

E-filing Acceptance by the Individual Taxpayers – A Preliminary Analysis

Nor 'Azimaton Saibon^a, Anuar Nawawi^a and Ahmad Saiful Azlin Puteh Salin^{b*}

^aFaculty of Accountancy, Universiti Teknologi MARA Shah Alam, 40450 Shah Alam, Selangor, Malaysia ^bFaculty of Accountancy, Universiti Teknologi MARA Perak Tapah Campus, 35400 Tapah Road, Perak, Malaysia

Abstract

The objective of this study is to determine taxpayer's perception on the tax filing system via internet, or well known as e-Filing. The samples were randomly selected from various taxpayers that walk in Inland Revenue Board Petaling Jaya Branch. Survey questionnaires were hand distributed with 44 taxpayers responded. The data collected were analyzed by using descriptive statistic. After 8 years of implementation, the respondents agreed that e-Filing is user friendly and easy to use. Based on the findings, majority of the taxpayers also have confidence and used e-Filing to file their tax return form, indicating taxpayers have a good perception toward e-Filing. However, they are concerned on the safety and security of the system and the efficiency of the server to operate particularly during the peak period.

Keywords: e-Filing; tax; electronic government; e-government; easiness; security

Introduction

Internet and its related technology applications are increasingly popular for business organisations and public institutions. This gives motivation to the government to provide information and deliver service to citizens and business partners through internet. Due to this, many government transactions that previously done on physical way are executed using internet-based transactions, well known as e-government (Wu & Chen, 2005). It is a process where public associate with government electronically via subscribing information and services provided (Lau et al., 2008) and use of information technology by the stakeholders (Symonds, 2000; West, 2004; Weerakkody et al., 2015). Empirical research shows that electronic government or well known as e-government is beneficial in improving efficiency (Moon, 2002; Carter & Belanger, 2005), decrease operating costs (Carter & Belanger, 2005; Wild & Griggs, 2006; Ask et al., 2008; Noor et al., 2011; Scoot et al., 2009; Wang & Liao, 2008), 24/7 delivery of government services to citizens (Huang & Bwoma, 2003; Hassan et al., 2010), faster and more accurate responses (Wescott, 2004), better access to information (Carter & Belanger, 2005; Zhang & Hsieh, 2010; Carter et al., 2012; Scoot et al., 2009) and services (Montagna, 2005; Chu et al., 2008; Sheng & Trimi, 2008), increased accountability and transparency (Tung & Rieck, 2005; Zhang & Hsieh, 2010), reduce digital divide problems due to uneven internet connectivity (Lee et al., 2006), prevent fraud and crime (Beynon-Davies, 2007) and sharing of best practices (Salleh et al., 2011, Picazo-Vela et al., 2012).

Realising the huge potential benefits of e-government applications, Malaysian government via its revenue services agencies namely Inland Revenue Board Malaysia (IRBM) launched the electronic tax form submission system or known as e-Filing in 2006.

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^{*} Corresponding author. Tel.: +605-406-7000 *E-mail address*: ahmad577@perak.uitm.edu.my



This system is one of many digital services offered by the Malaysian government and it is one of the most important and widely used electronic functions of e-government since it is convenience, easy and highly related to the practical needs of the taxpayers.

However, since e-Filing is using internet as its platform, it is common and inevitable that taxpayers are exposed to risk (Hoffman *et al.*, 1999). These includes various internet security threats such as worms, crackers, viruses, spoofing and password-sniffing. Consequently, when taxpayers use e-Filing, they fear that their personal security may be threatened (Lu *et al.*, 2005). Obviously, this will prevent taxpayers from adopting e-Filing. Despite the rapid adoption of e-Filing in Malaysia, the system is still unreliable especially at the peak period which led to high level of risk perceived by taxpayers (Zakaria *et al.*, 2009).

Based on this situation, this study is conducted to examine whether risk factor will deter taxpayers from using the online system. There are two purposes of this study. First, to examine the easiness of the e-Filing and second, to investigate the risk involved while using the e-Filing based on the perspectives of the users.

There are several contributions of this study. First, this research will be able to provide valuable insights about e-Filing to the government, IRBM and also to the taxpayers. The research identifies the types of risk that taxpayers perceived when using e-Filing. The findings can be a useful guide to IRBM to develop strategies from observing areas that the e-Filing could be further improved. The e-Filing would enhance tax administration and increase compliance by facilitating taxpayers to submit tax returns via computer since computers are now easily available everywhere.

