Behavioral Intention to Use E-Tax Service System: An Application of Technology Acceptance Model

Jullie Jeanette Sondakh[1]

Abstract:

The aim of this research is to predict the behavior of the taxpayer's interest in using the e-tax returns through the implementation of Technology Acceptance Model (TAM). This research takes the taxpayer in Manado and Bitung as the sample with total of 156 respondents.

Data were analyzed using Structural Equation Modeling (SEM) modeling which consists of two stages: the measurement model (measurement model) and the structural model. The research finds that, the perceived ease of use have a significant positive effect on the perceived usefulness and attitudes towards use e-SPT.

The perceived usefulness are having positive and significant effect on the attitudes towards use e-SPT but no significant effect on behavioral intention to use e-SPT. Attitude towards e-SPT are having positive and significant effect on the behavioral intention to use e-SPT.

Keywords: *attitude, behavioral intention, perceived ease of use, perceived usefulness*

JEL Classification: *K22, M40, M41, M48*

[1] *Faculty of Economics and Business, Sam Ratulangi University*
Jl. Kampus Bahu, Manado – Sulawesi Utara, Indonesia 95115
Phone +62811431445, corresponding e-mail : julliesondakh@unsrat.ac.id

1. Introduction

State Revenue from the tax is absolute, because taxes can determine the sustainability of the development and welfare of the people. The role of tax revenue for the state is become very dominant in the wheels of government support and continues to increase from year to year. But in practices, the state revenue from the tax is still not optimal. Directorate General of Taxation as the board appointed by government to collect tax revenue has made tax reformation of tax policy and tax administration system (modernization of tax administration) so potential tax revenue can be collected optimally.

Modernization of tax administration consist policy reform, administrative reform and the reform of supervision. Related to the administrative reform, the Director General of Taxation Sigit Priyadi Pramudito (magazines of Certified Public Accountant-CPA Indonesia, April 2015) stated to strengthen other tax sectors such as human resources and information technology (Suryanto, 2016). The focus of this research is to provide input with related to the modernization of the tax administration on strengthening tax sector related to tax information system or electronic tax services, namely e-SPT, e-filing, e-invoices and other electronic tax services. One of the facility of taxes that will be discussed in this study with related to the electronic tax services, namely e-SPT which is an application (software) made by the DJP for used by the taxpayer in order to get the ease of filing (SPT). The use of e-SPT is intended for all work processes and taxation services to work well, smooth, accurate and easier for taxpayers on their tax obligations until tax compliance will be increased. Tax revenue target will be achieved if supported by appropriate tax incentives and tax compliance in paying the obligations.

Based on the previous description, there should be an observation on interests predition behavior using e-SPT related the benefits of using perceived usefulness, perceived ease of use, attitude towards e-SPT and behavioral intention to use e – SPT. The research regarding behavioral intention is analyzed through modeling structural Equation modeling (SEM). On the second stage in the process of research, analysis model used the structural model that can explain direct effect, indirect effect and the total through the entire model (full model).

The purposes and benefits of this research are able to predict the behavior of the taxpayer's interest in using the electronic tax services and to provide policy direction for the tax authorities in reforming the system of policy reform, administrative reform and the reform of supervision. This research expects to contribute some empirical evidences in field of behavioral accounting.

2. Literature Review

2.1. *Technology Acceptance Model (TAM)*

One ot the theory about the used of information technology systems that are considered to be very influential and commonly used to describe the individual acceptance of the use of information technology is the Technology Acceptance Model (TAM). This theory was first introduced by Davis (1986) and was developed from Theory of Reasoned Action (TRA) by Azjen and Fisbein (1980). TAM added two major constructs into the TRA. The two main constructs are perceived usefulness and perceived ease of use. TAM argued that individual acceptance of information technology systems is determined by the two constructs. The first Technology Acceptance Model (TAM) and has not been modified are using five main constructs as follow : (1) perceived usefulness; (2) perceived ease of use; (3) attitude toward behavior; (4) interests of behavior using technology; (5) the behavior of using actual technology TAM is still a new model, there are so many rasearch try to compare between TRA and TAM and with the Theory of Planned Behavior (TPB) in era of this model introduction. Davis *et.al.* (1989) found that TAM is better in explain the desire to receive technology compared TRA.TAM was develop by Davis (1986) to explain computer-usage behavior. The goal of TAM is to provide an explanation of the determinants of computer acceptance thai is general, capable of explaining user behavior across abroad range of end-user computing technologies and user population, while at the same time being both parsimonious and theoritically justified. TAM is a dominant model for investigating user technology acceptance and has accumulated fairly satisfactory empirical support for its overall explanatory power, and has posited individual causal links across a considerable variety of technologies, users, and organizational context (Hu *et al.,* 1999; Theriou, 2015; Thalassinos *et al.,* 2015; Rupeika-Apoga and Nedovis, 2015: Grima *et al.,* 2016 and Theriou *et al.,* 2014).

Based on the explanation above and the discussion of this research related to the tax information systems or application of electronic tax services, the most accurate theory implementation for this study is the Technology Acceptance Model (TAM).

2.2.   *E-SPT Application*

E-SPT application or named SPT electronic is an application made by the tax authorities for used by the taxpayer related to the ease on submitting the SPT. In the Circular Letter of the Tax Authorities Number: SE-103 / PJ / 2011 about technical guidelines for the procedure of receiving and processing the annual notification letter, it had communicated the information system of taxation in connection with e-SPT and provider applications or Application Service Provider (ASP) related with e-filing.

2.3.   *Empirical study on Technology Acceptance Model (TAM)*

According to Lee *et al.* (2003), since TAM had been introduced until 2000, this theory had been referred by 424 research and until 2003 had been referred by 698 research as reported by the Social Science Citation Index (SSCI). TAM development until 2003 by Lee *et al.* (2003) were classified into four progress which are model introduction, model validation, model extension and model elaboration.

