PRIOR EXPERIENCE, TRUST, IS SUCCESS MODEL: A STUDY ON THE USE OF TAX E-FILING IN INDONESIA

Christine Tjen Vitria Indriani Panggah Tri Wicaksono

LPEM-FEB UI Working Paper 030

Chief Editor: Riatu M. Qibthiyyah

Editors : Kiki Verico Setting : Rini Budiastuti

© 2019, January Institute for Economic and Social Research Faculty of Economics and Business Universitas Indonesia (LPEM-FEB UI)

Salemba Raya 4, Salemba UI Campus Jakarta, Indonesia 10430

Phone: +62-21-3143177
Fax: +62-21-31934310
Email: lpem@lpem-feui.org

Web : www.lpem.org

Prior Experience, Trust, IS Success Model: A Study on the Use of Tax e-Filing in Indonesia

Christine Tjen^{1,★}, Vitria Indriani ¹, & Panggah Tri Wicaksono¹

Abstract

The purpose of this paper was to explore the perception of online tax filing in Indonesia using prior experience, trust, and IS (Information System) Success Model. The paper examined how the IS quality will be influenced by attributes such as prior experience on offline tax filing, trust in government, trust in technology, and trust in e-Filing website. Following this, the influence of IS quality on perceived usefulness and user satisfaction will be explored. To end the model, the paper was intended to answer question on whether the last two dimensions (perceived usefulness and user satisfaction) will have an effect on perceived net benefit. This paper used primary data generated by distributing online questionnaire and able to get the total of 1.095 respondents, 993 of which are actively using online tax-filing (e-filing) and valid. The data were analyzed by the Structured Equation Model (SEM). The results suggested that trust in government and trust in technology positively affect the trust in e-Filing website, which subsequently influence all three IS quality dimensions. Information quality, system quality and service quality was found to be consistently and significantly influence the perceived usefulness and user satisfaction. It was evident that tax payers in Indonesia placed the robustness and the safety features of the online system as the most important attributes that will influence the usefulness and satisfaction of online tax filing.

JEL Classification: H20

Keywords

e-filing — online tax return — IS quality — trust

¹ Faculty of Economics and Business Universitas Indonesia

*Corresponding author: Jl. Prof. Dr. Sumitro Djojohadikusumo, Kampus UI, Depok, Jawa Barat 16424, Indonesia. Email: indivara_devi@yahoo.com.

1. Introduction

Tax revenue plays an important role in Indonesia, since most of the government expenditures are financed by tax revenue. Therefore, in order to increase the tax revenue, it is significant for the Indonesian Government, especially the Directorate General of Taxation (DGT) to increase the tax compliance of the taxpayers. One type of tax compliance is formal tax compliance in submitting the tax returns. Thus, the DGT tried to simplify the tax return submission process by introducing the E-filing System in 2005. Currently, the E-filing system still applicable only for Individual Income Tax Return. According to the DGT, one of the advantage of e-filing is go-green and also for precise and safety reason because using the computer based system (online and real time). According to the data from DGT, until the submission deadline of 2017 Individual Income Tax Return, i.e 31 March 2018, there were around 8.47 million individual income tax returns submitted through e-filing system (80% of total submissions).

Online tax filing will soon be mandatory in Indonesia. Thus, the tax authority is required to design impeccable system that accomodate the needs of the tax payers. The study found many attributes that are relevant for the users and this input will be advantageous for e-filing system improvement. Chen et al. (2015) used prior offline experience to moderate the relationship between trust in government and trust in e-government website. The moderation itself demonstrated insignificant influence. However, prior experience in offline government services significantly enhanced the perception

towards e-government service. Belanger and Carter (2008) found that trust in e-government service consists of two aspects: trust to entity who provide the online service (the government) and trust in the reliability of the enabling technology to deliver the service itself (the internet). On top of that, the more citizens trust the e-government website, the better they can discern the quality of the information being provided for them by that said website (Chen et al., 2015) and the better the trust, the better the perceptions of system quality towards the e-government website will be (Teo et al., 2008; Khayun et al., 2011). Furthermore, those variables will influence the user satisfaction and perceived net benefits (Wang and Liao, 2008; Chen et al., 2015; Beldad et al., 2010; Chen, 2010).

Tax system is unique to every country. This study provided context-specific evidence. In Indonesia, where tax complience is considered low, the use of e-filing is expected to increase taxpayers' willingness to pay and report their taxes. The present study examined users' perception on the benefit of e-filing. In addition, this research also specified trust into three seperate dimesions; trust in government, trust in technology, and trust in e-Filing website. On top of that, this study consist of more sample than Chen et al. (2015), i.e used primary data generated by distributing online questionnaire and able to get the total of 1.097 respondents, 993 of which are actively using online tax-filing (e-filing) and the samples are consist from several provinces in Indonesia not only from one city in Indonesia.

The paper examined how the IS quality will be influ-

enced by attributes such as prior experience on offline tax filing, trust in government, trust in technology, and trust in e-Filing website. Following this, the influence of IS quality on perceived usefulness and user satisfaction will be explored. To end the model, the paper was intended to answer question on whether the last two dimensions (perceived usefulness and user satisfaction) will have an effect on perceived net benefit.