Second, e-Filing is quite new and in its early stages of development and implementation. As such, this research will be useful as reference for IRBM to increase their understanding on taxpayers' perception on the risk of e-Filing. Hence, risk-reducing strategies can be formulated to encourage service adoption by the taxpayers. In addition, the findings will also provide IRBM with information to promote e-Filing extensively by convincing taxpayers' on the safety and security of the system.

Finally, the findings of this research added to the theoretical framework and body of literature related to the electronic services offered by the government generally and electronic tax services particularly, especially to the developing country like Malaysia that are scarce in the literature. Prior study concentrated much on the electronic services provided by the Malaysian government in general (Salleh *et al.*, 2011; Jackson & Wong, 2016), electronic procurement (Sambasivan *et al.*, 2010; Kaliannan & Awang, 2010), smart card applications (Loo *et al.*, 2009) and electronic labour exchange (Noor *et al.*, 2011). In addition, many of this studies are largely limited and concentrated to the European context (Omar & Osmani, 2015).

Literature Review

Overview of E-Filing in Malaysia

IRBM aims to reduce manual or paper-based Income Tax Return Forms (IRTF) and encourage taxpayer to use e-Filing service. This application was initially introduced to corporate taxpayers in 2003 and a year later to individual taxpayers in 2004. In 2010, approximately 33 per cent of the total registered individual Malaysian taxpayers in Malaysia had used e-filing applications (Santhanamery & Ramayah, 2015).

Every transactions conducted via e-Filing is protected by public key infrastructure technology which allows users to file their IRTF online from any location. This application also assists the users to fill, compute and submit their IRTF easily, safely, and accurately. Tax



refund can also be processed early if IRTF submitted online. The types of ITRF that can be sent via e-Filing are individual gains other than business income (e-BE), Individual gains income from business (e-B), Non-Resident Individuals (e-M), Employer Return Form (e-E), Partnership Return Form (e-P), Company Return Form (e-C) and Statement under Sub-section 108 (5) (e-R). The most popular and widely forms that are submitted are Form B and Form BE.

Form B needs to be provided by an individual who is a resident in Malaysia and at the same time has a business income. On the other hand, Form BE is for individuals where their incomes are assessed under Section 4(b)-4(f) of the Income Tax Act 1967 and be completed by individual residents who have income other than business. The due date for submission of Form B is 30th June while Form BE is 30th April every year. Failure to comply will result of the penalty under subsection 112(3) of the Income Tax Act 1967.

Advantages of the E-Filing

Prior to the e-Filing, IRBM had been exercising the manual income tax filing assessment system since 1947. Efforts are constantly being made to convert the system into a fully functional e-Filing. The features of e-Filing definitely change the total process from the previous manual system. Under the manual system, taxpayers are required to manually compute their tax in the return form. Due to the many mistakes done by tax payers such as error in computation of tax, the submission of return form will take at least two weeks to arrive at IRBM. The return form will afterwards take 14 days to be completed from the date received.

One of the advantages of the e-Filing is that it improves the efficiency of tax payment and refund process (Santhanamery & Ramayah, 2015). The receipts of payment from taxpayers and refunds of excess payment to taxpayers processed by IRBM are quicker compared to the previous tax manual return form system. Through e-Filing, tax also will be auto-calculated. This can avoid human errors in computing tax. Other than that, the process of submitting tax return to the IRBM is faster, more convenient and secured than paper filing.

The other benefits of e-Filing is accuracy (Santhanamery & Ramayah, 2015) as the taxpayers can guaranteed instantly that their tax form received by the tax authority via the confirmation certificate. The confirmation acts as a proof that the IRBM had received the tax return and has started processing it. Hence, e-Filing helps the IRBM by leaving the tedious job of having to re-type the tax return at their service centre. This also minimise the possibility of IRBM making a mistake when processing the tax return.

In addition, Azmi and Kamarulzaman (2010) and Santhanamery and Ramayah (2015) suggest that e-Filing minimizes tax administrator workload and operational cost. This is because the tax returns submission is conducted in a paperless environment. Accordingly, e-Filing will reduce the cost of processing, storing and handling of tax returns.

Disadvantages of the E-Filing

While e-Filing implementation derived some benefits, undeniably it also bears some disadvantages. The most fundamental is the users must have knowledge on information technology and basic computer skills to use e-Filing. Users that not comfortable and confidence using digital devices may experience difficulty to file their tax return through e-Filing. Wirtz and Piehler (2016) found that easiness to use the electronic applications is critical for the user to use those applications.