Research that has been carried out after 2003 for studying the behavior of taxpayers' interests regarding electronic tax filing, one of them was conducted by Fu *et al.* (2006). This study focuses on the individual tax payer in Taiwan to integrate the two theories, namely TAM and TPB. The results of the study showed that the taxpayers prefer the benefits of the use of (perceived usefulness) tax filing method. There is another interesting thing found on this study that the effect of perceived ease of use towards behavioral intention is different for the taxpayers who fill out a form reporting manually and electronically (Vlasov, 2017).

Research related to the acceptance of the system of e-filing by taxpayers in Malaysia has been observed by Anna Che Azmi and Ng Lee Bee (2010). This research investigated the key factors on receiving e-filing system among taxpayers with TAM. The proposed model for further observation consists of three constructs which are perceived usefulness, perceived ease of use and perceived risk. The results showed that all latent variables significantly influence the behavioral intention. The construct of perceived risk has a negative correlation with the constructs of perceived usefulness and there is no significant relationship between the constructs of perceived risk and constructs of perceived ease of use. Further research on e-adoption of e-filing by Anna Che Azmi and Ng Lee Bee (2012) with focusing on the construct of perceived risk found that the perceived risk has a positive relationship with the adoption of e-filing whereas the perceived ease of use does not have a positive relationship with the adoption of e -filing.

Some of the results discussed before regarding the adoption or acceptance of e-filing system by the taxpayers provide the same conclusion. The same result was mainly related to a number of constructs that are often used by researchers to use application that TAM perceived usefulness and perceived ease of use. Acceptance of e-filing system by the taxpayers when connected to the behavior of interest (behavioral intention) prefer the use of perceived usefulness and perceived ease of use.

2.4. *Research model and hypothesis*
There are several theories and models that can explain the interaction between user trust, attitude, interests and actual use of information systems such as Theory of Reasoned Action (TRA) by Ajzen and Fishbein (1980); Theory of Planned Behavior (TPB) by Ajzen (1991) and the Technology Acceptance Model (TAM) by Davis (1989) and Davis, *et al,* (1989). Among of these theories, TAM is the most widely used and widely accepted to explain the relationship between perception and use of technology (Argawal and Prasad, 1999: Morris and Dillon, 1997). Unlike the other models, TAM explained that individual will receive a certain system if they believe in the system. That trust is perceived usefulness and perceived ease of use. Both of these constructs and TAM model also represents a significant constructs and models in the literatures regarding the adoption of e-government (Carter and Belanger, 2005; Cipovová and Dlaskova, 2016).

2.4.1. *Perceived Ease of Use (PEOU) and Perceived Usefulness (PU)*

According to TAM, individuals accept a particular system if they believe in the system. These believe are perceived ease of use (PEOU) dan perceived usefulness (PU). PU is defined as the user's perception of the degree to which using the system will improve his or her performance in the workplace. Perceived ease of use (PEOU) is defined as the user's perception of the amount of effort they need, to use the system. In the e-government literature, various studies (e.g. Carter and Belanger, 2005; Wang, 2002) have also adopted TAM in their model to test or evaluate the citizen adoption of e-government services. Perceived usefulness (PU) and perceived ease of use (PEOU) were found to be significant constructs in the e-government adoption literature (Carter and Belanger, 2004 and 2005; Nechaev and Antipina, 2016). Past research was inconsistent on whether perceived usefulness (PU) or perceived ease of use (PEOU) was the stronger determinant. According to Davis (1989), Perceived usefulness (PU) is shown as a primary determinant and perceived ease of use (PEOU) as a secondary determinant of intention to use a certain technology.

According to the findings in Wixom and Todd (2005), perceived usefulness (PU) was influenced by perceived ease of Use (PEOU). When taxpayers understand or learn the on-line tax filing system quicker, the filing efficiency and accuracy will be increased. Taxpayers can complete tax filing quicker (perceived usefulness) when they perceive the ease of use of the system is higher (Fu *et al.,* 2006; Fetai 2015). Hence, perceived ease of use (PEOU) is the determinant of perceived usefulness (PU) Perceived usefulness (PU) and perceived ease of use (PEOU) are distinct but related construct. Improvements in perceived ease of use (PEOU) may contibute to improved performance. Since improved performance defines perceived usefulness (PU) that is equivalent to near-term usefulness, perceived ease of use (PEOU) would have a direct, positive effect on perceived near-term usefulness (Suki and Ramayah, 2010).
H1: Perceived Ease of Use (PEOU) will have a significant positive effect on perceived usefulness (PU)

2.4.2.   *Perceived Ease of Use (PEOU) and attitude towards use e-SPT (AT)*
Perceived ease of use (PEOU) is another major determinant of attitude towards use in the TAM model. Taxpayers will know the advantages of the system only if it is easy to operate (Warkentin *et al.,* 2002). They will also have a positive attitude towards a system. When users perceive that the system is easy to operate, they will have more positive attitude. Davis (1989) once proposed to test the generality of the observed usefulness and ease of use tradeoff and to assess the impact of external interventions on these internal behavioral determinants. Beliefs about reliability certainly will affect one's attitude toward the system, which will shape behavioral beliefs about using the system (e.g. ease of use). It is the system behavioral beliefs (ease of use) that directly influence attitude toward use, ultimately usage (Wixom and Todd, 2005). Wang (2002) found that perceived ease of use (PEOU) was a stronger predictor of people's intention to e-file than perceived usefulness. The empirical reserach findings are, however mixed (Chau, 1996; Davis, 1989).

