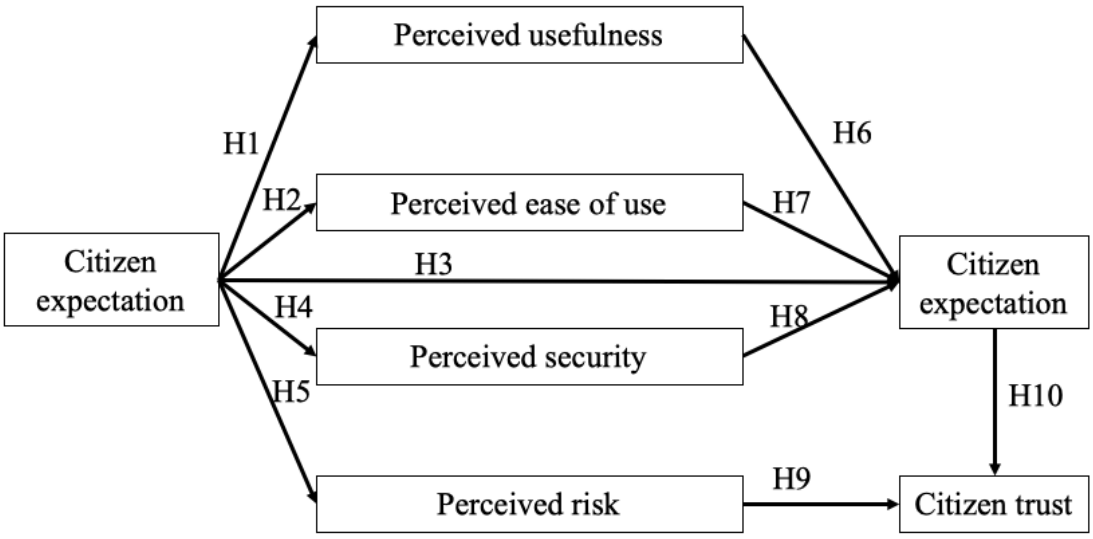

Figure 2 The Research Model of Liu and Zhou [2]

Beldad [4] in their research mentioned that if a party, whether individual or organization, has a good reputation, it will quickly develop trusting beliefs about that party, even if they lack first-hand knowledge. A government reputation is very important; therefore, researcher is included Government Organization Reputation (GOR) as one of the variables. Another variable from Beldad [4] is Propensity to Trust (PT) which also shows positively enhance the citizens

in using the e-government application, while the same results are found by Liu and Zhou [2]. Then researcher picked the latter but not inferior to the PT variable.

Based on the research model by previous research [1], [2], [4], researcher has an effort to develop a model as shown in Figure 3.