For example, taxpayers from the older generations are less exposed with computers. Learning computer skills is also difficult for them as it is considered as something new and alien to them. The public that do not have any basic computing and internet skill may be burdened by the time and effort to learn the new system (Azmi & Kamarulzaman, 2010). Mustapha (2015) suggest that ease of use is one of the important determinants and quality required for the success of e-tax implementation while Gilbert *et al.*, (2004) found that enjoyment and ease of use are critical to ensure individuals prefer and adopt electronic method as compared to traditional method of government services.

The other setback of e-Filing is the internet facilities. To use e-Filing, taxpayers must first have internet access to open the IRBM e-Filing website. Without internet access, taxpayers have no choice but to submit the return form manually.

Another disadvantage of e-Filing is the user need to remember password to access the system. With the large number of passwords and pin numbers people hold on nowadays such as internet banking, email and many other office applications, it will be a difficult to remember the e-Filing password.

E-Filing also sometimes experience some problems. The system could also be slow as it will be congested with people trying to access the system at one time especially during the peak hours. The tax administrator must ensure that the systems can run smoothly and capable to process large amount of transactions although the number of users using the e-filing drastically increased especially when the submission deadline approaching (Azmi & Kamarulzaman, 2010).

Risk of e-Filing

Generally, individual will compared and weigh the risks and benefits of using new technology before deciding to use and adopt such technology (Horst *et al.*, 2007). Because of this, electronic services offered by the government should not merely emphasis on the technology improvement such as digitising information and put it into web. Far more important is these electronic services need to be value driven, meaning able to serve the citizens (Wang & Hou, 2010) efficiently and effectively. Loo *et al.*, (2009) for example found that MyKad (national identity card for Malaysian) fail to take off due to fear of threat to privacy, risk of forgery and identity theft by the Malaysian public.

In the context of e-Filing, De Castro *et al.*, (2015) found that taxpayers intention to use the e-Filing is affected by the taxpayers perceived risks on those system. This is because when conducting e-filing, not only tax related information is transmitted but also banking and credit card information. This raised the question on whether e-filing is safe to be used. In the US, identity thefts are recorded to have staggering number of 1.1 million cases in 2011 from the 51,700 cases in 2008. The Treasury Inspector General for Tax Administration of United State of America reported an additional 1.5 million people potentially exposed to fraudulent tax refunds, totalling in excess of \$5.2 billion (Starkman, 2013).

From the tax perspectives, fraudulent tax returns can come in the form of tax identity theft, refund fraud and return-preparer fraud. Unfortunately, these frauds are difficult to prosecute because evidence of fraud is difficult to be uncovered. For example, there are no signed tax forms, envelopes or fingerprints which mean less evidence and audit trail leave behind (Starkman, 2013). The users may reluctant to use e-filing due to perception that their personal confidential information and privacy are at stake (Azmi & Kamarulzaman, 2010) and perceived a lack of security which lower their confidence (Moorthy *et al.*, 2014; Santhanamery and Ramayah, 2015). Rehman *et al.*, (2012) found that trust and transaction security are significant factors that influence public to use electronic government applications.



Research Methodology

Data for this research are collected primarily from individuals who are taxpayers residing in Petaling Jaya, one of the urban city in Malaysia. A self-administered questionnaire was used to gather the data. The data collection method employed in this survey was by distributing questionnaires to taxpayers who came to IRBM office to solve their tax matters. Convenience sampling method was used for this research and the sample size is 50 respondents with 44 taxpayers responded, making the response rate is 88%.

Research Instruments

The questions asked in the questionnaire are related to e-Filing. The questionnaire for this research consists of three parts; Section A to Section C. Section A has eleven questions with the purpose of eliciting information on the demographic profile of the taxpayers. Section B of the questionnaire consist eleven questions regarding the easiness towards tax e-Filing. Lastly, section C asks on users' perceptions of the risk involved when using e-Filing. These questions are constructed and modified based on Mahadeo (2009). The mofified questionnaires has been validated and refined by several experts in the related field.

Findings and Discussion

Demographic Profiles

Table 1: Demographic Profile of the Respondents

	n	Percent
Gender		
Male	30	68.2
Female	14	31.8
Age		
18-30 years old	9	20.5
31-40 years old	12	27.3
41-50 years old	9	20.5
51 years old and above	14	31.8
Qualification		
Doctorate	5	11.4
Master's Degree	2	4.5
Bachelor's Degree	15	34.1
Diploma	17	38.6
Others	5	11.4
Filing Method		
2012: Internet	38	86.4
Manual	6	13.6
2013: Internet	43	97.7
Manual	1	2.3
2014: Internet	44	100.0
Manual	-	-
Computer Experience		
None	1	2.3
1-3 years	5	11.4
4-6 years	6	13.6
7-9 years	6	13.6
10 years and above	26	59.1
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Internet Experience		
None	1	2.3
1-3 years	9	20.5
4-6 years	7	15.9
7-9 years	11	25.0
10 years and above	16	36.4

A total of 50 questionnaires were distributed. Out of 50 sets, 6 sets of the questionnaires were not usable due to incomplete answers. As a result, the final questionnaires analysed consisted of only 44 respondents. A complete demographic profile of the respondents is presented in Table 1.