H2: Perceived Ease of Use (PEOU) will have a significant positive effect on attitude towards use e-SPT (AT)

2.4.3. Perceived usefulness (PU) and attitude towards Use e-SPT (AT)

Perceived usefulness (PU) in the TAM model originally referred to job telated productivty, performance, and efectiveness (Davis, 1989). This in an important belief indentified as providing diagnostic insight into how user attitudes toward using (and intention to use) are influenced; perceived usefulness has a direct effect on intention to use over and above its influence via attitude (Davis, 1989; Taylor and Todd, 1995). The higher degree of perceiving usefulness from on-line tas filing system would make taxpayers perceive that the system can increase the tas filing efficiency and convenience. On the other hands, the convenience and promptness that on-line tas filing system brings will increase taxpayers's perception of tax filing efficiency. Taxpayers will then have positive attitude toward on-line tax filing behavior. When the users perceive the usefulness of on-line tax filing system is higher, their attitude will be affected positively (Lu *et al.,* 2010).

H3: Perceived usefulness (PU) will have a significant positive effect on attitude towards Use e-SPT (AT)

2.4.4. Behavioral Intention to Use e-SPT (BI)

Past research have provided evidence of the significant effect of perceived Ease of Use (PEOU) and perceived usefulness (PU) on behavioral intention (BI) (Vekantesh and Davis, 1996; Davis *et al.,* 1989; Hu *et.al.,* 1999; Argawal and Prasad, 1999, Vekantesh, 1999). Fu, *et al.,* 2006 and Norazah, *et al.,* 2010 found that behavioral intention (BI) was largely driven by perceived usefulness (PU). Perceived usefulness (PU) has a direct effect on intentions to use over and above its influence via attitude (Davis, 1989; Taylor and Todd, 1995). Past reserach was consistent on whether perceived usefulness was a stronger determinant.

H4: perceived usefulness (PU) will have a significant positive effect on behavioral intention to use e-SPT (BI)

2.4.5. Attitude towards Use e-SPT (AT)

Attitude has long been identified as a cause of intention. Attitude in Fishbein and Ajzen's (1975) paradigm is clasified into two constructs: attitude toward the object and attitude toward the behavior. The latter refers to a persons's evaluation of a specified behavior. This evaluation of a specified behavior leads to certain behavioral intention that further resultsin certain behavioral action. Adapting this general principle, attitude toward use in the TAM model is defined as the mediating affective response between usefulness and ease of use beliefs and intention to use target system. In other words, a prospective user's overall attitude toward using a given system is an antecedent to intentions to adopt (Davis, 1989). In user participation research, it is also believed that, prior to system development, users are likely to have vaguely formed beliefs and attitude concerning the system to be developed (Hartwick and Barki, 1994).

There are differences in results of the research on attitudes so that there are researchers who studied these constructs in the model (TAM) and some are not. The result of the research Venkatesh (1999), attitude is an original TAM construct, but often does not used in the model (TAM) because it is not fully function as mediator between perceived usefulness and interest behavior (behavioral intention). According to Hu *et al.,* (1999) behavior intention. In contrast to Davis (1989); Taylor and Todd (1995), the research results indicated that perceived usefulness has a direct influence on the behavior of interest (behavioral intention) or via attitude. The differences in findings of previous research (research gap) are the focus of this research while still incorporating the construct attitude in model (TAM). Based on the literature description above, this research adapted the model (TAM) as it relates to the behavior of using the technology and adapted TAM model that has not been developed or modified.

H5: Attitude towards Use e-SPT (AT) will have a significant positive effect on behavioral intention to use e-SPT (BI)

Figure 1. *Research Model*
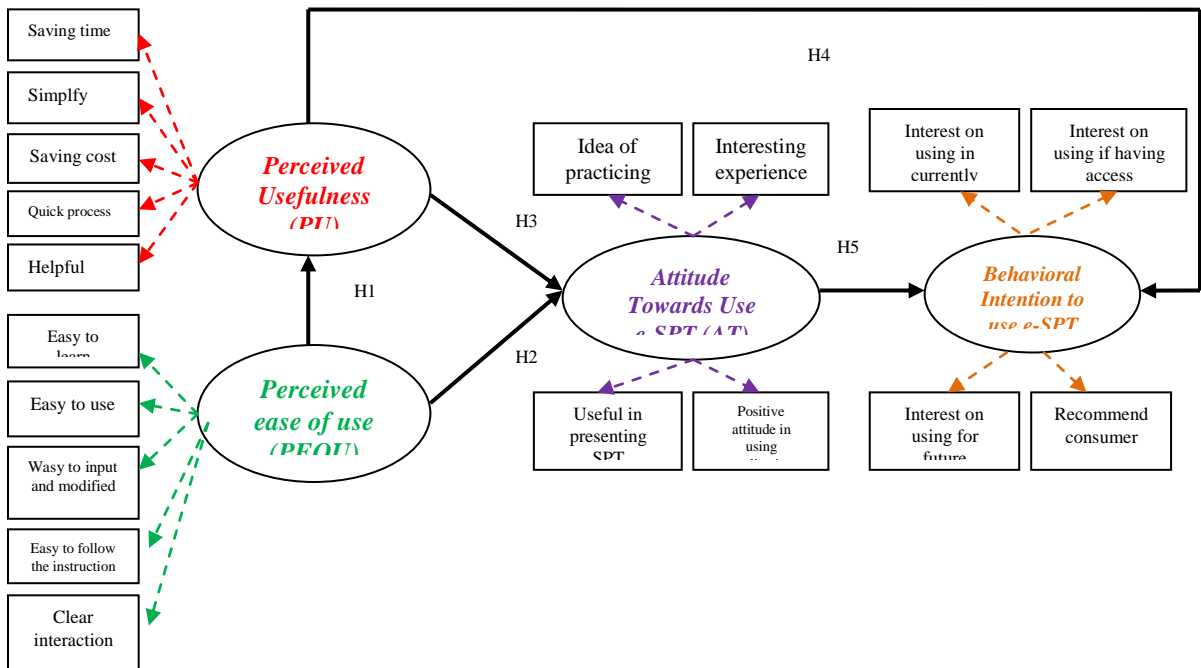
3. Research Methodology