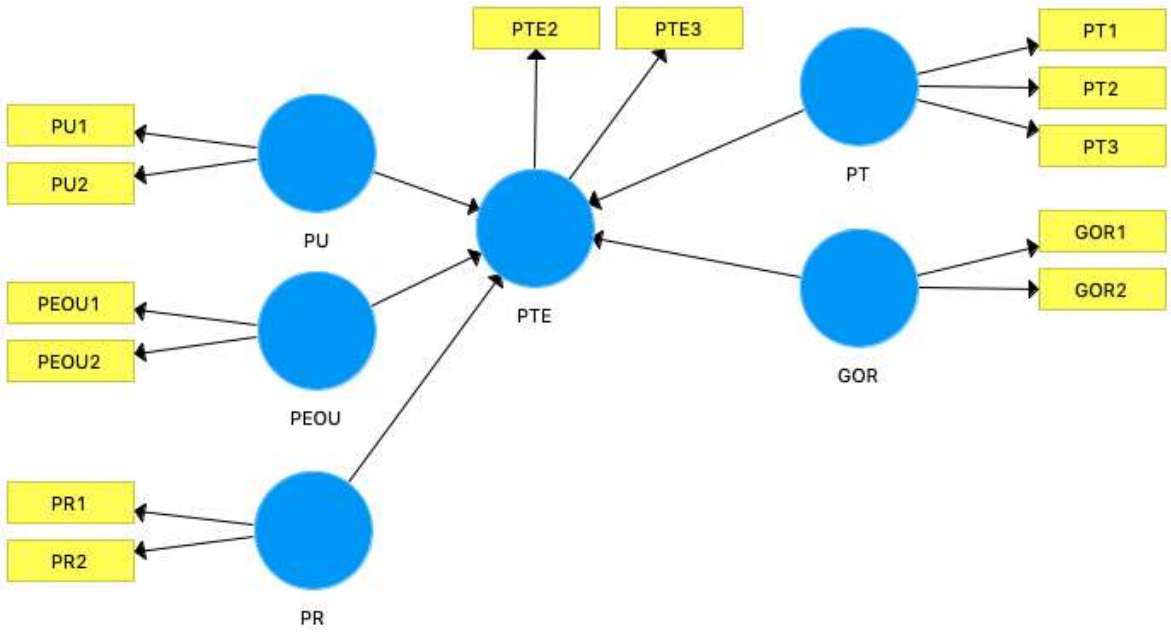

Figure 3 The Conceptual Research Model used by researcher [1],[2],[4]

Table 1 contains five hypotheses that researcher trying to figure out the affections. Each of arrow from one latent variable to another latent variable in Figure 3 will be represent the Hypothesis that researcher is trying to figure out.

Table 1 Research Hypothesis

HYPOTHESIS	DESCRIPTION
H1	Perceived Usefulness affecting the Public Trust on E-Filing
H2	Perceived Ease of Use affecting the Public Trust on E-Filing
H3	Perceived Risk affecting the Public Trust on E-Filing
H4	Propensity to trust affecting the Public Trust on E-Filing
H5	Government Organization Reputation affecting the Public Trust on E-Filing

Table 2 contains the explanation of the definition and the source of question and definition that build this research questionnaire.

Table 2 Conceptual definition of the Question and Variable

Variable	Definition	Question	Source
Perceived Usefulness (PU)	Trust of the user in using the system will be increasing his/her productivity in finishing the task. In the context of e-Filing will be increasing the productivity in finishing the activity of tax reporting.	The usage of e-Filing system made my tax reporting process faster.	[1], [2]
		I believe the use of e-Filing system improved the effectivity for citizen in doing the tax reporting.	
Perceived Ease of Use (PEOU)	Trust and perception of user that the system is easy to use.	For Me, e-Filing systems is easy to use.	[1], [2]
		It's easy for me to learn how to use the e-Filing systems.	
Perceived Risk (PR)	Risk that related to mistake that could be happened and caused loss. In this context risk explained as the negative impact that could be happened such as the breach of the data submitted if the Tax Reporting done online through the e-Filing.	I believe the e-Filing system provided by the Directorate General of Taxes is safe in safeguarding my tax report.	[1], [2]
		I feel comfortable giving or entering my sensitive data into the tax e-Filing system.	
Propensity to trust (PT)	Tendency to rely to other parties	I generally trust other people	[2], [4]
		I tend to rely on other people	
		I believe that generally other people have good intentions	
Government Organization Reputation (GOR)	When a party, individually or organization have a good reputation, trust will be developed directly even without any direct interaction.	I feel that the Directorate General of Taxes has a good reputation in implementing tax e-Filing systems for its citizens.	[4]
		I feel that the Directorate General of Taxes is honest in implementing the tax e-Filing system for its citizen	
Public Trust on E-Filing (PTE)	Trust on the E-Filing Application and the provider that provide the application.	I believe that if the community needs assistance in using the e-Filing system, the Directorate General of Taxes will be willing to help.	[2]
		I believe if the tax e-Filing system is worthy of trust.	

2.2. Data Collection

Data are collected by convenient random sampling through online forms from 1 Nov 2018 to 20 Nov 2018 and distributed through the researcher network. 61 respondents are collected and divide into two parts. 64% (39 respondents) who have experience in using e-Filing and 36% (22 respondents) are taxpayers but have never used e-Filing. Flow of the data collection and analysis could be seen on Figure 4.

