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The profile of tax e-filing users and non-users: The case of Malaysia

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Abstract

A system is considered successful if the take-up rate is high. In Australia and the United States, tax e-filing users have reached more than 80 percent of total taxpayers. However, in Malaysia, the take-up rate of tax e-filing system by individual taxpayers is still considered low. Therefore, it is puzzling on the background of those who do not like to e-file and who like to e-file. The aim of this paper is to identify the characteristics of users and non-users of tax e-filing system in Malaysia. This is important as understanding the characteristics of users and non-users of e-filing can help the government in making decision on the strategies to tackle the specific groups effectively, rather than implementing a general strategy in promoting the system. This study found that the main characteristics that influence a taxpayer to e-file or not are: gender, age, ethnicity and educational level.

Keywords: e-filing, personal taxpayers, income tax, Malaysia

1. INTRODUCTION

In 1991, Malaysia released Vision 2020, a roadmap for the creation of a knowledgeable and technology-literate workforce. One of the Vision 2020's flagships is the concept of electronic government (e-government). The main objectives of e-government are to improve the government's internal operation and to deliver high-quality services to the people of Malaysia (Ambali & Hashim, 2007). The electronic tax filing system is one example of e-government implemented by the tax authority of Malaysia with the objectives of facilitating taxpayers' filing of income tax returns within the Self-Assessment System (SAS) as well as increasing the efficiency of the tax revenue authority operations (Inland Revenue Board of Malaysia, 2009b, p. 11).

A tax e-filing system is considered successful if the take-up rate is high (Legris, Ingham, & Colletette, 2003, p. 191). In Australia, the take-up rate of e-filing among individuals achieved 90 percent for the 2009/10 tax year (Australian Taxation Office, 2010, p. 190). In the USA, a goal was endorsed to achieve 80 percent of all tax returns to be submitted electronically. As at 2011, the e-file rate was reported at about 78 percent (Electronic Tax Administration and Advisory Committee, 2014, p. 2) and as at 2014, it was reported that the target has been achieved (Electronic Tax Administration and Advisory Committee, 2015, p. 3). However, in Malaysia, the level of acceptance is still considered low, with only about one-third of total Personal tax in 2010 (See data in Table 1).¹

¹ Unfortunately, recent percentage on the e-filing user is not calculated due to unpublished data by the IRBM.

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Whilst there are numerous interesting unanswered questions surrounding the tax e-filing system, this study focuses on the characteristics of users and non-users of tax e-filing system in Malaysia. Understanding the characteristics or demographic background of a group of people is important for decision-making. In health studies, for example, demographic information is used to evaluate outcomes of health care treatments and to advise resource allocation decisions (Dolan & Roberts, 2002, p. 919). Likewise, understanding the characteristics of users and non-users of e-filing can help the government to tackle the specific groups effectively, rather than implementing a general strategy in promoting the e-filing system.

2. TAX E-FILING SYSTEM

The tax e-filing system is not a mandatory system in Malaysia. It was first introduced to company taxpayers in 2001 (Sun, 2001). It was a pilot project involving five large accounting firms in Malaysia and their clients. The e-filing for personal taxpayers was considered to be officially launched in February 2006 (Inland Revenue Board of Malaysia, 2007a) although it was first tried in February 2005 (Inland Revenue Board of Malaysia, 2009b, p. 5). This is probably due to the incomplete free package whereby taxpayers had to incur costs in order to use the system, which resulted in very low take-up rate in 2005. During 2005, the number of users of the e-filing system was reported to be only 25 salaried individuals (Inland Revenue Board of Malaysia, 2007b, p. 11; 2009b, p. 53). The poor acceptance of e-filing in 2005 was mainly because taxpayers had to buy a digital certificate (RM19.90) and a card reader (about RM150.00 to RM200.00) in order to e-file. Taxpayers probably perceived that e-filing was expensive and only benefited the tax administrator. Recognising the low take-up rate, the IRBM has tried to overcome the high costs for a digital certificate and its reader.