3.1. *Analysis of structural model*

Modeling of Structural Equation Modeling (SEM) consists of two stages: measurement model and structural model. Measurement model is to get constructs or latent variables that fit so it can be used for next stage of analysis. Hsiu-Fen Lin (2007), the measurement model was estimated using confirmatory factor analysis

Confirmatory Factor Analysis (CFA) to test the reliability and validity of the measurement model and the structural model that were analyzed to test the fit of structural model from the theoretical model that were proposed (TAM). The structural model aims to get the most fit or worthy of the model structure. To test the structural model, test of Goodness of Fit (GOF) had been conducted.

The research focus is on SEM modeling second stage of the structural model, which aims to get a Full Model that can be analyzed and evaluated of Goodness-of-fit criteria. In this second phase, there was merger model of CFA from the construct of exogenous and endogenous that had been accepted into an overall model or full model to be estimated and analyzed to see the compability model in overall as well as an evaluation of the model structure in order to obtain full model that can be accepted (feasibility test model). The technique used to gain Full Model that can received using Structural Equation Modeling or SEM with program packages AMOS. This is because SEM does not used to produce a model, but used to confirm the theoretical model that has been developed through empirical data. Therefore, in-depth study of the theory to obtain a theoretical justification for the model to be tested is an absolute requirement on SEM application.

3.2. Population and research sample

The population in this research are all individual taxpayers which listed in KPP Manado and became the object of research in accordance with each respondent criteria. Total taxpayers (individuals and entities) registered in the KPP Manado has been increased for last three (3) years in which, in 2013 there are 77,442 taxpayers, in 2014 there are 86,995 taxpayers and 2015 there are 90,055 taxpayers. The sampling technique is purposive sampling or judgment sampling and applies to both groups of respondents. The sampling technique with purposive sampling is where samples are carefully selected so it is relevant with research programs. In purposive sampling, researchers determine the conditions for the samples to be consistent with the purposes of research.

Respondents that were sampled in this research are corporate taxpayers and individual respondents in total 156 individual taxpayers whereas 88 respondents of individual taxpayers or 66% and corporate taxpayers in total 68 respondents or 34%. 160 questionnaires were distributed, 159 questionnaires were returned but just 156 questionnaires that can be processed because 2 questionnaire are not fully filled and one questionnaire is not filled at all. 156 questionnaires can be processed which eligible for the SEM analysis.

3.3. Questionnaire development

This research used two (2) variables exogenous which are perceived usefulness and perceived ease of use and 2 (two) variables endogenous which are attitude towards Use e-SPT and behavioral intention to use e-SPT, where all the of these variables are measured by Likert with scale in range of 1 to 5. Table 1 defines the statement (item) that is present in this questionnaire, was collected from questionnaires used in

previous research and has been adapted to suit with the research related the utilizing information technology applications such as e-SPT. The variable indicator of this research are perceptions, opinions, attitudes and views of respondents to what is perceived and experienced as a taxpayer at the time to meet tax obligations.

Table 1. *Indicators of latent variables exogenous and endogenous*

Construct	Indicator	Symbol	Reference
Perceived Usefulness	1. By using e-SPT application it will be saving more time compared by submitting manually	PU1	Davis (1989); Roca et.al., (2006); Fu et.al., (2006), Lu et.al., (2010)
	2. By using e-SPT application it will be easier compared by submitting manually	PU2	
	3. By using e-SPT application it will savings more cost compared by submitting manually	PU3	
	4. By using e-SPT application it will accelerate the filling of Notification Letter (SPT)	PU4	
	5. Overall, by using e-SPT application it will be very helpful	PU5	
Perceived ease of use	1. Learning to fill e-SPT application will bevery easy for me	PEOU1	Davis (1989), Chau and Hu (2001), Fu (2006), Roca (2006), Lu et, al., (2010)
	2. I found the filling of e-SPT application is easy to do	PEOU2	
	3. By using e-SPT application will make me easier to input and modified data	PEOU3	
	4. The instruction for using e-SPT application is easy to follow	PEOU4	
	5. My interaction with e-SPT application is very clear and understandable	PEOU5	

Table 1. *Indicators of latent variables exogenous and endogenous (cont.)*

Construct	Indicator	Symbol	Reference
Attitude towards Use e-SPT	1. I like the idea of using e-SPT for delivering the Notification Letter (SPT)	AT1	Hu et.al., (1999), Chang (2004), Lu et.al., (2010)
	2. Using e-SPT application will be an interesting experience	AT2	
	3. e-SPT application is a software that is very helpful in submitting Notification Letter (SPT)	AT3	
	4. I think positively about the use of e-SPT	AT4	
Behavioral intention to use e-SPT	1. I'm interested in using e-SPT application	BI1	Davis (1989), Wang (2002), Chang (2004), Fu (2006)
	2. I have the access to use e-SPT application, I'm interested in using it	BI2	

3. I'm planning on using e-SPT application in the future	BI3
4. I would recommend to use e-SPT application to family and friends	BI4

4. Results and Discussion

4.1. *The Estimated Results Determine the Interest Behavior (Full Model)*

Full Model was used to test the causal model that has been stated before in a variety of causality (Causal model). Full analysis model will look whether there is an unfitness model and causality which was built in the tested model. After measurement model analyzed by Confirmatory Factor Analysis (CFA) and had been observed that each indicator can be used to define a variable latent construct, then a Full model can be analyzed and evaluated the criteria Goodness-of-fit of Structural Model.