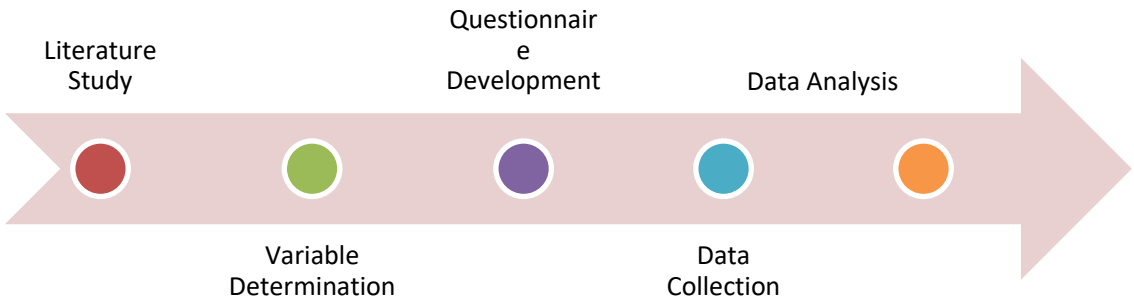

Figure 4 Flow of the research

Collected data will be analyzed using a Partial Least Square - Structural Equation Modeling (PLS-SEM). The reason of use PLS-SEM is due to researcher would like to analyze the factors and PLS-SEM. The scale used is Likert scale which is from one (disagreement) to four (Strongly Agree) and the scale is counted in order to avoid the respondent in picking the middle score.

3. RESULT AND DISCUSSION

After the result collected, we found out that from the convenient sampling that researcher did, only 64% are using the e-Filing. The data that could be used in analyzed are only the sample that have the experience in using the e-Filing application. Surprisingly there's an article from the Directorate of General Taxes that the adoption of this e-Filing application is 80% from all the tax payer by March 2018. Therefore, starting April 2018 All the Individual Tax report are compulsory reported using the electronic channel that provided by the Ministry of Finance, Republic of Indonesia.

3.1. Measurement Model

According to Hair et al.[5], there are indicator reliability, convergent validity and discriminant validity need to be carried out in order to evaluate the instrument. Indicator reliability carried out by checking the indicator loading should be higher than 0.70. Table 3 show the Outer Loading that generated using the SmartPLS 3.2.8.

Table 3 Outer Loading Result.

Outer Loading	GOR	PEOU	PR	PT	PTE	PU
GOR1	0,960					
GOR2	0,775					
PEOU1		0,981				
PEOU2		0,892				
PR1			0,939			
PR2			0,877			
PT1				0,867		
PT2				0,900		
PT3				0,860		
PTE2					0,895	
PTE3					0,921	
PU1						0,930
PU2						0,989

All the outer loading score are higher than 0.70 therefore it passed the evaluation of indicator of reliability. After checking the outer loading, we need to check on the score of average variances extracted (AVE). Table 4 showing the Construct Reliability and Validity Result that contains of Cronbach's Alpha (CA), Composite Reliability (CR), and Average Variance Extracted (AVE). At the end the AVE must be higher than 0.50 [5].

Table 4 Construct Reliability and Validity Result.

Construct	CA	CR	AVE
GOR	0,723	0,863	0,761
PEOU	0,881	0,935	0,879
PR	0,794	0,904	0,825
PT	0,849	0,908	0,767
PTE	0,788	0,904	0,824
PU	0,929	0,959	0,922

The score of the AVE are above 0.50 therefore the evaluation of the instruments is still good enough to continue to discriminant validity. To do the discriminant validity evaluation hair [5] explained, that The AVE of each latent construct must be higher than the construct's highest squared correlation with any other latent construct (Fornell–Larcker criterion) and the indicators loading should be higher than all of its cross loadings. Table 5 consisted of the result of Fornell- Larcker Criterion on Discriminant Validity.

Table 5 Fornell-Larcker Criterion Discriminant Validity Result

	GOR	PEOU	PR	PT	PTE	PU
GOR	0,872					
PEOU	0,412	0,937				
PR	0,623	0,478	0,909			
PT	0,783	0,649	0,606	0,876		
PTE	-0,210	0,163	-0,295	-0,115	0,908	
PU	0,448	0,680	0,578	0,647	-0,158	0,960

The green cells are the squared of AVE. compare to the other latent construct, the Squared of AVE from own latent construct are higher, it mean the instrument are valid [5]. Another option are checking the cross loadings result. Table 6 Cross Loadings result will help in evaluating the instrument.