In 2006, the tax e-filing system was officially launched to personal taxpayers. The digital certificates, using Public Key Infrastructure (PKI), were given free of charge to taxpayers. However, to download the digital certificate and the e-filing software (in Adobe package), a taxpayer needed a Personal Identity Number (PIN), which could be obtained from the IRBM. In addition, the e-filing system required the latest operating system and Windows (Windows XP at that time) in order to operate. Another limitation was that only the computer that was downloaded with the digital certificate could be used to complete the e-filing process. This means that if a taxpayer did his/her e-file at home, he/she cannot continue the e-filing at their office computer or any other computer. As a result, although the take-up rate of the e-filing system among personal taxpayers for 2006 increased to 188,747, this number still only accounted for about five percent of total personal taxpayers (see Table 1 below).

The e-filing system was further improved in 2007, regarding the e-filing web-based software. Using the web-based software, the user of the system needed only to download a digital certificate, and could directly use the online software without downloading it. The PIN was also sent out to taxpayers along with the hard copy of tax returns so that they did not have to go to an IRBM branch to get one. However, the problem of doing the e-filing at the same computer with the digital certificate remained. Taxpayers could not continue doing their e-filing at different computers. Nevertheless, the take-up rate for 2007 showed significant progress to reach 20 percent of total personal taxpayers that is more than 873,000 (see Table 1).

A significant improvement in 2008 was that the digital certificate was made roaming (roaming PKI). Through this system, taxpayers could easily use and continue their e-filing anywhere, anytime at any computer they like as long as they have the proper internet connection. Moreover, some basic taxpayer information (such as file number, name and address) was pre-populated in the electronic form. The benefits of e-filing were more tangible as the hard copy tax return was no longer printed in 2008 for those who had used e-filing in the previous year. In addition, the system was developed for tax agents so that a tax agent could also use the system on behalf of a taxpayer. The take-up rate of e-filing among the personal taxpayers for 2008 increased to 25 percent of total personal taxpayers and has reached more than 1 million users, or about five percent increased from 2007 users of e-filing (see Table 1). The roaming PKI tool remains in use until the present.

One feature worth noting is that the e-filing system was only available in the Malay language. This hinders the ability of those who are not fluent or confident speakers of the Malay language to use the system. Specifically, this situation may induce Chinese, Indians and other indigenous (especially in Sabah and Sarawak) who are not Malay first language speaking to use manual filing rather than e-filing, or towards greater use of tax professionals to file returns compared with those for whom Malay is their first language. Although this shortcoming was improved in 2009 by the inclusion of an English language translation to attract as many e-filing users as possible, the inclusion of only English as an alternative to Malay language may not be enough if a taxpayer has low knowledge in the Malay or English language. The e-filing take-up rate for 2009 was 31 percent

of total personal taxpayers that is more than 1.4 million (an increase of six percent from the previous year) (see Table 1).

Another obstacle is the busy period at the end of the deadline (30th April each year) that slows the e-filing process. This is because many taxpayers prefer to wait until the last minute to e-file. Delays at the peak period occur because the IRBM server has limited capacity to process large e-files. Although the IRBM increased the server capacity in 2008 (Inland Revenue Board of Malaysia, 2009a, p. 38), it was still not enough to accommodate an increased number of taxpayers in later years. The Malaysian tax e-filing remains prone to congestion at the end of the filing period probably due to the e-filing web-based software. Using the web-based software, all information entered into the e-filing is stored in the IRBM server.

Although the e-filing system has been constantly improved year by year, there is still a large portion of taxpayers who refuse to use the system in Malaysia. As indicated in Table 1, only one-third of personal taxpayers utilised the system in 2010. In a study by Islam, Yusuf, Yusoff and Johari (2012) also indicated that from 100 percent of their respondents who previously had used tax e-filing system, about 96 percent only reuse the system in the following year. According to Edwards-Dowe (2008, p. 3), the tax e-filing system may not be efficient in a developing country because the underlying administrative processes have not been reviewed; in addition, there are typically limited IT resources. Overall, information system implementation is considered costly and has a relatively low success rate in many parts of the world (Legris et al., 2003, pp. 191-192). Details on the take-up rates of the e-filing system from 2006 to 2010 are shown in Table 1.

Table 1: Users of Tax E-Filing, 2006 to 2010

Year	Total Personal Taxpayers	Users of Tax E-Filing	
		Number	Percentage (%)
2006	3,486,450	188,747	5
2007	4,451,443	873,095	20
2008	4,589,116	1,168,251	25
2009	4,785,452	1,460,209	31
2010	5,040,782	1,658,443	33

Source: Information from the IRBM Annual Reports 2006 to 2010 (Inland Revenue Board of Malaysia, 2007a, 2008, 2009a, 2010, 2011), IRBM media release (May 2012) and unpublished data from personal communication through email with the R&D Department, IRBM (25 March 2011).