Figure 2. Overview Causal Relationship Model Between Variables Perceived Usefulness, Perceived Ease of Use, Attitude towards Use e-SPT, and Behavioral Intention to Use e-SPT
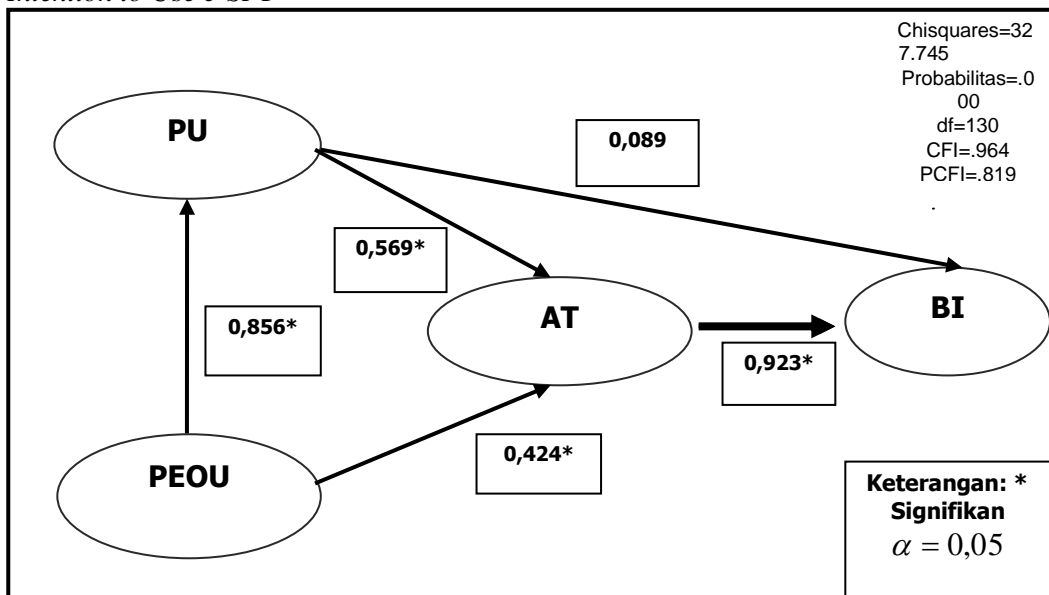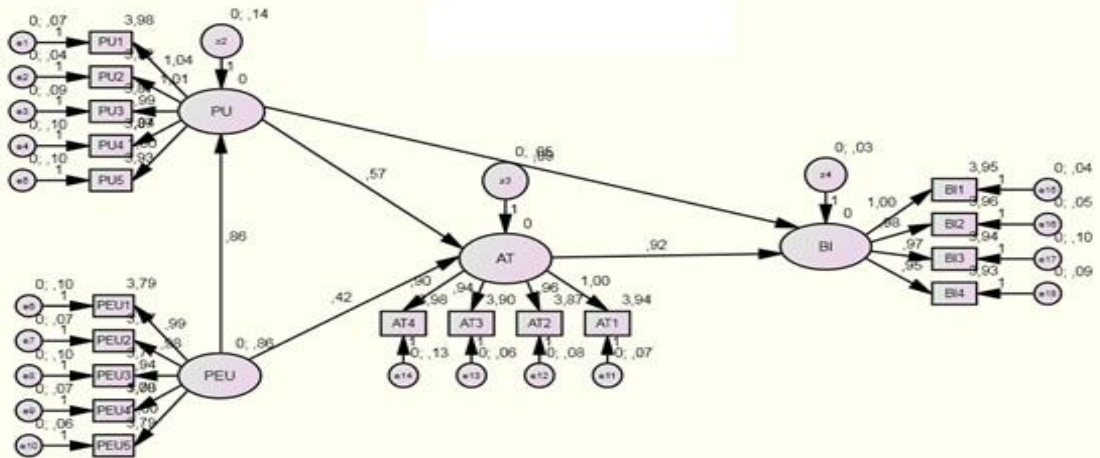
Figure 3. *Estimated Full Model*

4.2. Goodness of Fit Test

Model qualification test was conducted to evaluate the degree of suitability or Goodness of Fit (GOF) in general between the data and the model evaluation results as presented in Table 2.

Table 2. *Full test results interests behavior prediction model*

Goodness-of-Fit Index	Cut off Value	Estimated Results	Criteria
X^2 – *Chi Square*	< 214,477	327,745	Bad fit
Significance Probability	≥ 0,05	0,000	Bad fit
DF	< 0	130	Over Identified
RMSEA	≤ 0,08	0,09	Bad fit
CMIN/DF	< 2	2,521	Acceptable fit
TLI	≥ 0,95	0,958	Good fit
CFI	≥ 0,95	0,964	Good fit
NFI	≥ 0,90	0,943	Good fit
RFI	≥ 0,90	0,933	Good fit
IFI	≥ 0,90	0,965	Good fit
PNFI	0,06 – 0,09	0,801	Good fit

From the path diagram in Figure 2, and estimated full model in Figure 3 above, the full model prediction individual behavior is fulfill the criteria for the goodness of fit. The results of this estimation are described by some measurements for test the feasibility of the following models:

1. **Measurement of absolut compability.** In overall the measurement of absolute compability was obtained from the estimated full model through

X2 - Chi Square, Probability Significance, DF, RMSEA and CMIN / DF can be seen in Table 2. The estimation results suggest that the overall degree of prediction model (structural model and measurement model) for correlation and covariance matrices can not describe the overall fit of the model estimation even the estimated results in CMIN / DF compared with the cut off value indicates acceptable fit criteria.

