

FACTORS AFFECTING TAXPAYERS' SATISFACTION OF THE ONLINE TAX FILLING SYSTEM IN SRI LANKA

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Abstract

Satisfaction of taxpayers in E-filing of tax to a greater extent is a mental phenomenon. This research study was conducted to identify the factors affecting the satisfaction of tax payers. The criterion variable is taxpayer's satisfaction whereas perceived ease of use, perceived usefulness, computer self-efficacy, trust, information quality and website quality are considered as predictor variables. The simple random sampling method was used and 50 Government owned entities were selected as respondents into this study. A structured questionnaire was utilized to collect the data. This study adopted, DeLone and McLean information success model to measure taxpayer's satisfaction on E-filing service together with the technology acceptance model to develop the conceptual framework. The outcome revealed that the proposed model explains 88.5% of the variation (r^2) of the endogenous variable. The regression analysis discovered that website quality and perceived usefulness have significant relationship with satisfaction of taxpayers ($p < 0.05$). However, the other four constructs of the conceptual framework namely perceived ease of use, trust, computer self-efficacy and information quality had not shown a significant relationship with satisfaction of taxpayers. The results of the analysis evident that users had not realized the benefits of the Revenue Administration Management Information System (RAMIS). Therefore, the outcomes of the study lead the reader to recommend that it is necessary to carefully review on present E-filing RAMIS system in order to capture the attention of relevant stakeholders.

Key words: Taxpayers' satisfaction, E-filing, Perceived usefulness, Website quality, RAMIS

Introduction

E-filing of tax refers to successful filling of tax returns through the internet. Under e-governance policy of the Government of Sri Lanka, the concept of E-filing of tax returns through the internet was introduced in year 2014. New technologies are emerging rapidly with improved speed in all the fields. Internet has changed the present scenario of working by reducing the manual work. In this context, the Inland Revenue Department (IRD) has expedited the provisions to be followed, which can be filled and the procedure to file tax

returns for the benefit of tax payers as well as the Government. But with new technologies many challenges have emerged and among other thing, lacking the awareness of perceived ease of use is a major challenge. When analyzing the Government revenue, during year 2018 the total tax revenue contributed by the IRD to the Government revenue was Rs. 900,348 million and it was 46.89% of the total Government Revenue and 6.23% of the Gross Domestic Production (GDP) of the year (Inland Revenue Department, 2019). Due to the need to link the fiscal objective and the budget framework, the Government came up with the Fiscal Management Reform Program (FMRP) with the approval of the Asian Development Bank (ADB), initiated the concept of e- Governance and it laid the way to development of the e-filing of tax returns. The concept e- filing is the process of filling the tax documents through internet with the help of software or by registering through the income tax website. Therefore, Government introduced the Revenue Administration and Management Information System (RAMIS) and this was introduced with the aim of supporting the IRD in simplifying the tax administration and tax compliance procedures. RAMIS is also envisioned to support in increasing the revenue collection and tax compliance by enabling IRD to reach out to taxpayers in more efficient way. The project officially started in 2014 and the software developer was NCSI Solutions (Pvt) Ltd. in Singapore and the project had two Phases. The Phase 1 of the project was introduced in March, 2016, and initially on a voluntary usage basis for corporate tax payers of income tax assessment. But still, it was not made mandatory for all the tax payers to E-file their income tax returns.

The total cost of the project has been funded by the term loan granted by the ADB approximately around Rs. 9 billion. The cost incurred by the Government on this project since 2014 to 2018 is as follows;

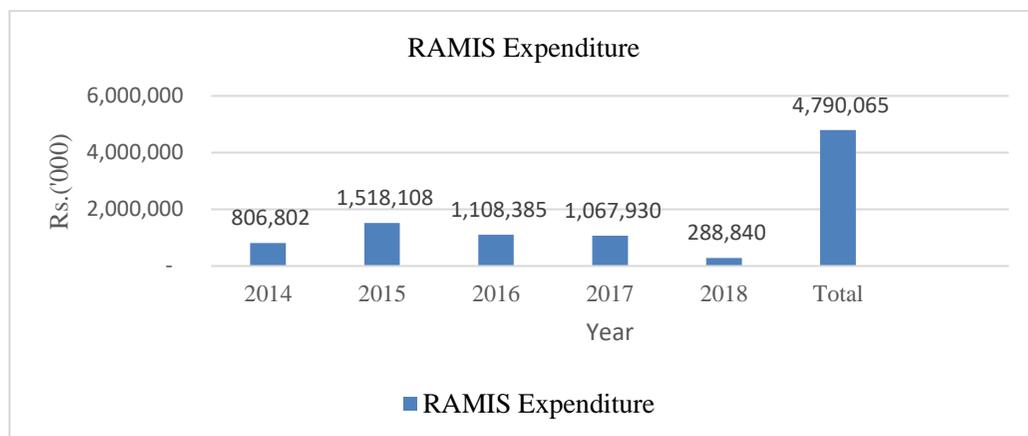


Figure 1: RAMIS Expenditure

Source: Performance Report of IRD (2019)