2. Literature Review

2.1 Prior Experience

The users of e-government are similar to those previously use government traditional service. According to Mostafa and El-Masry (2013), the use of electronic means by citizens to interact with government is an extension of their civic involvement via traditional channels. Citizens may also develop an understanding that the online channel is not an independent service channel separated from the offline channel (Kaufman-Scarborough and Lindquist, 2002). Lee et al. (2011) analysed data obtained from a local district government in Seoul, Korea, and revealed that the willingness to adopt e-government increased when users perceived high quality service provision in offline service channels. They argue that the prior interactions with the government through traditional channels shapes their belief, confidence, and trust in the government, which in turn translate into the perception of the quality of service provided online. In addition, users' prior experiences with the quality of offline services provide them with an opportunity to build trust in government (Welch et al., 2005). Chen et al. (2015) used prior offline experience to moderate the relationship between trust in government and trust in e-government website. The moderation itself demonstrated insignificant influence. However, prior experience in offline government services significantly enhanced the perception towards egovernment service. Thus, it follows that:

H1: Prior experience on offline government services positively affects trust in e-government website.

2.2 Trust

Online self-service technologies involve new risks and uncertainty that may hinder their adoption (Chouali et al., 2016). Therefore, previous literature in this field consider trust as one of the most important determinant of e-filing successful implementation. Belanger and Carter (2008) found that trust in e-government service consists of two aspects: trust to entity who provide the online service (the government) and trust in the reliability of the enabling technology to deliver the service itself (the internet).

2.2.1 Trust of the government

Trust of the government is defined as society's perception on the integrity and ability of the agency who provide public service (Carter and Belanger, 2005). People may trust the government if they believe that the government will act for the best benefit of the citizen. It suggests that trust in government heavily depends on how the government performs (Karkin and Janssen, 2013). In the initial stage of e-government adoption, citizens will have some resistance as they are not familiar with the potential risks associated

with the new mode of service (Abu-Shanab, 2014). Internet users' confidence in the government's ability to protect citizens' personal data will reduce the perceived risks of disclosing such data for e-government services, leading to a switch from offline to online channel (Beldad et al., 2011; Chouali et al., 2016; Lallmahomed et al., 2017). Citizens who trust the government would be more incline to share and use e-government service (Carter and Belanger, 2005; Hung et al., 2006; Chen et al., 2015; Kurfali et al., 2017). E-commerce offers an easy analogy; the success of an evendor's website is influenced by the online customer's trust toward that vendor, hence, the success of an e-government website is also affected by citizen's trust in the government (Teo et al., 2008). Thus, it follows that:

H2: Trust in government positively affects trust in egovernment website.

2.2.2 Trust in the technology

Trust in the internet as enabling mechanism of e-government service has been addressed by many literatures because it is one of the primary antecedents of trust in e-government adoption (Carter and Belanger, 2005; Chen et al., 2015; Chouali et al., 2016; Kurfali et al., 2017). Technology acceptance depends on potential user perception on internet's reliability in providing accurate information and secure transaction. Online sharing of personal data is hardly considered safe and therefore would be deemed risky (Beldad et al., 2011). There is some concern about sharing personal and confidential information with the government over the internet due to a fear that the data will be misused and their privacy diminished (GAO, 2001), be accessed by unauthorized third parties, rented or sold to other organizations, or just used for purposes unknown to the person to whom the data pertain (Beldad et al., 2011). The decision to adopt e-government service requires citizens' trust in the technology through which electronic transaction are executed, the internet (Carter and Belanger, 2005). According to Teo et al. (2008), if the citizen does not believe that the technology applied by the e-government is secure enough, he or she will be worried about the leakage ID and password, computer viruses, or his or her credit card number being hacked. On the contrary, a high level of trust in technology will facilitate citizens' belief that online transactions and interactions with government agencies can be conducted successfully. Chen et al. (2015) research also shown that trust in the internet able to encourage citizen to use e-government service. Thus, it follows that:

H3: Trust in technology positively affects trust in egovernment website.

2.3 Trust in e-government website'

According to Mostafa and El-Masry (2013), in order to boost e-government adoption, the agency need to develop a trustworthy relationship with the citizen, giving assurances that their data will be secure, and that the information contained on the website would be both current and accurate. This can be done through tools and techniques that web developers can use to increase and promote the security of e-government websites, such as firewalls and encryption technology. The role of trust itself is more relevant in the context of e-government than in others since user would

not be able to find another website that offer similar public service (Chouali et al., 2016). Simply saying, if they do not trust e-government website, they would keep using traditional method because there is no other website that provide e-government service. Since element of trust is essential to government online service acceptance, hence, similar to that of Chen et al. (2015), this study tries to assess e-government effectiveness in the context of trust. After initial use, citizens will make assessment on the information services provide by e-government website. The quality perception will be based on the trust of citizens toward the e-government website. High trust citizen is likely to attribute flaws and errors on the website to external reasons and tends to be less demanding in website functionality. On the contrary, if a citizen doubts the intention or commitment underlying the e-government website, any flaws can be attributed to perception of low quality (Teo et al., 2008).

Examining the relationship between trust and information quality in online exchange is crucial since in this situation, users can not touch, feel, or physically experience the object of the exchange (Chen et al., 2015). Information quality denotes citizen's evaluation of whether the information on the website is accurate, valid, and timely. The assessment will depend on level of citizen's trust in an egovernment website since citizens may not always have objective criteria and may have different interpretations of the information presented on the website (Teo et al., 2008). This is because trust defines expectations, as higher trust leads to more favorable perceptions of quality dimensions, in this case information quality (Beldad et al., 2010). The more citizens trust the e-government website, the better they can discern the quality of the information being provided for them by that said website (Chen et al., 2015). Thus, it follows that:

H4: Trust in e-government website positively affects information quality.