2. **Measurement of incremental compability.** In overall the measuremetn of the incremental compability was obtained from the full model estimated by TLI, CFI, NFI, IFI, and PFI can be seen in Table 2, which compares estimates and cut off value with good of fit criteria. The estimation results indicate that there is incremental match between the proposed model with the base model (baseline model) that is often referred as nullmodel and saturated model.

3. **Measuremeent of parsimoni compability.** The estimated results of full model for parsimony compability through PNFI can be seen in Table 2. to the good of fit criteria. The estimation results indicate that high parsimony from the size of parsimony compability can be stated that the GOF model with total parameters that had been estimated could reach the compability on that level.

From some differences index on the estimated results of full model on interest individual behavior prediction above, the index of TLI and CFI are highly recommended to be used for this index because it is relatively insensitive to sample size and less influenced by the complexity of the model. Based on the estimated index TLI and CFI, the full model can predict the behavior of interest at good fit.

4.3. *Hypothesis testing*
After a structural model can be considered as a fit, the next process is to see if there is a significant correlation between exogenous variables and endogenous variables. This structural model analysis is related to the evaluation of the coefficients or parameters indicating causality or influence the latent variables to other latent variables. This causal relationship had been hypothesized in a research. Table 3 presents the results of structural model estimation and evaluation of the coefficients structural model and its relation with the research hypothesis.

Table 3. *Hypothesis testing on relationship of variable exogenous and endogenous*

Path	Unstandardize Estimate (β)	Critical Ratio
PEU→PU	0,856*	18,789
PEU→AT	0,424*	6,677
PU→AT	0,569*	8,295
PU→BI	0,089	0,961
AT→BI	0,923*	9,884

* significant at 0.05

Tests were carried out on five (5) hypothesis. Hypothesis testing was done by using the t-value with a significance level of 0.05. The t-value in AMOS 18 program is Critical Ratio (C.R) on Regression Weights: (Group number 1 - Default model) of Full Model. When the Critical Ratio (C.R) $\geq$ 1,967 or the probability (P) $\leq$ 0.05 then H_0 is rejected. Hypothesis H_1 was supported as perceived ease of use (PEOU) has a significant positive effect on perceived usefulness (β = 0,856). Perceived usefulness (PU) and perceived ease of use (PEOU) were found to be significant constructs in the e-government adoption literature (Carter and Belanger, 2004, 2005). The finding show that the significant positive effect between perceived ease of Use (PEOU) and perceived usefulness (PU) towards attitude towards use e-SPT (AT) is confirmed here and also by other studies (Wixom and Todd, 2005; Fu *et al.,* 2006; Azmi and Bee, 2010).

Hypothesis H_2 and H_3 were supported as perceived usefulness (PU) and perceived ease of use (PEOU) have significant positive effects on attitude towards use e-SPT (AT). Similar to past studies, perceived usefulness (PU) is found to be a more powerful predictor of attitude towards use e-SPT (AT) than perceived ease of use (PEOU). Perceived usefulness (β = 0,569) showed a slightly stronger predictor to attitude towards use e-SPT than perceived ease of use (β = 0,424). The finding is consistent with that of Azmi and Bee, 2010; Lu *et al.,* 2010; Warkentin *et al.,* 2002; Ramayah *et.al.,* 2009; Davis *et al.,* 1989. They all agree that perceived usefulness (PU) and perceived ease of use (PEOU) would affect an individual's attitute. Hypothesis H_4 was not supported, there is no significant positive effcet of perceived Usefulness on behavioral intention to use e-SPT (β = 0,089, ρ > 0,05). This results matches with the viewpoints of Davis, 1989; Taylor and Todd, 1995. Contrary to Fu, *et al.,* (2006) and Norazah, *et al.,* (2010), which found that behavioral intention (BI) was largely driven by perceived usefulness (PU). Hypothesis H_5 was also supported as ρ < 0,05. Attitude towards use e-SPT had a significant positive effect on behavoral intention to use e-SPT (β = 0,923). This finding confirm the results of Davis (1989); Hartwick and Barki, 1994; Suki and Ramayah (2010). This results matches with the viewpoints of Azjen (1985); Davis *et al.,* (1989) and Hung *et al.,* (2006).

4.4. The analysis of inter variable effect
Significance test on functional relationship between variables is done partially by Critical Ratio (C.R) or probability (P) on the regression weight. Critical Ratio equal to the value Critical Student (t-value) of the ordinary regression model (non-structural). The relationship between variables indicated a significant effect if the C.R $\geq$ 1.65 or P $\leq$ 0.05 at the 5% significance level. The direction of the impact (positive or negative) on the loading factor (λ) on standardized regression weights. Furthermore, the impact strength can be measured between both constructs that influence direct, indirect, and total effect.

4.5. The amount of direct effect, indirect effect and total effect inter construct

Direct effect is the coefficient of all of all the coefficient line with the one pointed arrow. Indirect effect is an effect that comes from a dividend variable or intervening or the effect of the exogenous variable to endogenous dependant variable through endogenous intervening variable. Total effect is the effect from various connection or calculation results between direct effect and indirect effect. Table 5 presents the total amount of direct effect, indirect effect, and total effect.

