

Taxpayers' Satisfaction in Using E-Filing System in Malaysia: Demographic Perspective

Md. Aminul Islam, Dayang Hasliza Muhd Yusuf and Abul Bashar Bhuiyan
School of Business Innovation and Technopreneurship, Universiti Malaysia Perlis,
Kangar, Perlis, Malaysia

Abstract: This study attempted to investigate the influence of demographic factors on E-filing user satisfaction in Malaysia. The data were collected from randomly selected respondents using survey method from all states of Malaysia. The findings indicate that age and occupation affect tax payers E-filing user satisfaction in Malaysia. However, race, gender and education were not significant factors in gauging user satisfaction on E-filing in Malaysia. Findings reveal that all respondents have committed to file their income taxes via E-filing next year despite of average user satisfaction rate with the mean of 3.62 out of 5 scale. The findings should assist Malaysian Inland Revenue Board in formulating new strategies on improving E-filing user satisfaction to achieve their goal of having 80% of Malaysian tax payers to use E-filing in future.

Key words: E-filing, user satisfaction, demography, malaysia, gauging user

INTRODUCTION

E-filing, since its inception has generated interest among Government agencies, academicians and researchers. Governments are implementing Information and Communication Technologies (ICT) to enable E-government to improve the efficiency of government services provided to citizens, employees, businesses and agencies (Carter and Belanger, 2005). Mohd Salleh indicated that the quest to implement E-government by most countries is increasing due to its potential benefits where E-government can enhance the way that a government interacts with citizens and businesses. According to Mohd Salleh in Malaysia the initiatives for E-government commenced with the launching of Multimedia Super Corridor (MSC) in 1996 as the main vehicle to support and facilitate change in embracing the Information Technology (IT) revolution, guided by the vision 2020. Lai *et al.* (2005) mentioned that that tax environment is progressing in line with ICT advancement and since the 1990s; several tax authorities from the developed countries and Asia-Pacific regions have progressively utilized functionality of ICT to implement E-Filing system. By benchmarking E-filing usage with Singapore, one of the countries that was categorized as “Gold Medalists” in the E-government category with conceptualization, policies and implementation of E-government initiatives are characterized as sound and authentic, Malaysia is not far behind as a “Silver

medalist”. In its 10th year after E-filing introduction, 1,002,000 individual taxpayers in Singapore electronically filed their taxes in 2007 as of 18 April 2007 compared to 915,000 in 2006 (IRAS, 2007). Singapore reported a 91% achievement in Assessment Year (YA) 2009, 94% in YA 2010 and a further increase to 96% achievement in YA 2011 (IRAS, 2011). The E-filing application was introduced in February 2006 in Malaysia. Individuals and company taxpayers can submit their ITRFs electronically via the internet. From 2008, E-filing was extended to non-residents, partnerships and employers. The Inland Revenue Board of Malaysia (IRBM) has simplified E-filing and has increased the server capacity to shorten the time that taxpayers need to complete and submit their forms. As at end of July 2011, >2.2 million tax payers filed their income tax return forms via the E-filing service which is a 11.7% increase from the number of users in 2010. The total registered tax payers as at July 2011 are 6.6 million. The electronic submission of ITRFs saves time and cost for taxpayers. The IRBM also reduced printing costs, delivery costs and scanning costs of the ITRFs. The IRBM now no longer physically (manually) issues ITRFs to taxpayers who had used E-filing the previous year. Costs savings is estimated at RM8.17 million in addition to a reduction in the workload of processing physical ITRFs. This shows that E-filing usage rate in Malaysia is increasing rapidly. The IRBM has been promoting E-filing with easy, accurate and safe tax filing. Thus, this study investigates the success of

E-filing system in Malaysia by focusing on electronic service quality dimensions that affect user satisfaction and subsequently measures if users' perceived net benefits have been realized.

Background of Inland Revenue Board of Malaysia (IRBM) and E-filing system:

Among the functions of the Inland Revenue Board of Malaysia (IRBM) is to act as the government of Malaysia an agent in the administration, assessment, collection and enforcement of income tax, and other taxes agreed upon between IRBM and the government of Malaysia. Previously, the tax return is manually processed. The initiatives towards automating the process via implementation of the E-filing system was done in a few stages starting with the implementation of the Self Assessment System (SAS) for corporations in 2003. SAS was extended for non-corporations such as individuals, clubs and associations in 2004. The IRBM then took another step forward by implementing the E-filing system also in 2003. In the semi-manual E-filing system, taxpayers downloaded special software to guide them in filling up of tax return forms. The completed forms were then printed out and submitted manually to IRBM. The E-filing system helped taxpayers avoid mistake in filling up tax return forms by highlighting unfilled fields and providing auto-computing functions in some of the fields (IRB, 2004). Finally, the IRBM E-filing services which allow taxpayers to submit their tax return forms electronically via the internet was implemented in 2003 for corporations. The E-filing application was extended to individual taxpayers in 2006 (IRB, 2006). E-filing transaction has many benefits such as offering more convenience, fast, accurate and secured in terms of payments. Since, its introduction and implementation, the response towards the E-filing system is very good. The number of taxpayers using the E-filing services has been reported by a number of sources to have increased steadily, since its implementation in 2006. In the first year of its implementation, the E-filing system managed to garner a total of 186,271 individual users which almost doubled the IRBM expectation of 100,000 users. The IRBM target was then to achieve at least 30% of the 3.65 million active taxpayers (both corporate and non-corporate) (IRB, 2006). In 2007 the number of individual taxpayers using the E-filing system increases to 873,095 which is 469% the year before (IRB, 2007). In 2008, the IRBM extended the E-filing services to non-residents, partnerships and employers. A total of 1,188,130 income tax return forms were filed by individuals and non-individuals via the E-filing system, surpassing the IRBM target of one million users by the 3rd year of its implementation. In 2008, the IRBM also stopped issuing

printed income tax return forms (IRB, 2008). The number of E-filing users were also reported to raise by 16.5% from 1.25 million in 2009-1.9 million in 2010 (Financial Report 2010). The number of taxpayers using the E-filing system in 2011 was reported as 2.3 million and for 2012, IRBM expects the number of E-filing users will touch 2.5 million out of 6.6 million registered individual and non-individual taxpayers (NST, 17 March 2012). This would translate to 37.8% of the total registered taxpayers were using the E-filing services in the 6th year of its implementation. This achievement is however falls below the expectation. Compared to Singapore, percentage wise, the 91% tax payers were reported to use the E-filing system in Assessment Year (YA) 2009, 94% in YA 2010 and a further increase to 96% achievement in YA 2011 (IRAS, 2004). India who also implemented the E-filing system in 2006 sees a 2.534% increase of users from 3.63-92 Lakhs in 2010-2011 (Directorate of Income Tax, A Journey across Three Centuries, 2011). Although according to Ambali (2009), the implementation of E-filing system is expected to provide greater convenience for taxpayers by allowing them to file their tax returns at anytime and from anywhere within the stipulated tax filing period in another exploratory research results have shown that many taxpayers did not use E-filing system to file their tax returns. This study focused on understanding the determinants of E-filing user satisfaction to measure users' perceived net benefits realization and subsequently to indicate the area of quality dimensions that IRBM to focus on in order to improve the user satisfaction moving forward. This study would also attempt to identify the demographic factors influence on the adoption of the E-filing system among Malaysian taxpayers.

Literature review: This study focused on understanding the determinants of E-filing user satisfaction and subsequently to indicate the area of quality dimensions that IRBM needs to focus on in order to improve the user satisfaction and thereby increase the E-filing adoption rate among Malaysian taxpayers. Past literatures on related scholarly models were reviewed to understand the research findings of electronic service quality dimensions that effect user satisfaction and to construct theoretical Model. The basis of this study is adapted from DeLone and McLean Information System Success Model for end user satisfaction developed by DeLone and McLean (2003) to measure online service quality with three major dimensions of information quality, system quality and service quality. From information quality perspective, personalization, completeness, relevance, easy of understanding and security quality dimensions are used to measure electronic information system content issue

(DeLone and McLean, 2003). System quality measures refers to the desired characteristics of electronic information system by using usability, availability, reliability, adaptability and response time quality dimensions (DeLone and Mclean, 2003). Subsequently, service quality or in another words, overall support delivered by the service provider towards electronic information system are measured using assurance, empathy, responsiveness quality dimensions (DeLone and Mclean, 2003). The electronic information system impact measures are grouped into net benefits variables where this is used to capture the balance of positive and negative impacts of the electronic information system on users and other stakeholders where cost savings, expanded markets, incremental additional sales, reduced search costs and time savings are used constructs of measurement (DeLone and Mclean, 2003). The difference in the E-filing adoption rate among users of different demographic factors will also be looked into.

Demographic factors: A study was conducted among tax payers in Labuan FT to see the difference in attitude towards E-filing usage between different demographic factors found that there is significant difference in attitude among users having different level of education, previous experience using the E-filing system and having learn to use the E-filing system. The same study found that the attitude difference is not significant between male and female respondents (Ilias *et al.*, 2009). A study by Mohsin and Raha (2007) also found that active users of the E-filing are among those with higher levels of income and education. In a different study by Ambali (2009) it was found that gender does have influence in the user intention to use the E-filing system, user perception of ease of use of the system and retention of the E-filing system, i.e. whether a user have the intention of continuing to use the E-filing system in future. According to Ambali (2009), Ramoo (2006) found that the demographic profile of E-filing users are “predominantly female, aged 30-55 years old, married, Chinese with a bachelor of masters degree, earning more than RM3000 per month and working in private sector” (p.4). Ibrahim and Pope (2011) found that male taxpayers tend to prefer using E-filing compared to their female counterparts, marital status does not have significant influence on the preference to use E-filing and that taxpayers in the Klang Valley are highly likely users of the E-filing system. The same study however found that Chinese tax payers to prefer manual tax filing over e-filing and that the level of income does not affect choice of filing method (manual or E-filing) which is contrary to the findings by Ramoo (2006) and Mohsin and Raha (2007). Higher percentages of tax