E-government shares similar analogy to that of e-commerce. Trust in an e-vendor involves the belief that the e-vendor will take the responsibility to ensure the technical reliability and ease of use of a website, thus leading to higher perception of the system quality for that website (Teo et al., 2008). Following this argument, trust enables citizens to believe that the government agency that runs the website will be able to effectively address various technical issues for enhancing the website usability and providing efficient process. The better the trust, the better the perceptions of system quality towards the e-government website will be (Teo et al., 2008; Khayun et al., 2011). Thus, it follows that:

H5: Trust in e-government website positively affects system quality.

In the context of e-government, service quality perceptions involve interactions between citizens and government. Citizens with high trust in e-government are likely to be more tolerant and less demanding, and thus attribute negative experience (e.g., transaction delay or prolonged application processing time) to reasons other than poor service (Teo et al., 2008). Thus, it follows that:

H6: Trust in e-government website positively affects service quality.

2.4 Quality antecedents

This study adopts the updated model of information system quality by DeLone and McLean's (1992), which is deemed to be a useful framework for examining the success of information technology. The success is defined by the quality of information, system, and service quality (DeLone and McLean, 2003; Petter et al., 2008). The higher the qualities, the more successful the technology is considered (Zaidi et al., 2007), therefore, this study examines the information quality, systems quality, and service quality of the e-Filing website.

2.4.1 Information quality

Chang et al. (2005) defined information quality as the degree of how the information provided meets the needs of customers. Information quality is usually measured on how accurate, relevant, timely, and complete the information to help the customers (DeLone and McLean, 2003). In this study, information quality represents how well the information provided in the e-Filing system to help taxpayers in submitting their electronic tax returns to the government. Since taxpayers have vary knowledge about the use of the system, the better the information provided, the perceptions towards the website become favourable (Aladwani, 2013). If e-Filing website could provide better information, the perception on the information quality provided by the website would become better. Chen et al. (2015) also found that the quality of information positively affects the perceived usefulness.

Furthermore, the quality of information would enhance the users' performance (Borek et al., 2014). The users will be satisfied in using the system because a high-quality information will help them to use the system better (Beldad et al., 2010; Chen, 2010). The information on the e-Filing website should be up-to-date, accurate, relevant, sufficient, and easy to understand. Such information will help the taxpayers to use the system better, and thus increase users' satisfaction. Therefore, the quality of information will significantly affect the user satisfaction on the e-Filing website. Chen et al. (2015) also found that the better quality of information will increase user satisfaction towards the e-government services.

H7: Information quality positively affects perceived usefulness.

H8: Information quality positively affects user satisfaction.

2.4.2 System quality

System quality is defined as the degree of how the functionalities of the system can help the customers in meeting their needs as easy as possible and with minimum problems (Chang et al., 2005; DeLone and McLean, 2003). In this study, system quality means that the system has functionalities that can address the needs of the taxpayers, so that the taxpayers find minimum problems during the use of e-Filing website. The quality includes easy to access, providing a clear guideline, provide downloadable form, easy to use, no crash, as well as easy to input and revise the information. If the taxpayers find such useful system, it will make them easier to submit their tax returns to the government, and thus increases the perception of the usefulness towards the e-Filing website.

Previous studies found that users will experience significant impact of the system quality if they can easily navigate the website (Landrum et al., 2010; Petter and McLean, 2009; Teo et al., 2008). If users find minimal problems in using the system, it will also affect the users experience in using the system, and thus it increases users' satisfaction. Therefore, the quality of e-Filing system will significantly affect the user satisfaction.

H9: System quality positively affects perceived usefulness.

H10: System quality positively affects user satisfaction.

2.4.3 Service quality

Service quality represents the degree to which the service is delivered to support the customers in using the system so that they could meet their needs (DeLone and McLean, 2003). In this study, service quality is defined as the degree of services provided by the tax officials in helping the taxpayers. The use of e-Filing website should be supported by services provided by tax officials. In Indonesia, tax officials provide several services, such as application of EFIN (electronic filing identification number), call center (Kring Pajak), and others. These services should help the Indonesian taxpayers in meeting their obligation to submit the tax returns.

Chen et al. (2015) found that the service quality positively affects the perceived usefulness towards the e-government service. Further, service quality is a determinant of satisfaction because websites should able to provide improved and simplified services to help the users in solving their problems (Floropoulos et al., 2010). A better service quality improves the perceptions of the customers on the system's usefulness and satisfaction (Floropoulos et al., 2010). Therefore, if the Indonesian government could provide a high-quality service to the citizens to support the use of e-Filing website, it will positively affect their perception of usefulness and their satisfaction towards the website.

H11: Service quality positively affects perceived usefulness.

H12. Service quality positively affects user satisfaction.

2.5 Perceived usefulness

A system is perceived to be useful if it provides net benefits to the users. Chang et al. (2005) stated that the benefits can be measured through the amount of error reduction experienced, the amount of time saved, lower communication costs, and faster refund processing. In this study, the perception of usefulness towards the e-Filing website are measured by how the system make the users easy to submit their tax returns, the reduction of error, and how the system is beneficial for the users.

Chen et al. (2015) found that the perceived usefulness towards the e-government services positively affect the user satisfaction. Floropoulos et al. (2010) also find that if users find that a system is useful, it will encourage user satisfaction. The more useful the system, the more likely the user will be satisfied. Furthermore, Chen et al. (2015) also found that the increased perception of the usefulness would increase the perceived net benefit towards the e-government services. If the system is useful in performing its tasks, it will benefit the users such as time saving and cost saving. Therefore, the better perception of usefulness, the better the users' satisfaction and the higher the benefit obtained by the users through using the system.