Before introducing the RAMIS, the taxpayers had to file the tax returns manually based on the return of income and the statement of assets and liabilities posted to every tax payer by the IRD. Every tax payer has to adhere to the statutory dead line as per the section 93 of the Inland Revenue Act, No. 24 of 2017. That is every tax payer shall file with the Commissioner General not later than eight months since the end of the assessment every year. For example, for the year of assessment 2018/2019 the income tax return shall be filed with the IRD on or before 30 November 2019. Further, if any taxpayer was not able to submit the tax return, penalty as per section 178 will be imposed by the IRD. Hence, there were many difficulties faced by the taxpayer in the manual system, some of the common complaints were, time consuming and cumbersome process and necessary to be present physically, have to stand in queue in the last date of the return filing and normally end with the closure of office working hours, no confirmation of return filed was arithmetically correct and time consuming to record data and expedite refunds (Geetha & Sekara, 2012). There are many advantages that can be enjoyed by the tax payers as well as the officials of the IRD in having an online tax filling system. Such as, accessibility is allowed 24*7*365, conveniences, certainty of delivery and quick confirmation, fast refunds, tax payer privacy and security are assured, can use online tax preparation software and eliminate error notices caused by data entry errors.

The income tax department is responsible for all activities related to the taxation process. The income tax department is governed by Department of Inland Revenue under the Ministry of Finance, Government of Sri Lanka. The income tax department of Sri Lanka launched the electronic tax filing system of income tax returns because at the moment 12.5% of GDP in the country is generated through income tax revenue (IRD,2019). E-taxation scheme was one of the major mile stones introduced under the streamline Government tax mechanism in the year 2016, introduced with a view to improving the return filing system (IRD, 2019). The general aim of E-taxation is to replace cumbersome manual, bureaucratic service systems with collaborative, efficient, process-driven and secure online delivery. The department preferred the system of E-filing because that would make the process of filing of Income Tax Returns easier for tax payers as well as reduce the time required for data entry at their end on receipt of the income tax returns. Enabling the filing of income tax returns over the internet was the most feasible answer to the department's needs and tax payers, the department had to create an environment in which the user would feel secure about filing his income tax returns online. E-filing helped furnishing tax returns through authorized representative who can obtain the registration as Authorized Representatives. Response time for processing the income tax returns as well as claiming refund dropped considerably. Duplication of efforts were eliminated by these intermediaries and most of all in the online procedure the tax payers do not have to be actually present for filing their returns. The RAMIS is introduced by the IRD commencing from the year 2016 by computerizing the IR system.

The process of tax administration with RAMIS is mainly consisted with tax payer registration, submission of returns, issuing of assessments, making payments, expediting refunds, submission of appeals, collection administration, issuing clearance certificates and issuing direction.

Research Problem

E- filing is the process of filling tax documents through internet with the help of readymade software or by registering clients through the income tax website. The pilot project initiated in July 2014 was named as RAMIS. The Phase I of the project of e-filing of income tax was introduced in September, 2016 and the Phase II in October 2016 by the Department of Inland Revenue of Sri Lanka. Initially corporate tax payers were expected to participate voluntarily. But still, it was not made mandatory for all tax payers to E-file their income tax returns. There had been three years since the introduction of the online income tax filling and there has been slow voluntary tendency towards filling the income tax return virtually. However, many issues still prevail with tax payers, those have been monitored in this online tax filling system, through the complaints made to the call center of the RAMIS.

Observations and informal discussion revealed a certain level of dissatisfaction over the present online tax filing system by the tax payers. Some of the common complaints and observed lapses in online income tax filling system were, Website not user friendly, having many links and icons confusing the users, the order in which the process to be carried out, not knowing the changes made to IRD website, having system errors in peak times, difficulties in uploading scan images and not trusting whether the tasks was completed or not were stated. So, this research study was conducted to identify which factors affect the satisfaction of tax payers by applying online tax filling in the contest of Government owned enterprises in Sri Lanka. The problem is Government of Sri Lanka has spent approximately Rs. 5 billion initialing RAMIS system and this has been further increased to Rs. 9 billion, however, the online E-filing has not been accepted by the users as expected. Therefore, objectives of this study include to assessment the satisfaction level of tax payers to identifying significant factors of the current E-filing, which in turn influences tax payers' satisfaction. Further, it has been observed that, the return of implementation of RAMIS has not so far been completed and system acceptance has been very slow. However, the outcomes of this study will bring benefits to tax payers, officers of IRD and the Government of Sri Lanka.