payers who prefer manual tax return submission method are from lower education level, below average knowledge on IT as well as tax (Ibrahim and Pope, 2011). This is consistent with the findings by Fu *et al.* (2006) in a study among Taiwanese taxpayers where demographic factors of age, gender, education, prior experience using computers and the internet and having access to computer and internet resources have significant influence on the acceptance of E-government initiatives including E-filing. Demographic characteristics of gender, level of income, education, age, experience using the computer and internet, access to computer and internet facilities and frequency of using the internet have also been found to predict potential adoption of the E-filing method of submitting tax return forms (Fu *et al.*, 2004). Fu *et al.* (2004) listed the profile of electronic tax payers adopters as having higher education, younger have computer more and internet experience have more access to internet and computer facilities and spend more time online. The same profile applies for user retention. Hwang (2000) in a study among Taiwanese taxpayers preference for tax filing method stated that the users of internet tax filing method was dominated by men, ages between 30-39, have college education, having 1-3 years of experience using the computer and internet and have filed tax returns for 8-11 years.

User satisfaction: Kamarulzaman and Azmi (2009) concluded that satisfaction is the difference between a products perceived performance in delivering value relative to a buyer's expectation before a product is purchased. User satisfaction is a critical issue in the success of any business system either traditional business or online business. Ambali (2009) suggested a need for improvement in the implementation of the online E-filing to ensure that the system conform to the public E-filers' satisfaction as the result for users' retention only indicate moderate level. He also said that the overall level of the E-filing usage among taxpayers is still low, despite many campaign activities by IRBM to increase the level of E-filing usage in the country. In order to make sure E-filing system can fully satisfied users, the technology system used by IRBM must has this criteria; usefulness, ease of use, facilitating conditions and security and users' intention to continue using the E-filing system.

MATERIALS AND METHODS

This is a correlation study and was conducted among E-filing users working in public sector, private sector and also self employed users under the natural environment

where the variables were neither controlled nor manipulated. The survey method used to gather information to empirically test the research model developed. Individual tax payer is treated as unit of analysis in this study. Three independent variables namely gender, age, race, occupation, education were selected to determine factors that contribute to user satisfaction of income tax E-filing system. User satisfaction was used as a dependent variable. Sekaran (2006) mentioned probability sampling design can be used when the elements in the population have a known chance of being chosen as subjects in the sample. This study used convenient sampling method to obtain sufficient number of respondents due to non availability of Malaysian tax payers list to do probability sampling. Total of 500 questionnaires distributed via hardcopy. Colleagues, friends and relatives were notified via electronic mail to respond to the electronic survey. The questionnaires are adopted from various literature of Hitz *et al.* (2006) and Parasuraman (2000) and tailored to meet the objective of this study. In Section A, the demographic variables were measured by using nominal scale and from Section B until L, the variables are measured by using 5-point interval scale to measure the attitude ratings with 1 is rated as strongly disagree, 2 as disagree, 3 as neutral, 4 as agree and 5 as strongly agree.

The data collected via questionnaires were analyzed by using Statistical Package for Social Sciences (SPSS) software for Windows. Factor analysis and reliability analysis were used as part of goodness of measures. Reliability analysis computed Cronbach's alpha which indicated the internal consistency and reliability of measuring the scales of variable (Sekaran, 2006). The scores range from 0-1 where higher score indicates higher reliability with Cronbach's alpha value of 0.7 and above were accepted to be reliable (Nunnally and Bernstein, 1994). One Way ANOVA and t-test were used to find out effect of demographic factors on E-filing user satisfaction in Malaysia.

RESULTS AND DISCUSSION

This following sections present findings of the research undertaken to gauge the effect of demographic factors on E-filing user satisfaction.