3. METHODOLOGY

Data for this study was gathered through a large mail survey throughout Malaysia, which includes all 14 states. The survey was distributed in 2010. The respondents of this study were Malaysian personal taxpayers who filed their income tax return in 2010 (for the 2009 year of assessment). To ensure that the respondents came from that group of taxpayers, the use of an appropriate population database was crucial to ensure the representativeness of the sample extracted. The technique for selecting participants for this study was similar to the one used by Hasseldine (1995). In Hasseldine's study, the sample was selected by the Inland Revenue Department and the department sent out the questionnaires due to confidentiality reasons. This sample was believed to ensure representativeness because it came from the tax authority database. About 2,600 taxpayers were randomly selected by the IRBM for this study. the sample was considered adequate to describe the personal taxpayer population in Malaysia with a total number of almost 4.8 million for 2009 (Inland Revenue Board of Malaysia, 2010, p. 50).

4. RESULTS AND DISCUSSION

4.1 Gender and Marital Status

This study received of about ten percent response rate, after removing non-usable responses. As shown in Table 2, 83 percent of respondents were married (N=201). Both single and married respondents indicated that they preferred e-filing to manual filing. Specifically, 75 percent of single respondents chose to e-file, compared with 59 percent of married respondents. For non-e-filers, it can be concluded that respondents with married status constituted the majority. The results suggest that single respondents accepted e-filing very well compared to married persons. This is probably due to single taxpayers having simpler tax affairs than married taxpayers. In addition, single taxpayers in this study were probably young in age as research indicates that younger people prefer technological systems compared to older people (Czaja & Sharit, 1998, p. 329). Details of this study data are shown in Table 2.

4.2 Age and Employment Status

In terms of age, the majority of the respondents came from the age group of 25 to 44 (about 42 percent) and 45 to 54 (about 40 percent). This was followed by the 55 to 64 age group (about 11 percent), 65 and above (4.5 percent), and 24 and below (1.7 percent). The distribution is reasonable because the compulsory retirement age for civil servants in Malaysia is between 55 and 60 (Jabatan Perkhidmatan Awam, 2011). Analysis of the respondents by age indicates that older respondents (aged 65 and above) preferred to use manual filing (almost 73 percent from the total of the group), while the majority of younger respondents preferred e-filing. However, among those aged between 45 and 64 there was just a small difference between the percentage of e-filing users (56 percent) and non-users (44 percent). This indicates age did not matter and that there were other factors that influence the taxpayers in this age group to use or not to use the e-filing system. Details of this study data are shown in Table 2.

About 75 percent of total respondents were employed and 22 percent were self-employed. Another three percent were in the "other" category, namely retired people. Most of the employed respondents used e-filing (63 percent). Although more than half of self-employed respondents utilised e-filing, a higher proportion of self-employed respondents (43.4 percent) used manual filing than employed respondents (37 percent). The findings suggest that there is still a large portion of employed and self-employed taxpayers who can be persuaded to use e-filing if the take-up rates of e-filing are to be increased. Details of this study data are shown in Table 2.

4.3 Ethnicity and Geographical Area

Malaysia is a multi-cultural country with three main ethnic groups: Malay, Chinese and Indian. Malay is the largest ethnicity followed by Chinese and Indian. In this study, almost half of the respondents were of Malay ethnicity. This was followed by Chinese (38 percent), Indian (7 percent) and others (6 percent). Analysis of the ethnicity groups shows that the majority of Malays used e-filing (72 percent). Among the Chinese respondents, the users of e-filing and manual filing were about 50-50. On the other hand, the majority of Indian respondents used manual filing (63 percent), compared with those using e-filing (38 percent). The findings indicate that e-filing is widely accepted by Malays in comparison with other ethnic groups in Malaysia. The Chinese and Indian groups are thus rather resistant towards e-filing. Reasons for this situation are examined further by the model for determinants of e-filing usage behaviour. Details of this study data are shown in Table 2.