Table 5. *The amount of direct effect, indirect effect dan total effect*

Path	Symbol	Direct Effect	Indirect Effect	Total Effect
PEOU → PU	$\beta 1$	0,856	0,000	0,856
PEOU → AT	$\beta 2$	0,424	0,487	0,911
PU → AT	$\beta 3$	0,569	0,000	0,569
PU → BI	$\beta 4$	0,089	0,525	0,614
AT → BI	$\beta 5$	0,923	0,000	0,923

Based on the calculation shown on Table 5, it can be seen that the direct effect of attitude towards use e-SPT (AT) on behavioral intention to use e-SPT (BI) is 0.923. It is bigger when compared to the direct effect of perceived ease of use (PEOU) on Perceived usefulness (PU) which is 0.856. The indirect effect of perceived usefulness (PU) on behavioral intention to use e-SPT (BI) which is 0.525 is bigger when compared to the indirect effect of Perceived ease of use (PEOU) on Attitude towards use e-SPT (AT) which is 0.487. If seen from the total effect, then the line of effect of Perceived ease of use (PEOU) on Behavioral intention to use e-SPT (BI) through Perceived usefulness (PU) and attitude towards use e-SPT (AT) is bigger rather than without through Perceived usefulness. The line of effect of Perceived usefulness (PU) on Behavioral intention to use e-SPT (BI) seen from the direct effect is only 0,089. If through attitude to use e-SPT, the total effect is 0,614. This study proved that perceived usefulness (PU) has a direct effect on intentions to use over and above its influence via attitude (Davis, 1989; Taylor and Todd, 1995).

5. Conclusion and Future Research

5.1. *Conclusion and implications*
An empirical study was conducted to identify determinants of user acceptance for e-government services in Indonesia. The results demonstrated that perceived usefulness and perceived ease of use would affect an individual's attitude. The study infers and finds the correlation among these three factors. The finding is consistent with that of Azmi and Bee (2010), Lu *et al.* (2010), Warkentin *et al.* (2002), Ramayah *et.al.* (2009), Davis *et al.* (1989). This is one of research contribution. This study proves that attitude shows positive effect on behavioral intention, and these results matches with the viewpoints of Azjen (1985); Davis *et al.,* (1989) and Hung *et al.,* (2006). The finding is another contribution of this paper.

The empirical results also show that perceived usefulness has no significant positive effect on behavioral intention to use e-SPT. This results matches with the viewpoints of Davis (1989) and Taylor and Todd (1995)**.** Empirical result shows that the goodness of fit of this research model is accepted. Hence, we propose the acceptance model and finds that it could be a reference for the goverment on practical policy-making. This helps the government to improve their shortcoming. The policy goal can be fulfilled if government services is closer to the public's demand. Our research provides a starting point for government seeking ways to improve citizens' acceptance of e-tax services system.

5.2. *Limitations*

As with any reserach, this study has a number of limitations. First, the survey concentrates on a specific area and does not represent the whole of Indonesia. Hence, caution needs to be taken when generalizing this research to the whole of Indonesia. Second, this reserach did not incorporate actual usage behavior in the proposed model. However, this is not a serious limitation as there is substantial empirical support for the causal link between intention and behavior. Third, this study used a cross-sectional design and correlational data which did not provide irrefutable evidence of causation. Longitudinal evidence might enhance our understanding of the causality and interrelationships between or among variables important to e-tax services system acceptance by individuals.

5.3. *Future research*

We suggest follow-up studies can target taxpayers who have never used e-tax services system to study the comments and acceptance factors of these two group (have experience of using e-tax services system and have no experience in the system). Additional reserach is also needed to determine whether the results of this study can be replicated in other population and e-government services. The empirical research can be used in practical situation and also a reference for government policy-making.

References

Ajzen, I. and Fishbein, M. 1980. Understanding attitude and predicting social behavior. Upper Saddle River, NJ: Prentice Hall.

Azjen, I. 1985. From intention to action: A theory of planned behavior, In: J. Kuhl and J. Bechmenn (Eds), Action Control from Recognition to Behavior. NY: Springer Verlag.

Ajzen, I. 1991. The theory of planned behavior. organizational behavior and human decision processes. 50(2), 179-211.

Arbuckle, J.L. 1997. AMOS Users' Guide, Version 3.6. Chicago : Smallwaters Corporation.

Argawal, R. and Prasad, J. 1999. Are individual differences germane to the acceptance of new information technologies? Decisions Sciences, 30(2), 361-391.

Azmi, C.A. and Bee, N.L. 2010. The Accptance of The E-filing System by Malaysian Taxpayers: A Simplified Model. Electronic Journal of e-Government, 8(1), 13-22.

Azmi, A.C., Kamarulzaman, Y. and Hamid, N.H.A. 2012. Perceived risk and the adoption of tax e-filing. World Applied Sciences Journal. 20(4), 532-539.

Browne, K.A. and Cudeck, R. 1993. Alternative Ways of Assessing Model Fit. In K.A. Bollen & J.S. Long, Test for Structural Equation New Delhi: Sage Publications Inc.

Chang, P.V. 2004. The Validity of An Extended Technology Acceptance Model (TAM) for Predicting Intranet/Portal Usage. Master Paper : School of Information and Library Science, University of North Caroline.

Carter, L. and Belanger, F. 2004. Citizen Adoption of e-government Initiatives. Proceedings of 37th Hawaii International Conference on System Sciences, 1-10.

Carter, L. and Belanger, F. 2005. The Utilization of e-Government Services: Citizen Trust, Innovation and Acceptance Factors. Information System Journal, 15, 5-25.

Chau, P.Y.K. 1996. An Empirical Assessment of a Modified Technology Acceptance Model. Journal of Management Information Systems, 13(2), 185-204.

Cipovová, E. and Dlaskova, G. 2016. Comparison of Different Methods of Credit Risk Management of the Commercial Bank to Accelerate Lending Activities for SME Segment. European Research Studies Journal, 19(4), 17-26.

Davis, F.D. 1986. A Technology Acceptance Model for Empirically Testing New End user Information Systems: Theory and Results. Ph.D Dissertation, Sloan Scholl of Management, Massachusetts Institute of Technology.