H13. Perceived usefulness positively affects user satisfaction.

H14. Perceived usefulness positively affects perceived net benefits.

2.6 User satisfaction

Chang et al. (2005) and Wang and Liao (2008) stated that the success of an e-government also depends on how the user are satisfied towards the system. In this study, user satisfaction is measured by how the e-Filing website effectively help the citizens in meeting their tax obligation to the government, and whether the system meets their expectation to the system. If users find that a system gives positive experience in using the system, users will be more satisfied (Wang and Liao, 2008). Chen et al. (2015) found that user satisfaction towards e-government services positively affect the net benefit obtained by the users, in which the net benefit obtained by the users from using the system will affect subsequent use of the system (DeLone and McLean, 2003). H15. User satisfaction positively affects the perceived

net benefits.

2.7 Perceived net benefits

Net benefits is defined as the citizen-perceived net benefit evaluation, most notably in terms of communication, costs and time savings, and better system performance (Wang and Liao, 2008; Chen et al., 2015). Gilbert et al. (2004) found that perceived benefit is an important dimension triggering willingness to adopt e-government service. Since the emphasize of this study is on the measurement of e-government success from the perspective of citizens, net benefit in this study refers to the citizen-perceived net benefit evaluation on that system. Hence, perceived net benefit can be considered as an important measure of online government service success story. Figure 1 illustrates research model for this study.

2.8 Research Methodology 2.9 Sample and Data Collection

In order to gain users' perception on the e-Filing system in Indonesia, this study uses survey questionnaire which was developed based on previous research (Wang and Liao, 2008; Ojha et al., 2009; Schaupp et al., 2010; Hussein et al., 2011; Chen et al., 2015). The survey questions have been adjusted to fit the context on the use of e-Filing system in Indonesia. The survey questionnaire asked about users' perceptions on prior experience on offline tax return, trust in government, trust in technology, trust in e-Filing website, information quality, system quality, service quality, perceived usefulness, user satisfaction and perceived net benefits. The survey uses a four-point Likert scale, from strongly disagree (1) to strongly agree (4). Table 1 shows the survey questions to measure the construct.

The online version of survey questionnaires was distributed to prospective respondents or users of e-Filing. In order to ensure that the respondents are the users of e-Filing, the first question asked whether they have used e-Filing

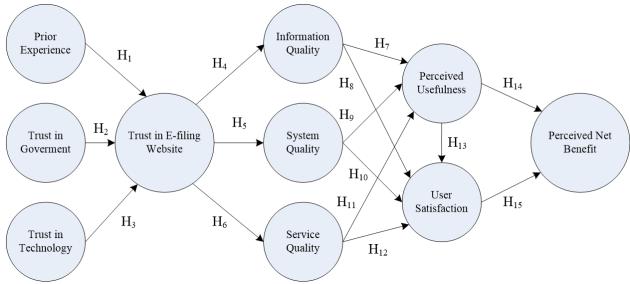


Figure 1. Research Model

website to submit their tax returns. The detail number of respondents and sample are shown on Table 2.

2.10 Research Methodology

Data analysis is conducted using a covariance-based structural equation modelling (CB-SEM) for factor analysis and hypothesis testing. The survey questionnaire was being tested for its validity and reliability. For validity test, the standardized factor loading for each indicator should be larger than 0.5. If the standardized factor loading is less than 0.5, the indicators will be deleted (see Table 4). Meanwhile, each construct has a good reliability if the average variance constructed (AVE) is more than 0.5 and the construct reliability (CR) is more than 0.7. In order to test the hypothesis, the t-values and path coefficients will be used to determine whether the hypothesis are supported (see Table 5).

3. Research Findings and Discussions

Largest group of our respondents were from 26–35 years old, with 51,2% male. It justified that the majority of the users of e-filing were young professional, a Generation X, who is more keenly use technology to fulfil their tasks and familiar with the online service (Ainin et al., 2012). The age distribution data also consistent with the statistic released by Indonesia Internet Service Association in 2017, stating that almost 50% of internet user in Indonesia fell in 19–34 years old age group.

We also managed to get response from all across Indonesia, although the majority of the respondents resided in the capital city of Indonesia (DKI Jakarta) and other area with close proximity from it such as West Java (Jawa Barat) and Banten. Overall, the percentage of respondents from Java Island surpasses respondents from any other island. It demonstrated the fact that Java Island as the most developed area in Indonesia. Thus, it has the best internet connection and has the highest internet penetration. A complete characteristic of the respondents can be found in Table 3.

Figure 2 along with Table 5 show our research finding.

They suggest that trust in government and trust in technology able to shape trust in e-filing website. Citizen will value e-filing website if government has a good image that make them believe that government always tries to offer them the best service and able to provide safe online service environment. Trust in the technology also influence the willingness of taxpayers to switch from offline tax filing into the online one (Kurfali et al., 2017). Internet should be a reliable technology and should have taken the necessary security measures (Voutinioti, 2013) since taxpayers will disclose their confidential information during the tax filing process (Beldad et al., 2011). A high level of trust in technology will facilitate citizens' belief that online transactions and interactions with government agencies can be conducted successfully (Teo et al., 2008). This finding reflects that Indonesian citizens' trust on the government and trust on the technology play an important role on their intention use the e-filing.