Based on Table 1, majority of the respondents are female, representing 68.2% (n=30) of the respondents while the remaining 31.8% are male (n=14).

As indicated in Table 1, respondents are categorised into four age groups. The result shows the majority of respondents are in the age of 51 and above years old, which amounted to 31.8% (n=14), followed by 27.3% (n=12) in the group of 31to 40 years old, 20.5% (n=9) in the group of 41to 50 years old and in the group of 18 to 30 years and above. Academically, majority of the respondents have Diploma qualification, representing 38.6% (n=17), followed by the group of respondents (34.1%) with Degree qualification. The rest of the respondents have post graduate and other qualifications.

In terms of filing method majority of the respondents prefer their tax return done electronically. The past 2012's result finding indicated only 38 (86.4%) respondents adopted the system to fill their tax return. However, 2013's results recorded an increase to 43 respondents (97.7%). Taxpayers' behavioural intention to adopt the system showed a positive sign with the results indicating a further increase to 44 respondents (100%) that will used the system in 2014. This indicates a good improvement of taxpayers' acceptance of the e-Filing.

Regarding respondents with computer and internet experience, majority of the respondents have some computer and internet experience, with the exception of one respondent. This result explain prior results of the majority respondents using e-Filing, indicating computer and internet experience contributing to the willingness of the taxpayers to use e-Filing.

The Easiness of E-Filing

Table 2: The Easiness of E-filing System

Statements -		Yes		No		Not sure	
		n	Percent	n	Percent	n	Percent
1.	Learning to use the e-Filing is easy for me	42	95.5	0	0	2	4.5
2.	I find it easy to file my income tax return using the e-Filing	42	95.5	0	0	2	4.5
3.	It is easy for me to become skilful at using the e-Filing	42	95.5	0	0	2	4.5
4.	I find that the e-Filing is user friendly	39	88.6	2	4.5	3	6.8
5.	Using the e-Filing improves my efficiency in preparing income tax filing.	42	95.5	1	2.3	1	2.3
6.	Using the e-Filing improve my productivity in preparing income tax filing.	44	100.0	0	0.0	0	0.0
7.	Using the e-Filing enhance my effectiveness in preparing income tax filing.	43	97.7	0	0.0	1	2.3



8.	I find that the e-Filing is sophisticated enough to cover the length and breadth of the taxation requirements	31	70.5	5	11.4	8	18.2
9.	It is easy for me to understand the information used in the e-Filing	37	84.1	2	4.5	5	11.4
10.	I find that the e-Filing contains ample and unambiguous information	31	70.5	3	6.8	10	22.7
11.	Using the e-Filing reduces the risk of making unintentional errors in filing my tax return	36	81.8	2	4.5	6	13.6

Table 2 shows that overall, taxpayers find e-Filing is easy to be used, helpful and informative. From this table, 42 respondents (95.5 %) agreed that the e-Filing is easy to learn, use and hence increase their skills in using the e-Filing (Question 1 to 3). On the other hand, 39 respondents (88.6%) agreed that e-Filing is user friendly. This could indicate that a majority of the taxpayers be of the same opinion that e-Filing is user-friendly and easy to be used. This is consistent with the argument by Wang (2003) and Moon and Kim (2001) who posit that users will feel less threatening to advanced information technology if it is easy to use. Thus, to promote the usefulness of e-Filing, this technology needs to be easy to learn and use.

Next questions (Question 5 to 8) gauge the perceived usefulness of the e-Filing form the user perspectives. Majority of the respondents agreed that using e-Filing would improve their efficiency in preparing income tax filing, as shown by 95.5% of the respondents. In addition, all respondents (100%) agreed that using e-Filing would improve their productivity in preparing income tax filing. This is also supported by the next statement in which 43 of the respondents (97.7%) agreed that using e-Filing would enhance their effectiveness in preparing income tax filing. Besides, 31 of the respondents (70.5%) also agreed that e-Filing sophisticated enough to cover the length and breadth of the taxation requirements.