Davis, F.D. 1989. Perceived Usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. MIS Quaterly, 13(3), 319-340.

Davis, F.D., Bagozzi, R.P. and Warshaw, P.R. 1989. User Accaptance of Computer Technology: A Comparison of Two Theoritical Models. Management Science, 15(8), August, 982-1003.

Fetai, B. 2015. Financial Integration and Financial Development: Does Financial Integration Metter?. European Research Studies Journal, 18(2), 97-106.

Fu, J.R., Cheng. K.F. and Wen, P.C. 2006. Acceptance of Electronic Tax Filing: A Study of Taxpayer Intentions. Information & Management, 43, 109-126.

Grima, S., Romānova, I., Bezzina, F. and Dimech, C.F. 2016. Alternative Investment Fund Managers Directive and its Impact on Malta's Financial Service Industry. International Journal of Economics and Business Administration, 4(1), 70-85.

Hair, J.F., Anderson R.E., Tatham R.L. and Black W.C. 1998. Multivariate Data Analysis. 5th Edition, New Jersey : Prentice-Hall International.

Hartwick, J. and Barki, H. 1994. Explaining the Role of User Participation in Information Use. Management Science, 40(4), 440-465.

Hu, P.J., Chau, P.Y.K., Sheng, O.R.L. and Tam, K.Y. 1999. Examining the Technology Acceptance Model Using Physician Acceptance of Telemedicine Technology. Journal of Management Information System. 16(2), 91-112.

Hulland, J., Chow, Y.H. and Lam, S. 1996. Use of Casual Models in Marketing Research. A Review, International Journal of Research in Marketing, 13, 181-197.

Hung, S.Y., Chang C.M. and Yu, T.J. 2006. Determinants of User Acceptance of the e-government Sevices: The Case of On-line Tax Filing and Payment System. Government Inform, 23 (1), 97-122.

Iqbaria, M., Zinatelli, N., Cragg, P. and Cavaye, A.L.M. 1997. Personal Computing Acceptance Factors in Small Firms: A Structural Equation Model. MIS Quarterly, 21(3), 279-305.

Lin, H.F. 2007. Predicting Consumer Intention to Shop online: An Empirical Test of Competing Theories. Electronic Commerce Research and Applications, 6, 433-442.

Lu, C.T., Huang, S.Y. and Lo, P.Y. 2010. An Empirical Study of On-line Tax Filing Acceptance Model: Integrating TAM and TPB. African Journal of Business Management, 4(5), 800-810.

Mathieson, K. 1991. Predicting User Intention Comparing the Technology Acceptance Model with the Theory of Planned Behavior. Information System Research, 2(3), 173-191.

Morris, M.G. and Dillon, A. 1997. How User Perception Influence User Use. IEEE Software, 14(4), 58-65.

Nechaev, A. and Antipina, O. 2016. Analysis of the Impact of Taxation of Business Entities on the Innovative Development of the Country. European Research Studies Journal, 19(1), 71-83.

Suki, N.M. and Ramayah, T. 2010. User Acceptance of The E-government Services in Malaysia: Structural Equation Modeling Approach. Interdiciplinary Journal of Information, Knowledge, and Management, 5, 395-412.

Roca, Juan Carlos, Chao-Min Chiu, Francisco Jose Martinez. 2006. Understanding e-learning Continuance Intention: An Extention of the Technology Acceptance Model. International Journal of Human-Computer Studies, 64, 683-696.

Rupeika-Apoga, R. and Nedovis Uraev, R. 2015. The Foreign Exchange Exposure of Non-Financial Companies in Eurozone: Myth or Reality? International Journal of Economics and Business Administration, 3(1), 54-66.

Sun, H. and Zhang, P. 2003. A New Perspective to Analyze User Technology Acceptance. Working Paper, Syracuse University.

Suryanto, T. 2016. Audit Delay and Its Implication for Fraudulent Financial Reporting: A Study of Companies Listed in the Indonesian Stock Exchange. European Research Studies Journal, 19(1), 18-31.

Taylor, S., and Todd, P.A. 1995. Understanding Information Technology Usage: A Test of Competing Models. Information System Research, 6(2), 144-176.

Thalassinos, I.E., Pintea, M. and Raţiu, I.P. 2015. The Recent Financial Crisis and Its Impact on the Performance Indicators of Selected Countries during the Crisis Period: A Reply. International Journal of Economics and Business Administration, 3(1), 3-20.

Theriou, G.N., 2015. Strategic Management Process and the Importance of Structured Formality, Financial and Non-Financial Information. European Research Studies Journal, 18(2), 3-28.

Theriou, N., Aggelidis, V. and Theriou, G. 2014. The Mediating Effect of the Knowledge Management Process to the Firm's Performance: A Resource-Based View. International Journal of Economics and Business Administration, 2(1), 87-114.

Vekantesh, V., and Davis, F.D. 1996. A Model of the Antecedents of Perceived Ease of Use: Development and Test. Decision Science, 27(3), 451-481.

Venkatesh, V. 1999. Creation of Favorable User Perceptions: Exploring The Role of Intrinsic Motivation. MIS Quarterly, 23(2), 239-260.

Vlasov, V.A. 2017.The Evolution of E-Money. European Research Studies Journal, 20(1), 215-224.

Wang, Y.S. 2002. The Adoption of Electronic Tax Filing Systems: An Empirical Study. Governmnet Information Quaterly, 20, 333-352.

Warkentin, M ., Gefen, D., Pavlou, P.A. and Rose G.M. 2002. Encouraging Citizen Adoption of E-government by Building Trust. Electronic Mark, 12(3), 157-162.

Wixom, B.H., and Todd, P.A. 2005. A Theoritical Integration of User Satisfaction and Technology Acceptance. Information System Research, 16(1), 85-102.