In addition, this study also shows that trust in e-filing website significantly associated with user perception on the system attributes; information quality, system quality and service quality. The result consistent with Chen et al. (2015), whereby trust in e-government website mostly affect user perception in information quality. It is explained by Teo et al., (2008), stating that a citizen uses an e-government website for information search or online services that involve transactions with the government agencies, hence fulfilling citizen's information and transaction needs are the two basic functions of an e-government website. Trust in e-filing website pose the least influence on service quality. It indicates that having a secure system is not enough for the user. To be effective, the system must also being backed by the human support to help them in the tax filing process.

All of the quality elements significantly affect perceived usefulness, with system quality having the highest influence. It indicates that every feature embedded in the system will give additional value for the user in facilitating their tax filing, but thing that user perceive more is the accessibility and easiness of the system. User satisfaction is also more likely to be determined by the robustness of the system

Table 1. Survey Questions

Construct	Survey Questions Question Items
Prior experience on offline tax returns	PE1: I feel that the offline tax filing requires a fast time.
(Chen et al., 2015)	PE2: I feel that the offline tax filing is easy to do. PE3: Tax officials can handle the problem well when I have problems related to offline tax filing. PE4: Tax officials can provide an easy-to-understand explanation when I
	have questions related to offline tax filing. PE5: Tax officials are friendly in communicating with me when I report taxes manually (offline) to the tax office.
Trust in government	TG1: I believe that the Directorate General of Taxes acts in the best
(Chen et al., 2015; Schaupp et al., 2010)	interests of citizens. TG2: I believe that the Directorate General of Taxes is honest in carrying out its obligations. TG3: I believe that the Directorate General of Taxes is competent in carrying out its obligations. TG4: I believe that the Directorate General of Taxes can manage the e-Filing system appropriately. TG5: I believe that the Directorate General of Taxes can maintain taxpayer information in the e-Filing system.
Trust in technology	TT1: I am sure that the internet has adequate protection that makes me feel comfortable when reporting taxes with the e-Filing system.
(Chen et al., 2015)	TT2: I am sure that the rules of legal and technology protect me from problems on the internet when reporting taxes with the e-Filing system. TT3: I am sure that encryption and other technological advancements on the internet make me feel safe when reporting taxes with the e-Filing system. TT4: In general, the internet is now a safe environment for reporting taxes with the e-Filing system.
Trust in e-Filing website	TW1: I believe that the e-Filing system protects tax information from changes, destruction or theft by unauthorized parties.
(Ojha et al., 2009)	TW2: I believe that the e-Filing system has adequate safety standards to protect taxpayers. TW3: In general, e-Filing systems can be trusted to report taxes.
Information quality (Chen et al., 2015)	IQ1: Information presented in the e-Filing system is up-to-date. IQ2: Information presented in the e-Filing system is accurate. IQ3: Information presented in the e-Filing system is relevant for tax reporting purposes. IQ4: Information presented in the e-Filing system is adequate for tax reporting purposes. IQ5: Information presented in the e-Filing system is easy to understand.
System quality (Chen et al., 2015; Hussein et al., 2011; Schaupp et al., 2010)	SysQ1: The e-Filing system can be accessed easily at any time. SysQ2: The e-Filing system provides downloadable forms for tax reporting purposes. SysQ3: The e-Filing system provides guidance that helps taxpayers in tax reporting. SysQ4: The e-Filing system is easy to use. SysQ5: The e-Filing system does not crash when it is used. SysQ6: I can easily enter and revise my data when using the e-Filing system.
Service quality	SrvQ1: Services provided by tax officials related to the use of the e-Filing
(Chen et al., 2015; Ojha et al., 2009)	system are reliable. SrvQ2: Services provided by tax officials related to the use of the e-Filing system meet my needs. SrvQ3: The "Kring Pajak" service (1 500 200) can handle problems well regarding tax reporting with the e-Filing system.
Perceived usefulness (Ojha et al, 2009; Chen et al., 2015)	PU1: The use of the e-Filing system facilitates my tax reporting process. PU2: The use of the e-Filing system reduces errors in my tax reporting process.
Hear satisfaction	PU3: Overall, the e-Filing system is useful for me.
User satisfaction (Chen et al., 2015; Wang and Liao, 2008)	US1: I feel that the e-Filing system is effective in helping me to fulfil tax obligations to the government. US2: Overall, I am satisfied with the current e-Filing system. US3: Overall, the current e-Filing system has met my expectations.
Perceived net benefits	PNB1: When compared to the offline tax filing, the e-Filing system
(Chen et al., 2015)	reduces the time needed for tax reporting process (time-saving). PNB2: When compared to the offline tax filing, the e-Filing system reduces the costs required for tax reporting process (cost-saving). PNB3: Overall, when compared to the offline tax filing, the e-Filing system is more useful to use.

Table 2. Research Sample

Total respondents	1097
Not e-Filing users	(97)
e-Filing	1000
Invalid responses	(7)
Valid responses	993