The last three questions (Question 9 to 11) aim to investigate whether the e-Filing contains ample and unambiguous information to reduce the risk of taxpayers making unintentional errors in filing their tax returns. 37 respondents (84.1%) agree that it would be easy for them to understand the information used in e-Filing while 31 respondents or 70.5% concur that the e-Filing contain ample and unambiguous information. Finally, majority of the respondents (81.8%) agreed that e-Filing would reduce the risk of the user in making unintentional errors in filing my tax return.

Security of E-filing

Table 3: *The Risk of E-filing*

Statements		Yes		No		Not sure	
		n	Percent	n	Percent	n	Percent
1.	Using the e-Filing may cause me to lose control over the privacy of my personal information	8	18.2	26	59.1	10	22.7
2.	By using the e-Filing my personal information may be used without my knowledge.	10	22.7	25	56.8	9	20.5
3.	Internet hackers may take control of my personal information if I use the e-Filing	10	22.7	16	36.4	18	40.9
4.	The security built into the e-Filing is not strong enough to protect my account.	6	13.6	16	36.4	22	50.0
5.	Considering the expected level of service performance of the e-Filing, using it is risky	5	11.4	22	50.0	17	38.6
6.	The e-Filing's server perform well during peak periods	15	34.1	13	29.5	16	36.4
7.	The e-Filing architecture and infrastructure can cope with ever increasing demand especially during peak periods.	15	34.1	6	13.6	23	52.3



The other objective of this research is to examine whether the taxpayers perceived that the e-Filing is electronically secured to be used. Four questionnaires (Question 1-4) were developed for this purpose. The findings were as presented in Table 3.

Majority or 26 respondents (59.1%) disagree that using e-Filing will cause them to lose control over the privacy of their personal information. Only 8 respondents (18.2%) feel e-Filing will jeopardise their personal information while 10 respondents (22.7%) are not sure with the situation. For the next statement, 56.8% of the respondents chose to differ with argument that by using e-Filing, their personal information would be used without their knowledge. Only 22.7% of the respondent agrees while remaining 20.5% were unsure about the situation.

Third statement posits that internet hackers might be able to take control of user personal information if they use e-Filing. 40.9% of the respondents were unsure whether this situation might occur, 16 respondents (36.4%) did not believe that this will occur while 10 respondents believe that this might occur.

Majority of the respondents also were not sure whether the security system built into the e-Filing is not strong enough to protect their account. Only 36.4% of the respondents believe that security system in e-Filing can be trusted while 13.6% of the respondents believe that the e-Filing security system is weak.

The result of the findings above shows that the user of e-Filing has a serious concern in term of privacy, risk and security issues while using the system. This is not unexpected because based on Internal Revenue Service (IRS) Oversight Board report, about 460,000 people have been victimized by identity theft tax fraud since 2008. The possibility or risk of fraud reduce taxpayers' intention to adopt e-Filing (Azmi & Bee, 2010; Pavlou, 2003; Featherman & Fuller, 2003) because taxpayers are only likely to adopt e-Filing if their risk perceptions and environmental uncertainties are alleviated.

The last part of this research intent to identify whether e-Filing architecture and infrastructure can cope with the ever increasing demand of e-Filing especially during peak periods. 22 respondents (50%) disagreed that it is risky to use e-Filing, considering the expected level of the service performance (Question 5). Only 5 respondents (11.4%) agreed that it still be risky using the system while 17 respondents (38.6%) were not sure.

34.1% of respondent also have confidence and believe that e-Filing server may perform well during peak periods i.e. near the submission deadline (Question 6). Only 29.5% have a doubt with the server performance while 36.4% were not sure, possibly they rarely file their forms during peak hours which led them being unsure of the condition during peak period.

Consistent with the prior statements, only 34.1% of the respondents agree that e-Filing architecture and infrastructure can cope with ever increasing demand especially during peak periods. 13.6% did not agree with this statement while majority of the respondents (52.3%) were not sure. The final three questions indicate that most of the respondents were uncertain about the performance of e-Filing during peak period because they prefer to file their form prior from the possibility that the system may be congested.

Conclusion

This research concludes that most of the respondents find e-Filing to be user friendly and easy to use. It also shows that respondents can understand the information use in the e-Filing. In addition, most of the correspondents agree that their performance, productivity and



effectiveness in filing their tax return through e-Filing have improved. This is because taxpayers are now free from the hassle of having to calculate the tax amount as the system is able to perform the task. This sophisticated system helps taxpayers to improve and enhance their performance in preparing income tax filing. This outcome has encouraging IRBM to continue with whatever programs necessary to recommend taxpayers to file their tax returns using the e-Filing.

The finding also indicates that e-Filing contains ample and unambiguous information for references. Every item that needs to be filled up has an explanation and is easy to understand. This can reduce the risk of making unintentional errors by taxpayers.