Literature Review and Hypotheses Development

The concept of E-return filing is new to Sri Lanka and gradually gaining the familiarity among the users. When reviewing the literature, it was found that, scholars have used following theories in predicting the E-filing and user satisfaction. The commonly used theories are Theory of Reasoned Actioned (TRA), Theory of Planned Behavior (TPB), Technology Acceptance Model (TAM) and DeLone and McLean IS Success Model. In determining what constitute the tax payer's satisfaction of using E-filing system introduced by the Inland Revenue Department of Sri Lanka, it is important to understand how scholars have defined satisfaction. The satisfaction has been defined by many authors in relation to different disciplines, such as customer satisfaction in marketing, employee satisfaction in human resources and user satisfaction in relation to information systems etc. According to the Kotler (2000), satisfaction is the person's feeling of pleasure and dissatisfaction with if the

performance falls short of expectation and if it matches the expectation then the client was satisfied. Similarly, expectation – confirmation theory says that consumer’s intention to repurchase a product or continue service use is determined primarily by their satisfaction with prior use of that product or service (Bhattacharjee, 2001).

Perceived ease of use and taxpayer satisfaction

Perceived ease of use is an internal belief an individual hold about the mental effort involved in using a system (Davis, 1989). The importance is that any improvements in perceived ease of use may contribute to improved performance. Wang (2003) found that perceived ease of use is a stronger predictor of people's intention are to E-filing than perceived usefulness. A number of studies also found that perceived ease of use has positive influence on intention to use a system (Fagan et al., 2008; Hsu et al., 2009; Ramayah et al., 2005). Adamson and Shine (2003) conducted a study in the context of bank treasury transactions, a mandatory situation similar to income E-filing, and found that perceived ease of use had strong positive influence on end user satisfaction. Also, Ojha et al. (2009) focused only on perceived ease of use as a factor affecting intentions to the E-filing among young Indian professionals. These results suggest the following hypothesis:

- H1: There is a significant relationship between perceived ease of use and satisfaction in E-filing of tax returns and user (tax payer) satisfaction.

Perceived usefulness and taxpayer satisfaction

Perceived usefulness is referred to job related productivity, performance, and effectiveness (Davis, 1989). According to Mathwick et al. (2001) perceived usefulness is the extent to which a particular system boosts one's job performance. Several researchers have found its direct effect on intentions to use (Davis, 1989 ; Taylor & Todd, 1995). According to Fu et al. (2006) and Suki and Ramayah (2010), perceived usefulness is the most important predictor of behavioral intention. Further, Ambali (2009) examined the user's perceptual retention on the Income tax E-filing system in Malaysia and found that perceived usefulness is the most influential and potential contributing factor of user satisfaction. Past studies on online shopping, web-based training, E-banking, E-commerce and E-Government service like E-tax filing system proved that perceived usefulness has direct impact on adoption of new technology. Also, Azmi et al. (2010) explained about the taxpayer’s response in accepting the E-filing system. The E-filing system is an important E-Government service in Malaysia. The study proposed a model consisting of three constructs, which was perceived usefulness, perceived ease of use and perceived risk. With regard to citizen's satisfaction towards using E-filing system, researcher proposes to test the following hypothesis:

- H2: There is a significant relationship between perceive usefulness and satisfaction in E-filing of tax returns and user (tax payer) satisfaction.

Computer self- efficacy and taxpayer satisfaction

Computer self-efficacy is defined as an individual's perception of his or her own ability to use Computer in the accomplishment of a task rather than reflecting simple component skill' (Compeau & Higgins, 1995). According to Bandura (1986), self-efficacy is defined as the belief that one has about the capability to perform a particular task. Computer self-efficacy can be operationalized at both the general computing behavior level and at the specific computer application level (Marakas et al., 1998). Hill et al. (1987) reported that computer self-efficacy influences an individual's expectation and decision to use computers. It plays an important role in shaping an individual's feeling and behavior (Compeau & Higgins, 1995). Individuals with high computer self-efficacy used computers more frequently, derived more enjoyment from their use, and experienced less computer anxiety. In the context of E-Government, Wangpipatwong et al., (2005) confirmed that the adoption of E-Government websites depends on the computer self -efficacy of citizens. Another study conducted by Lim (2001) on web-based distance education showed that computer self-efficacy significantly contributed to consumer satisfaction. Based on the literature the following hypothesis is proposed:

- H3: Computer self-efficacy significantly influences tax payer's satisfaction in E-filing of tax returns and user (tax payer) satisfaction.