Table 3. Characteristics of Respondents

Demographics	Category	Sample		
		N	%	
Gender	Male	508	51.2	
	Female	485	48.8	
Age	< 26 years old	93	9.4	
8-	26–35 years old	500	50.3	
	36–45 years old	236	23.8	
	46–55 years old	128	12.9	
	> 55 years old	36	3.6	
Education	Elementary school	1	0.1	
Education	Junior high school	0	0.1	
	Senior high school	16	1.6	
	Diploma I	7	0.7	
	Diploma II	ó	0.7	
	Diploma III	44	4.4	
	Bachelor's degree (Diploma IV)	541	54.5	
	Master's degree	352	35.5	
	Doctoral degree	32	3.2	
D ' '				
Domicile	Aceh	6	0.6	
	Sumatera Utara Sumatera Barat	6 11	1.1	
	Riau	8	0.8	
	Jambi Sumatera Selatan	2	0.2	
		18 0	1.8	
	Bengkulu		0	
	Lampung	11	1.1 0.6	
	Kepulauan Bangka Belitung	6 1	0.0	
	Kepulauan Riau DKI Jakarta	369	37.2	
	Jawa Barat	236 42	23.8 4.2	
	Jawa Tengah	22	2.2	
	Daerah Istimewa Yogyakarta Jawa Timur	38	3.8	
		109	3.6 11	
	Barten	109	1.3	
	Bali Nyaa Tanggara Barat		0.6	
	Nusa Tenggara Barat	6 2		
	Nusa Tenggara Timur	1	0.2	
	Kalimantan Barat	3	0.1	
	Kalimantan Tengah Kalimantan Selatan	6	0.5	
	Kalimantan Timur	12	1.2	
	Kalimantan Utara	2	0.2	
	Sulawesi Utara	4	0.2	
	Sulawesi Tengah	2	0.4	
	Sulawesi Tengan Sulawesi Selatan	25	2.5	
	Sulawesi Tenggara	3		
	Gorontalo	3	0.3	
	Sulawesi Barat	3 1	0.3	
	Maluku	4	0.1	
	Maluku Utara	1	0.4	
		3	0.1	
	Papua Papua Barat	3 1	0.3	
	Offshore	16	1.6	
Type of Tax Return (SI		179	18	
	SPT 1770 S	736	74.1	
	SPT 1770	78	7.9	

Table 4. De	cerintiva	analycic	validity	and	reliability	roculte
Table 4. De	SCHIDUYE	anaivsis.	vanuity.	anu	renability	resuits

Table 4. Descriptive analysis, validity, and reliability results							
Construct	Items	Mean	SD	Standardized factor loading	AVE	CR	
PE	PE1	1.94	1.11	Deleted	0.74	0.89	
	PE2	2.01	0.96	Deleted			
	PE3	2.77	0.95	0.88			
	PE4	2.85	0.91	0.94			
	PE5	2.95	0.86	0.75			
TG	TG1	3.44	0.71	0.77	0.65	0.9	
	TG2	3.14	0.83	0.81			
	TG3	3.28	0.77	0.86			
	TG4	3.35	0.72	0.82			
	TG5	3.38	0.73	0.78			
TT	TT1	3.16	0.78	0.83	0.75	0.92	
	TT2	3.22	0.76	0.88			
	TT3	3.3	0.73	0.91			
	TT4	3.23	0.76	0.84			
TW	TW1	3.25	0.73	0.89	0.8	0.92	
	TW2	3.29	0.72	0.93			
	TW3	3.44	0.65	0.86			
IQ	IQ1	3.47	0.65	0.82	0.69	0.92	
	IQ2	3.44	0.64	0.83			
	IQ3	3.51	0.61	0.9			
	IQ4	3.49	0.62	0.87			
	IQ5	3.34	0.75	0.72			
SysQ	SysQ1	3.2	0.87	0.73	0.54	0.87	
	SysQ2	3.37	0.78	0.65			
	SysQ3	3.41	0.74	0.77			
	SysQ4	3.38	0.76	0.79			
	SysQ5	2.65	0.97	0.67			
	SysQ6	3.18	0.84	0.77			
SrvQ	SrvQ1	3.23	0.78	0.9	0.68	0.86	
	SrvQ2	3.28	0.75	0.93			
	SrvQ3	2.89	0.86	0.6			
PU	PU1	3.67	0.57	0.86	0.69	0.87	
	PU2	3.43	0.71	0.72			
	PU3	3.65	0.57	0.91			
US	US1	3.65	0.56	0.78	0.76	0.9	
	US2	3.41	0.71	0.92			
	US3	3.3	0.75	0.9			
PNB	PNB1	3.77	0.52	0.88	0.76	0.9	
	PNB2	3.75	0.53	0.85			
	PNB3	3.74	0.52	0.88			

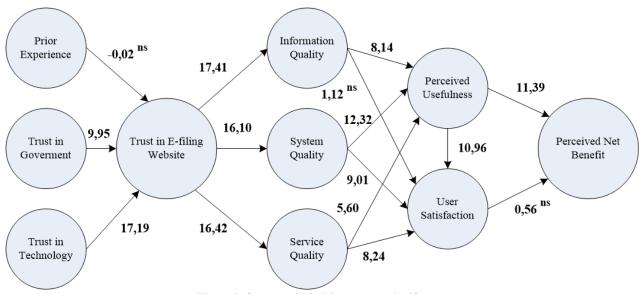


Figure 2. Structural Model (ns = non-significant)

rather than by the service provided by the e-filing system itself. The user may be satisfied as long as the transaction is completed successfully (Teo et al., 2008)

Following the previous research in this field, we considered prior experience as one of many variables that explain trust in e-filing website. The citizen will have a positive attitude toward e-filing if they perceived this service as an extension of the traditional one. It implies that a nice experience using the traditional tax filing will build a believe that online service will bring similar experience. It consistent with the research by Chen et al. (2015), whereby prior offline experience has a significant relationship with the trust in e-government website. However, our finding shows the contrary. It indicates that prior experience in offline government service has nothing to do with the citizen belief in the online service. Our respondent acknowledged the offline tax filing service as time consuming, hard to do, and lack of help from the tax officials in the process. Nevertheless, people seems to ignore the bad impression when they get an offer to use the online version, believing that e-filing will give better experience (Lee et al., 2011).