The adoption of e-Filing is currently on a voluntary basis. E-Filing involves the transmission of highly sensitive personal information and there is a risk that users' information will fall to the hands of third parties. The risk affected user's decision to disclose or provide personal information on the Internet (Hoffman, *et.al.*, 1999). Therefore, if taxpayers' perceive electronic tax-filing as extremely risky or unsecured, it is very likely that they will not file their income tax return electronically. The findings of this research show that most of the respondents agree that e-Filing is secure.

The perfomance of e-Filing depends on the architecture and infrastructure of the system. In terms of ICT infrastructure to support e-government transmission or specifically e-filing implementation, Malaysia has one reasonably good ICT infrastructures. However, findings of this research indicated that most of respondent are not sure whether the e-Filing architecture and infrastructure can cope with the ever increasing demand especially during peak period.

Overall, it can be concluded that most of taxpayers in Petaling Jaya Branch have a good perception towards e-Filing. This in advertently increase the number of taxpayers who wants to file their tax return through e-Filing in the future and hence, help the objective of Malaysian government to achieve e-government implementation.

Recommendations

There are several suggestions to increase the efficiency and effectiveness of the e-Filing adoption in this country. First, e-Filing might be exposed to problems during peak period as it might be congested with many users trying to file their tax return with too many people accessing to system at one time. To overcome this problem, IRBM has to increase the capacity and capability of its servers. It can be outsourced for a few months to support the existing servers or the government can contribute some financial allocation for new servers. This is a long term investment which the government may want to undertake.

Second, to improve the perceptions of taxpayers towards the e-Filing, it is advisable if the interface is made friendlier so that it will be easy for first time users to use the e-Filing. This can be done by having the interface designed in many languages such as Malay, Chinese, Indians and other local language apart of English.

Third, the e-Filing should have clearer instructions by attaching an example on how to file the form. In that way, taxpayers will be more self-reliant and understand more on how to use the system. For example, video to demonstrate step by step in using the e-Filing can be prepared and easily accessed to enhance user understanding.

Finally, IRBM also need to educate the public on tax public ruling and provisions more comprehensively to increase taxpayer understanding on many technical aspects of tax returns. For example, many examples should be given on the certain technical terms. For example, term 'critical illness' has been misunderstood by many taxpayers. The system must clarify clearly type of critical illness that can be claimed by the taxpayers. If there are



clarifications or details to explain technical terms, this can avoid taxpayers from committing unintentional errors.

Limitations and Suggestions for Future Research

There are several limitations of the study. The sample of the experimental group is small. There were only 44 taxpayers and it might not represent the majority of the taxpayers of the Petaling Jaya Branch. Besides, this research only conducted descriptive research, meaning only describes data and characteristics about the population or phenomenon being studied. Although the data description is factual, accurate and systematic, the research cannot describe what caused a situation.

In future, data can be collected from huge samples so that the findings are more representative and reliable. Inferential statistics also can be applied so that causal relationship where one variable affects another can be conducted, such as examining the factors or determinants of e-Filing usage.

References

- Ask, A., Hatakka, M., & Gronlund, A. (2008). The Orebro City Citizen Oriented e-Government Strategy. *International Journal of Electronic Government Research*, 4(4), 69–88.
- Azmi, A. C., & Bee, N. L. (2010). The Acceptance of the e-Filing System by Malaysian Taxpayers: A Simplified Model. *Electronic Journal of e-Government*, 8(1), 13-22.
- Azmi, A. A. C., & Kamarulzaman, Y. (2010). Adoption of Tax e-filing: A Conceptual Paper. *African Journal of Business Management*, 4(5), 599-603.
- Beynon-Davies, P. (2007). Personal Identity Management and Electronic Government: The Case of the National Identity Card in the UK. *Journal of Enterprise Information Management*, 20(3), 244–270.
- Carter, L., & Belanger, F. (2005). The Utilization of e-government Services: Citizen Trust, Innovation and Acceptance factors. *Information Systems Journal*, 15(1), 5–25.
- Carter, L., Schaupp, L. C., Hobbs, J., & Campbell, R. (2012). E-government Utilization: Understanding the Impact of Reputation and Risk. *International Journal of Electronic Government Research*, 8(1), 83–97.
- Chu, P.-Y., Yeh, S.-C., & Chuang, M.-C. (2008). Reengineering Municipality Citizen Electronic Complaint System Through Citizen Relationship Management. *Electronic Government*, 5(3), 288–309.
- De Castro, J. A. C., Cordero, M. J. D., De Chavez, J. R., Gabia, M. F. P., Mortel, S. A. A., Yortas, J. C., Manongsong, J. L. and Pateña, A. D. (2015). Awareness on BIR e-Filing and Payment Ssystem: Basis for Efficient Revenue Transactions. *Asia Pacific Journal of Academic Research in Business Administration*, 1(1), 32-40.