Table 2: Demographic Profile of Respondents

Item		E-Filing (N=147)		Manual Filing (N=95)		Total (N=242)
		Number	Percent within Item	Number	Percent within Item	Number
Gender:	Male	91	61.9	56	38.1	147
	Female	56	58.9	39	41.1	95
Marital status:	Single	27	75.0	9	25.0	36
	Married	118	58.7	83	41.3	201
	Other	1	25.0	3	75.0	4
	Not mentioned	1	100.0	0	0.0	1
Age:	24 and under	4	100.0	0	0.0	4
	25 to 44	69	68.3	32	31.7	101
	45 to 54	54	55.7	43	44.3	97
	55 to 64	15	55.6	12	44.4	27
	65 and above	3	27.3	8	72.7	11
	Not mentioned	2	100.0	0	0.0	2
Employment:	Employed	114	63.0	67	37.0	181
	Self-employed	30	56.6	23	43.4	53
	Other	3	37.5	5	62.5	8
Ethnicity:	Malay	86	72.3	33	27.7	119
	Chinese	48	51.6	45	48.4	93
	Indian	6	37.5	10	62.5	16
	Others	7	50.0	7	50.0	14
Location:	Northern ^a	36	60.0	24	40.0	60
	Klang Valley ^b	53	60.9	34	39.1	87
	Southern ^c	20	64.5	11	35.5	31
	Eastern ^d	17	54.8	14	45.2	31
	Others ^e	21	67.7	12	38.7	31
	Not mentioned	2	100.0	0	0.0	2

In terms of geographical area, the data for this study was derived from all over Malaysia. In total, the majority of respondents were from the Klang Valley (36 percent). This was followed by the northern region (25 percent) and the remaining areas in Malaysia with the same percentage of about 13 percent. Comparison within the location areas indicated that e-filing outperformed the manual filing in every location. Eastern states (Pahang,

Kelantan and Terengganu), however, showed a narrower percentage difference between e-filing users (55 percent) and manual filing users (45 percent) as compared to other regions. Users of e-filing were mainly from the Klang Valley area (36 percent), followed by the northern region (25 percent), southern region (12 percent), others (13 percent) and eastern region (12 percent). Details of this study data are shown in Table 2.

4.3 Level of Education, Tax and Information Technology Knowledge

Overall, about 40 percent of the respondents were in the lowest category of academic qualification (up to Sijil Tinggi Pelajaran Malaysia (STPM)). This was followed by graduate level (32 percent), diploma level (15 percent) and postgraduate level (12 percent). The majority of the group up to the STPM level were non-users of e-filing. In the higher academic education levels, the percentages for the e-filing category were higher than the manual category.

In general, the majority of personal taxpayers in Malaysia perceived that their level of tax knowledge and IT knowledge were average. In terms of tax knowledge, about 25 percent of respondents from the e-filing group and 20 percent from the manual filing group indicated that they had good or excellent tax knowledge. However, more respondents from the non-users group perceived themselves as having poor or fair levels of tax knowledge (21 percent) compared with their counterparts (10 percent only).

The findings indicate that respondents who perceived themselves as good or excellent regarding the level of IT and tax knowledge were more likely to use the e-filing system than manual filing and vice versa. Details of e-filing users and non-users according to the level of general education, IT knowledge and tax knowledge are shown in Table 3.

Table 3: General Education, Tax and Information Technology Knowledge

Item	E-Filing(N=147)		Manual Filing (N=95)		Total (N=242)	
	Number	Percent	Number	Percent	Number	Percent
General Education:						
Up to STPM	52	35.4	98	40.5	47	49.5
Diploma	24	16.3	35	14.5	11	11.6
Graduate	50	34.0	77	31.8	26	27.4
Postgraduate	21	14.3	28	11.6	7	7.4
Not mentioned	0	0.0	4	1.7	4	4.2
Tax Knowledge:						
Poor	4	2.7	23	9.5	7	7.4
Fair	11	7.5	14	5.8	13	13.7
Average	95	64.6	127	52.5	53	55.8
Good	27	18.4	60	24.8	17	17.9
Excellent	10	6.8	15	6.2	2	2.1
Not mentioned	1	0.7	3	1.2	2	2.1
IT Knowledge:						
Poor	7	4.8	11	4.5	16	16.8
Fair	6	4.1	24	9.9	8	8.4
Average	73	49.7	148	61.2	54	56.8
Good	47	32.0	44	18.2	13	13.7
Excellent	12	8.2	12	5.0	3	3.2
Not mentioned	1	0.7	3	1.2	2	2.1