It is also found that information quality does not determine user satisfaction. Providing online public information is regarded as website fundamental function (Teo et al., 2008). Thus, satisfaction toward these e-filing website is more likely to be influenced by the services provided by the website and the speed and easiness of the system itself rather than by the information available on it. Another possible explanation is citizen may also consider that information provided by the current e-filing system does not satisfy their need. Therefore, lack of significance relationship between user satisfaction and information quality is found in this study.

Furthermore, the result of this research shows that user satisfaction is not influential to the perceived net benefit. Our data demonstrated that user of e-filing in Indonesia perceive online tax system as cost saving and time saving in facilitating their tax obligation to the government. However, satisfaction measurement involves a complex dimension. Current e-filing system in Indonesia is still has many room for improvement. As in Chen et al. (2015), this can further explain why not all information system quality dimensions significantly influenced the perceptions of usefulness and satisfaction. Thus, even if the users believe using e-filing will increase their speed and accuracy in processing their tax return, they still have a feeling that the system is unable to entirely fulfil their needs. Overall, though the system still has room to meet users' expectation, the respondents put high value on the current e-filing system and considered it more beneficial than the offline tax reporting system.

4. Conclusion, Limitation, and Implication

4.1 Conclusion

They suggest that trust in government and trust in technology able to shape trust in e-filing website. This finding reflects that Indonesian citizens' trust on the government and trust on the technology play an important role on their intention use the e-filing. In addition, this study also shows

that trust in e-filing website significantly associated with user perception on the system attributes; information quality, system quality and service quality. The result consistent with Chen et al. (2015), whereby trust in e-government website mostly affect user perception in information quality. All of the quality elements significantly affect perceived usefulness, with system quality having the highest influence. It is also found that information quality does not determine user satisfaction. Finally, our data demonstrated that user of e-filing in Indonesia perceive online tax system as cost saving and time saving in facilitating their tax obligation to the government.

4.2 Limitation

The sample of this research are more concentrated in Java island compared to the other islands in Indonesia. Thus, the recommendation of future research is to add more samples from outside Java islands in order to analyse the taxpayers' behaviour from the cultural difference.

4.3 Implication

From the result of this research, the Indonesia DGT should emphasize the system quality and service quality in applying the e filing method to increase the taxpayers' satisfaction in using this system. On top of that, the DGT should also evaluate the information quality from the e filing system to increase the taxpayers (users) satisfaction in the future.

References

Abu-Shanab, E. (2014). Antecedents of trust in e-government services: An empirical test in Jordan. *Transforming Government: People, Process, and Policy*, 8(4), 480-499.

Ainin, S., Bahri, S., & Ahmad, A. (2012). Evaluating portal performance: A study of the National Higher Education Fund Corporation (PTPTN) portal. *Telematics and Informatics*, 29(3), 314-323.

Aladwani, A. M. (2013). A cross-cultural comparison of Kuwaiti and British citizens' views of e-government interface quality. *Government Information Quarterly*, 30(1), 74-86.

Belanger, F., & Carter, L. (2008). Trust and risk in e-government adoption. *Journal of Strategic Information Systems*, 17(2), 165-176.

Beldad, A., Jong, M. D., & Steehouder, M. (2010). How shall I trust the faceless and the intangible? A literature review on the antecedents of online trust. *Computers in Human Behavior*, 26(5), 857-869.

Beldad, A., Jong, M. D., & Steehouder, M. (2011). I trust not therefore it must be risky: Determinants of the perceived risks of disclosing personal data for e-government transactions. *Computers in Human Behavior*, 27(6), 2233-2242.

Borek, A., Parlikad, A. K., Woodall, P., & Tomasella, M. (2014). A risk based model for quantifying the impact of information quality. *Computers in Industry*, 65(2), 354-366.

Carter, L., & Belanger, F. (2005). The utilization of e-government services: Citizen trust, innovation and acceptance factors. *Information Systems Journal*, 15, 2-25.

Chang, I. C., Li, Y. C., Hung, W. F., & Hwang, H. G. (2005). An empirical study on the impact of quality antecedents on tax payers' acceptance of internet tax-filing systems. *Government Information Quarterly*, 22(3), 389-410.

Chouali, W., Yahia, I. B., Charfeddine, L., & Triki, A. (2016).
Understanding citizens' adoption of e-filing in developing coun-

To	hle	5	CR.	SEV	1 R	esults

Hypothesis	Relationships of variables (IV \rightarrow DV)	Path coefficients	t-Statistic	Results
H1	$PE \rightarrow TW$	0	-0.02	Not Supported
H2	$TG \rightarrow TW$	0.3	9.95	Supported
H3	$\mathrm{TT} ightarrow \mathrm{TW}$	0.68	17.19	Supported
H4	TW o IQ	0.74	17.41	Supported
H5	$TW \rightarrow SysQ$	0.69	16.1	Supported
Н6	$TW \rightarrow SrvQ$	0.68	16.42	Supported
H7	$IQ \rightarrow PU$	0.27	8.14	Supported
H8	IQ o US	0.03	1.12	Not Supported
H9	$\mathrm{SysQ} ightarrow \mathrm{PU}$	0.47	12.32	Supported
H10	$SysQ \rightarrow US$	0.31	9.01	Supported
H11	$SrvQ \rightarrow PU$	0.18	5.6	Supported
H12	$SrvQ \rightarrow US$	0.23	8.24	Supported
H13	$PU \rightarrow US$	0.46	10.96	Supported
H14	$\mathrm{PU} o \mathrm{PNB}$	0.73	11.39	Supported
H15	$\text{US} \rightarrow \text{PNB}$	0.03	0.56	Not Supported