Profile of respondents: A total of 175 responses were obtained from 500 questionnaires that were distributed. From 275 E-filing users that responded to this survey via hardcopy and electronically, 49% were male and 51% were female. The 26.5% of 155 respondents were Malays, 25.2%

were Indians, 38.7% were Chinese and 9.7% were comprised of other races. Other than that 35.5% of the respondents were below 30 years old, 54.2% were between 30 and 45 years old and 10.3% were between 46 and 55 years old. On education level of the respondents, 1.3% were secondary school leavers, 7.1% were diploma holders, 5.8% were professional certificate holders, 55.5% were bachelor degree holders, 28.4% were master degree holders and 1.9% comprised of Ph. D holders. In terms of employment, 11.6% were attached to public sector, 87.1 were from private sector and 1.3% was self-employed. In terms of state of residence, 3.2% of the respondents were from Perlis, 10.3% were from Kedah, 43.9% were from Penang, 4.5% were from Perak, 8.4% were from Selangor, 4.5% were from Negeri Sembilan, 2.6% were from Melaka, 2.6% were from Johor, 1.9% were from Pahang, 2.6% were from Terengganu, 3.2% were from Kelantan, 1.9% were from Sarawak, 5.8% were from Sabah, 3.9% were from Kuala Lumpur and 0.6% were from Labuan. Out of 275 respondents, 96.8% of the respondents filed their taxes via E-filing in 2012 but all of them have used E-filing up to date and 100% of these respondents committed to submit their income tax filing via E-filing next year.

Reliability analysis: The reliability test was conducted on the data. The Cronbach's Alpha value used to test the reliability of the items measuring each of the independent variables (system quality, information quality and service quality), moderating variable (technology readiness) and dependent variables (user satisfaction and users' perceived net benefits) variables. All dimensions in this study have high levels of reliability and are well above the cut-off value of 0.70 as suggested by Nunnally and Bernstein (1994). Reliability analysis was used to test the consistency and stability of user satisfaction and found it to be satisfactory (Cronbach alpha = 0.862).

Findings: One way ANOVA was used to find out whether respondents with different age groups differ in respect to user satisfaction toward income tax E-filing in Malaysia. The F value was large and found to be significant at 5% significance level (Sig. F = 0.042). Duncan test shows that respondents in the age group of below 30 are significantly different from age group 46 and above. It indicates that younger respondents are more satisfied than the elders. It could be due to the fact that younger respondents are computer savvy. Race and education do not show any significant effect on user satisfaction towards income tax E-filing in Malaysia. This is a new findings as earlier study by Ramoo (2006) and Mohsin and Raha (2007) found that Chinese tax payers to prefer manual tax filing over E-filing. The findings of education level of respondents do not

Table 1: One way ANOVA results

| Factors | F-values | Sig. F |
|------------|----------|--------|
| Age | 2.838 | 0.042 |
| Race | 0.867 | 0.460 |
| Education | 0.794 | 0.556 |
| Occupation | 3.114 | 0.047 |

any effect is not consistent with findings of Fu *et al.* (2004). Fu *et al.* (2004) found that demographic characteristics of gender, level of income, education, age, experience using the computer and internet, access to computer and internet facilities and frequency of using the internet have also been found to predict potential adoption of the E-filing method of submitting tax return forms. Table 1 presents the results of one way ANOVA.

Respondents with different occupation significantly differ in respect to user satisfaction towards income tax E-filing in Malaysia (Sig. F = 0.047). Bonferroni test shows that respondents from the private or non-government sector significantly different from respondents who are self-employed or involved in own business. Duncan test also shows that that self-employed respondents are significantly different from those are working with government and non-government sectors in E-filing user satisfaction in Malaysia. Respondents from all states have similar user satisfaction towards E-filing as one way ANOVA result was not significant.

The t-test was then used to find out whether male respondents significantly differs from female respondents in respect to E-filing user satisfaction. The Levene's test and subsequently t-test for equality of means shows no difference between male and female in respect user satisfaction of E-filing in Malaysia. This finding is consistent with research findings of Ilias *et al.* (2009). This study findings are consistent with earlier research due to the fact that most of the earlier research was done in Klang Valley or few states of Malaysia. However, this study had sample from all over Malaysia. Therefore findings of this study is more generalizable.

CONCLUSION

The implication of this study must be examined in a managerial and policy perspective to form effective strategies sustain the current E-filing users by taking appropriate action (s) to improve user satisfaction among Malaysian tax payers to achieve the MIRB goal to increase the E-filing usage moving forward. The 100% of the respondents have used E-filing before and 96.8% of them have filed their income taxes via E-filing in the recent years. All respondents have committed to file their income taxes via E-filing next year despite of average user satisfaction rate with the mean of 3.62. This indicates that

by having careful strategy implementation by the government, E-filing can achieve higher user satisfaction rate. Potential improvement in the weakest area followed by moderate areas will definitely help to improve E-filing user satisfaction moving forward. As a start, MIRB can allocate dedicated staff to update the web site in timely manner. When the updates are made, MIRB staff can show date and details of the update and place the updates consistently at the same place of web site for convenience viewing rather than users browsing over. Future researchers can consider on other attributes besides the demographic factors to improve this study and to address the limitations. As such, it is hoped that this study will give a preliminary insight and understanding on the tax payers' user satisfaction of E-filing from demographic perspective.

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