- Featherman, M.S. and Fuller, M. (2003). *Applying TAM to e-Services Adoption: The Moderating Role of Perceived Risk*, [Online], Available: http://www.hicss.hawaii.edu/HICSS36/HICSSpapers/INEMG01.pdf/, [20 May 2008]
- Gilbert, D., Balestrini, P., & Littleboy, D. (2004). Barriers and Benefits in the Adoption of e-Government. *The International Journal of Public Sector Management*, 17(4), 286–301.
- Hassan, H. S. H., Shehab, E. M., & Peppard, J. (2010). Egyptian Electronic Government: The University Enrolment Case Study. World Academy of Science, Engineering and Technology, 71, 373–378.
- Hoffman, D. L., Novak, T. P., & Peralta, M. (1999). Building Consumer Trust online. *Communications of the ACM*, 42(4), 80-85.
- Horst, M., Kuttschreuter, M., & Gutteling, J. M. (2007). Perceived Usefulness, Personal Experiences, Risk Perception and Trust as Determinants of Adoption of e-Government Services in The Netherlands. *Computers in Human Behavior*, 23(4), 1838–1852.
- Huang, Z., & Bwoma, P. O. (2003). *An Overview of Critical Issues of e-Government*. IACIS-2003. pp. 164–170.
- IRBM (n.d.) Kelp Calm and Do E-filing. Retrieved from http://www.hasil.gov.my/pdf/pdfam/eFilingHandbook/pdf
- Jackson, S., & Wong, M. S. (2016). A Cultural Theory Analysis of e-Government: Insights From A Local Government Council In Malaysia. *Information Systems Frontiers*, 1-15.
- Kaliannan, M., & Awang, H. (2010). Adoption and use of e-Government Services: A Case Study on e-Procurement in Malaysia. *WSEAS Transactions on Business and Economics*, 7(1), 1–10.
- Lau, T. Y., Aboulhoson, M., Lin, C.,&Atkin,D. J. (2008). Adoption of e-Government in Three Latin American Countries: Argentina, Brazil and Mexico. *Telecommunications Policy*, 32, 88–100.
- Lee, S. M., Tan, X., & Trimi, S. (2006). M-government, from Rhetoric to Reality: Learning from Leading Countries. *Electronic Government*, 3(2), 113–126.
- Loo, W. H., Yeow, P. H. P., & Chong, S. C. (2009). User Acceptance of Malaysian Government Multipurpose Smartcard Applications. *Government Information Quarterly*, 26(2), 358–367.
- Lu, H. P., Hsu, C. L., & Hsu, H. Y. (2005). An Empirical Study of the Effect of Perceived Risk Upon Intention to Use Online Applications. *Information Management & Computer Security*, 13(2), 106-120.
- Mahadeo, J. D. (2009). Towards an Understanding of the Factors Influencing the Acceptance and Diffusion of e-Government Services. *Electronic Journal of E-government*, 7(4), 391-402.



- Montagna, J.M. (2005). A Framework for the Assessment and Analysis of Electronic Government Proposals. *Electronic Commerce Research and Applications*, 4(3), 204–219.
- Moon, J. W., & Kim, Y. G. (2001). Extending the TAM for a World-Wide-Web Context. *Information & Management*, 38(4), 217-230.
- Moon, M. J. (2002). The Evolution of e-Government among Municipalities: Rhetoric or Reality? *Public Administration Review*, 62(4), 424–433.
- Moorthy, M. K., Samsuri, A. S. B., Hussin, S. B. M., Othman, M. S. B., & Chelliah, M. K. (2014). E-Filing Behaviour among Academics in Perak State in Malaysia. *Technology and Investment*, 5(2), 79-94.
- Musptapha, B. (2015). Evaluation of e-Tax Quality Implementation Criteria: the Case of Self-Employed Taxpayers in Nigeria. *International Journal of Computer and Electronics Research*, 4(2), 39-45.
- Noor, Z. M., Kasimin, H., Aman, A., & Sahari, N. (2011). An Adoption Model of Electronic Government Services in Malaysia: Electronic Labor Exchange (ELX). *Jurnal Pengurusan*, 33, 87–97.
- Omar, A., & Osmani, M. (2015). Digitally Enabled Service Transformations in Public Sector: A Review of Institutionalisation and Structuration Theories. *International Journal of Electronic Government Research*, 11(3), 76-94.
- Pavlou, P.A. (2003). Consumer Acceptance of Electronic Commerce: Integrating Trust and Risk With The Technology Acceptance Model. *International Journal of Electronic Commerce*, 7(3), 101-134.
- Picazo-Vela, S., Gutierrez-Martínez, I., & Luna-Reyes, L. F. (2012). Understanding Risks, Benefits, and Strategic Alternatives of Social Media Applications in the Public Sector. *Government Information Quarterly*, 29(4), 504–511.
- Rehman, M., Esichaikul, V., & Kamal, M. (2012). Factors Influencing e-Government Adoption in Pakistan. *Transforming Government: People, Process and Policy*, 6(3), 258-282.
- Salleh, K., Ahmad, S. N. S., Ikhsan, S. O. S. S., & Chong, S. C. (2011). Perceived KM Benefits and Obstacles: A Survey on Government Institutions. *Electronic Government*, 8(4), 327–342.
- Sambasivan, M., Wemyss, G. P., & Rose, R. C. (2010). User Acceptance of a G2B System: A Case of Electronic Procurement System in Malaysia. *Internet Research*, 20(2), 169–187.