- tries: An empirical investigation. *Journal of High Technology Management Research*, 27(2), 161-176.
- Chen, C.W. (2010). Impact of quality antecedents on taxpayer satisfaction with online tax-filing systems: An empirical study. *Information and Management*, 22(3), 389-410.
- Chen, J. V., Jubilado, R. J. M., Capistrano, E. P. S., & Yen, D. C. (2015). Factors affecting online tax filing – An application of the IS Success Model and trust theory. *Computers in Human Behavior*, 43, 251-262.
- DeLone, W. H., & McLean, E. R. (1992). Information system success: The quest for the dependent variable. *Information Systems Research*, 3(1), 60-94.
- DeLone, W. H., & McLean, E. R. (2003). The DeLone and McLean model of information systems success: A ten-year update. *Journal of Management Information Systems*, 19(4), 9-30.
- Floropoulos, J., Spathis, C., Halvatzis, D., & Tsipouridou, M. (2010). Measuring the success of the Greek taxation information system. *International Journal of Information Management*, 30(1), 47-56.
- GAO (General Accounting Office), McClure, D. (2001). *Electronic government: challenges must be addressed with effective leadership and management*. 11 July 2001. URL http://feapmo.gov/links.asp.
- Gilbert, D., Balestrini, P., & Littleboy, D. (2004). Barriers and benefits in the adoption of e-government. *International Journal of Public Sector Management*, 17(4), 286-301.
- Hung, S. Y., Chang, C. M., & Yu, T. J. (2006). Determinants of user acceptance of the e-Government services: The case of online tax filing and payment system. *Government Information Quarterly*, 23 (1), 97-122.
- Hussein, R., Mohamed, N., Ahlan, A. R., & Mahmud, M. (2011).
 E-government application: An integrated model on G2C adoption of online tax. *Transforming Government: People, Process and Policy*, 5(3), 225-248.
- Karkin, N., & Janssen, M. (2013). Evaluating websites from a public value perspective: A review of Turkish local government websites. *International Journal of Information Management*, 34(3), 351-363.
- Kaufman-Scarborough, C., & Lindquist, J. D. (2002). E-shopping in a multiple channel environment. *Journal of Consumer Marketing*, 19, 333-350.
- Khayun, V., Ractham, P., & Firpo, D. (2011). Assessing e-excise success with DeLone and McLean's model. *Journal of Com*puter Information Systems, 52(3), 31-40.
- Kurfali, M., Arifoglu, A., Tokdemir, G., & Pacin, Y. (2017). Adoption of e-government services in Turkey. Computers in Human Behavior, 66, 168-178.

- Lallmahomed, M. Z. I., Lallmahomed, N., & Lallmahomed, G. M. (2017). Factors influencing the adoption of e-Government services in Mauritius. *Telematics and Informatics*, 34(4), 57-72.
- Landrum, H., Prybutok, V. R., & Zhang, X. (2010). The moderating effects of occupation on the perception of information services quality and success. *Computers and Industrial Engineering*, 58(1), 133-142.
- Lee, J., Kim, H. J., & Ahn, M. J. (2011). The willingness of e-government service adoption by business users: The role of offline service quality and trust in technology. *Government Information Quarterly*, 28(2), 222-230.
- Mostafa, M. M., & El-Masry, A. A. (2013). Citizens as consumers: Profiling e-government services' users in Egypt via data mining techniques. *International Journal of Information Management*, 33(4), 627-641.
- Ojha, A., Sahu, G. P., & Gupta, M. P. (2009). Antecedents of paperless income tax filing by young professionals in India: an exploratory study. *Transforming Government: People, Process and Policy*, 3(1), 65-90.
- Petter, S., & McLean, E. R. (2009). A meta-analytic assessment of the DeLone and McLean IS success model: An examination of IS success at the individual level. *Information and Management*, 46(3), 159-166.
- Petter, S., DeLone, W., & McLean, E. (2008). Measuring information systems success: Models, dimensions, measures and interrelationship. *European Journal of Information Systems*, 17(3), 236-263.
- Schaupp, L. C., Carter, L., & McBride, M. E. (2010). E-file adoption: A study of U.S. taxpayers' intentions. *Computers in Human Behavior*, 26(4), 636-644.
- Teo, T. S. H., Srivastava, S. C., & Jiang, L. (2008). Trust and electronic government success: An empirical study. *Journal of Management Information Systems*, 25(3), 99-131.
- Voutinioti, A. (2013). Determinants of user adoption of egovernment services in Greece and the role of citizen service centres. *Procedia Technology*, 8, 238-244.
- Wang, Y. S., & Liao, Y. W. (2008). Assessing e-government systems success: A validation of the DeLone and McLean model of information system success. *Government Information Quarterly*, 25(4), 717-733.
- Welch, E. W., Hinnant, C. C., & Moon, M. J. (2005). Linking citizen satisfaction with e-Government and trust in government. *Journal of Public Administration Research and Theory*, 15, 371-391.
- Zaidi, S. K. R., Henderson, C. D., & Gupta, G. (2017). The moderating effect of culture on e-filing taxes: evidence from India. Journal of Accounting in Emerging Economies, 7(1), 134-152.

Gedung LPEM FEB UI

Jl. Salemba Raya No. 4, Jakarta 10430 Phone: +62-21 3143177 ext. 621/623; Fax: +62-21 3907235/31934310

Web : http://www.lpem.org/category/publikasi/workingppers/