4.4 Characteristics of E-filing users and Non-users

Overall, the present study reveals that the users of the e-filing system was predominantly comprised of those who were male, aged below 45, employed, Malay ethnicity and having a general education attainment of diploma level or higher. In terms of location, the number of e-filing users outperformed the non-users in all locations, but people who lived in the Klang Valley area (urban areas) were the highest group of e-filing users. The characteristics of those who refused to use the e-filing system were mostly opposite to the characteristics of those who preferred the system.

The e-filing non-users were primarily those aged between 45 and 64, self-employed, Chinese ethnicity and had a low education attainment. Although the users of e-filing outnumbered those manual filing in all locations, the eastern areas (which comprise the states of Kelantan, Terengganu and Pahang) held the highest percentage of non-users (45 percent of total respondents from that area). The main characteristics of manual and e-filing users from the present study are summarised in Table 4.

Table 4: Main Characteristics of E-filing users and Non-users, 2010

Demographic Variables	E-Filing Users	Manual Filing Users
Gender	Male	Female
Age	Below 45	45 to 64
Employment status	Employed	Self-employed
Ethnicity	Malays	Chinese
Education level	Diploma or higher	Up to STPM
Location	Klang Valley	Eastern part

The respondents' profiles in the present study's findings are similar to a previous study on technology readiness by Rockbridge Associates Inc. (2005, pp. 15-16), which found that the characteristics of people who have high techno-readiness are young, highly educated people, male and live in closed-in suburbs. The similarity suggests that the users of the e-filing system in this study probably possessed more techno-readiness qualities than the manual users and therefore the policy-maker should focus on the opposite characteristics in developing any strategy to increase the take-up rate of e-filing.

However, this result contradicts the finding by Ramayah et al. (2008) who found Chinese ethnicity as being a dominant feature of the e-filing user. Reasons for the difference may be due to the timing of data collection and the sample of the study employed for both studies. Ramayah et al. conducted their study in 2006 when e-filing was just commencing for personal taxpayers² while the present study was conducted after five years of operation, in 2010. Moreover, the sample of the Ramayah et al.'s study consisted of only 100 taxpayers in the Penang area, a small state out of fourteen states in Malaysia. It is well known that the majority of the population in Penang, especially in Penang Island, is Chinese (Department of Statistics Malaysia, 2011, p. 3). Therefore, it is not surprising that the finding in Ramayah et al. indicated the Chinese as the dominant ethnicity that engaged e-filing during that time. The present study, on the other hand, covered a wide range of the geographical area in Malaysia, including all states and was comprised of 242 usable responses, which doubled the number in the Ramayah et al. sample, and the respondents were randomly selected by the IRBM from its personal taxpayer database.

5. CONCLUSION

This study was conducted mainly to identify the profile of tax e-filing users and non-users in Malaysia. The overall picture of the respondents of this study indicated that the respondents were well distributed among the demographic variables. It is identified that the majority of e-filing users are male, aged less than 45 and salaried taxpayers. Most of them are Malays, more educated (holding at least a diploma), and live in the Klang Valley (urban area). In contrast, the majority of non-users are female, aged between 45 to 64 and are self-employed. Most of them are Chinese, have low educational attainment, and live in the eastern part of peninsular Malaysia (rural area). The results also indicated that IT knowledge was more likely to determine the choice of e-filing than the tax knowledge. It is hoped that the results can assist the government in formulating specific strategies to tackle specific groups of taxpayers identified as non-users of e-filing system in Malaysia. The strategies are required in order to increase the take-up rate of the system and to increase the efficiency of the tax revenue authority operations in Malaysia, as an example of a developing country. It is also suggested that a committee such as in the US (Electronic Tax Administration and Advisory Committee) to be set up in order to monitor the development and obstacles in the era of electronic taxation in Malaysia. Areas for future studies include more in-depth survey using qualitative method, other external reasons for non-users of e-filing and other type of e-filing returns such as return by employers.

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² Officially, the e-filing system was opened with a free digital certificate in February 2006 (Inland Revenue Board of Malaysia, 2008, p. 40; 2009a, p. 38).

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