Table 6 Cross Loading Results

	GOR	PEOU	PR	PT	PTE	PU
GOR1	0,960	0,391	0,512	0,765	-0,228	0,378
GOR2	0,775	0,330	0,676	0,578	-0,101	0,464
PEOU1	0,365	0,981	0,416	0,630	0,188	0,689
PEOU2	0,459	0,892	0,552	0,594	0,080	0,558
PR1	0,615	0,440	0,939	0,578	-0,305	0,503
PR2	0,504	0,433	0,877	0,518	-0,218	0,562
PT1	0,659	0,562	0,368	0,867	-0,096	0,577
PT2	0,616	0,619	0,436	0,900	-0,091	0,565
PT3	0,762	0,531	0,744	0,860	-0,112	0,557
PTE2	-0,243	0,211	-0,273	-0,046	0,895	0,043
PTE3	-0,144	0,093	-0,263	-0,156	0,921	-0,307
PU1	0,355	0,730	0,464	0,578	-0,073	0,930
PU2	0,467	0,635	0,601	0,650	-0,185	0,989

Compare to the other cross loadings score, the green cells are own cross loading result for each question. Compared each row, the result indicated that the green cells are higher from the score that available for each row. Therefore, after a careful analysis, researchers decide that the instruments are good enough to distribute to the populations.

Based on the result analysis of indicator of reliability, Convergent validity, and discriminant validity, Researchers decided all the tools or instrument that used in this research are valid and reliable. Further activity can be done by spreading the questionnaire and asking people to answer the questionnaire.

3.2. Structural Modelling

A bootstrapping with subsamples 6000 is generated and giving path coefficient result in Table 7. From the result Table 7 we could take decision whether to reject or accept the hypothesis.

Table 7 Path Coefficient Results

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (|O/STDEV|)	P Values
GOR -> PTE	-0,088	-0,150	0,344	0,255	**0,799**
PEOU -> PTE	0,584	0,480	0,343	1,702	**0,089**
PR -> PTE	-0,322	-0,383	0,230	1,401	**0,161**
PT -> PTE	-0,029	0,031	0,343	0,084	**0,933**
PU -> PTE	-0,311	-0,196	0,316	0,983	**0,326**

Based on the path coefficient result it shows that the entire hypotheses are rejected, because none of the T Statistic result are higher than the T Table. The total of samples are 39 therefore the degree of freedom (df) are 37 and the T-Table shown that with the standard error rate 5% and the T Statistic need to be higher 1,96 to accept the hypothesis [5]. Figure 5 shows the result model of the Research. Inside the Figure 5, Based on the bootstrapping result of the P value and the T-Statistic of the R Squared, which is 0.0261, it also means that endogenous latent variables in the structural model are weak. R Squared result on original sample (O) shows that the dependent variable (Public Trust to the Government) only can be explained 26,1% by the independent variables in this research. There are 73,9% that can be explained by other variable outside the research.

Figure 5 Research Result Model

A further study could be done by looking at variable inside the Technology Acceptance Model by Fred Davis [6]. The model from Fred Davis[6] could be combine with the Information Systems Success Model that created by Delone and McLane [7]. The variable of IS Success Model (Information Quality, System Quality, Service Quality) [7] included as the external variables for the Technology Acceptance Model by Fred Davis [6]. This combination of model also introduced by Zaied in his article [8].

4. CONCLUSIONS

This research carried out the evaluation of the measurement model of the research on e-Filing by using PLS-SEM. With the empirical result of the t-statistic of H1 (t-statistic = 0,983), H2 (t-statistic = 1,702), H3 (t-statistic = 1,401), H4 (t-statistic = 0,084), and H5 (t-statistic = 0,983) not higher than 1,96. In the other words, H1, H2, H3, H4 and H5 are not supportive. The research result shown that the entire hypotheses are rejected indicating the usage of the e-Filing application in Indonesia is unaffected on the public trust to the Government. The unaffected explained as 26.1% in this research with the total R^2 result of

0,261. Meaning that there are 73.9% that can be explained by other variable outside the research.

Further research could be done with a proper sampling that closely representing the national population of Indonesia Tax Payer. Researcher realize that due to the limitation of the time and efforts, proper sampling from the population of Indonesian Tax Payer are difficult to done. Future research could be done are to improve the research model. Integrated Success Model (ISM) could be adopted in order to evaluate the factor that influenced the adoption of E-Government Application.

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