- Santhanamery, T., & Ramayah, T. (2015). Understanding the Effect of Demographic and Personality Traits on the e-filing Continuance Usage Intention in Malaysia. *Global Business Review*, 16(1), 1-20.
- Scott, M., DeLone, W. H., & Williams, G. (2009). *Understanding Net Benefits: A Citizen-Based Perspective on E-government Success*. International Conference on Information Systems, pp. 1–11.
- Sheng, H., & Trimi, S. (2008). M-government: Technologies, Applications and Challenges. *Electronic Government*, 5(1), 1–18.
- Starkman, J. (2013). E-Filing and the Explosion in Tax-Return fraud. *Wall Street Journal*. Retrieved from http://www.wsj.com/articles/SB10001424127887323374504578222130 6650022160 on 19 May 2016.
- Symonds, M. (2000). Government and The Internet: Quick Fixes. The Economist, 355, 13.
- Tung, L. L., & Rieck, O. (2005). Adoption of electronic government services among business organizations in Singapore. *Journal of Strategic Information Systems*, 14(4), 417–440.
- Wang, H., & Hou, J. (2010). *The external and internal barriers to e-government Implementation*. In proceeding of 2010 International Conference on Management and Service Science.
- Wang, Y., & Liao, Y. (2008). Assessing e-Government Systems Success: A Validation of the DeLone and McLeanmodel of information systems success. *Government Information Quarterly*, 25(4), 717–733.
- Wang, Y. S. (2003). The adoption of electronic tax filing systems: an empirical study. *Government Information Quarterly*, 20(4), 333-352.
- Weerakkody, V., Irani, Z., Lee, H., Osman, I., & Hindi, N. (2015). E-government Implementation: A Bird's Eye View of Issues Relating to Costs, Opportunities, Benefits and Risks. *Information Systems Frontiers*, 17(4), 889-915.
- Wescott, C. G. (2004). E-Government in the Asia-pacific Region: Progress and Challenges. *Systemics, Cybernetics and Informatics*, 3(6), 37–42.
- West, D. (2004). E-Government and the Transformation of Service Delivery and Citizen Attitudes. *Public Administration Review*, 64(1), 15–27.
- Wild, R., & Griggs, K. (2006). A Funding Choice Mecision Model for Financing Promising e-Government Services. *Electronic Government*, 3(3), 241–255.
- Wirtz, B. W., & Piehler, R. (2016). E-Government Applications and public personnel Acceptance: An Qmpirical Analysis of the Public Servant Perspective. *International Journal of Public Administration*, 39(3), 238-247.

ISSN 1675-1302



- Wu, L., & Chen, J. L. (2005). An Extension of Trust and TAM model with TPB in the Initial adoption of on-line tax: An Empirical study. *International Journal of Human-Computer Studies*, 62(6), 784-808.
- Zakaria, Z., Hussin, Z. H., Zakaria, Z., Noordin, N. B., Sawal, M. Z. H. B. M., Saad, S. F. B. M., & Kamil, S. B. O. (2009). E-filing System Practiced by Inland Revenue Board (IRB): Perception towards Malaysian taxpayers. *Cross-cultural Communication*, 5(4), 10-20.
- Zhang, Y. J., & Hsieh, C.-T. (2010). Chinese citizens' Opinions on e-Government Benefits, Issues and Critical Success Factors. *Electronic Government, an International Journal*, 7(2), 137–147.