Trust and taxpayer satisfaction

Internet has provided greater convenience for tax payers to file taxes and make use of the online services. However, several individuals prefer to file their returns manually. According to Belanger et al., (2008), the basic issue is related to privacy and security. There is a feeling among the people that the facilities in electronic tools are not adequately secured (Ambali, 2009). There is personal sensitivity on individual data when a taxpayer files the information (Iqbal & Bagga, 2010). According to Valacich and Schneider (2012), the taxpayers should be assured of system security and information security. The system security protects unauthorized access and use and information security ensures that their personal information will not be viewed, stored or manipulated during transit or storage by inappropriate parties in a manner consistent with their confident expectations. Lim et al., (2012) argued that Governmental institutions should possess capability-based trust derived from the citizens' belief that they possess the ability to fulfill their needs and provide satisfactory services to them. Trust therefore plays an important role in accepting e-filing system. Based on it the following hypothesis is proposed:

- H4: Trust significantly influences tax payer's satisfaction in E-filing of tax returns and user (tax payer) satisfaction.

Information quality and taxpayer satisfaction

Information quality is referred to the degree to which users are provided with quality information regarding their needs. It also represents the users' perception of the output quality generated by an information system and it includes such issues as the relevance, timeliness and accuracy (Aladwani & Palvia, 2002; Stockdale & Borovicka, 2006). Information preciseness, timeliness and sufficiency were found to be key indicators of information quality in Government e-services (Saha et al., 2012). A study conducted by Venkatesh et al., (2016) showed that the intention to use E-Government services is higher when there is better information quality. Based on the studies the following hypotheses are proposed:

- H5: Information qualities significantly influences the satisfaction of tax payers in E-filing of tax returns and user (tax payer) satisfaction.

Website quality and taxpayer satisfaction

Website quality means quality of the service provided by the e-filing site in terms of responsiveness and web assistance (Li et al., 2002). A study conducted by Saha et al., (2012) indicated that when the service provided by the site is fast enough for a citizen to complete the transaction in a reasonable time, he or she considers it as a quality website. Ilhaamie (2010) highlighted that service quality is an important dimension of organizational performance in the public sector. According to Connolly et al., (2010) efficiency and ease of completion are the dimensions of website service quality that influenced e-taxpayer's perception of value and convenience and intention to use and recommend the website to their peers. A good quality website enables the citizens to spend less time to receive the service without waiting in a queue. Based on the study the following hypotheses are proposed

- H6: Website quality significantly influences the satisfaction of tax payers in E-filing of tax returns and user (tax payer) satisfaction.

Satisfaction of using E-filing system

Expectation confirmation theory holds that consumer's intention to repurchase a product or continue service use is determined primarily by their satisfaction with prior use of that product or service (Bhattacharjee, 2001). Satisfaction is the consumer's fulfillment response. It is a judgment that a product or service feature, or the product or service itself, provided a pleasurable level of consumption-related fulfillment, including levels of under or over fulfillment (Oliver 1997). According to DeLone and McLean (1992) a user is satisfied when he or she is happy at the outcome of using the information products or services. For Hu et al., (2009) user satisfaction is the degree to which an individual is satisfied with his or her overall use of the system under evaluation. In this study tax payer's satisfaction is operationalized as a measure of satisfaction with the e-filing system. According to Lim et al., (2012) it is important for the Government to listen to taxpayers' opinions in order to improve the e-filing system.

Research Methodology

A sample of fifty (50) Government companies out of 144 were selected as a simple random sample. All these companies are supposed to pay income tax through the RAMIS system. An online survey was launched adopting standard questionnaire and it was administered through google form to collect data. Response rate was 34.72% of the total population. Key informed respondents from Government companies were utilized to fill the online questionnaire.

Data Analysis and Findings

Data and Sample

Data was mainly analyzed through descriptive and inferential statistics. validity tests were done through discriminant and convergent validity and average variance extraction (AVE) and AVE Squared were calculated accordingly. Then Cronbach's alpha and composite reliability were calculated for the reliability analysis. Following is the summarized demographic profile of the respondents.

Measurement of Variables

The data was analyzed with correlation and regression analysis. The six dimension were positively correlated with tax payers' satisfaction. However, hypothesis was tested using regression analysis from which the statistically significant relationships were identified.

Data Analysis and Presentation

Analysis of Demographic Characteristics of the Respondents

Table 1: Profile of the sample

	Demographic Factors	Frequency	Percentage %
Age	18-25	None	0
	26-35	18	36
	36-45	23	46
	46-55	9	18
	over 55	None	0
Gender	Male	26	52
	Female	24	48
Marital Status	Married	45	90
	Single	05	10
Ethnicity	Sinhala	46	92
	Tamil	3	6
	Muslim	1	2

Educational Level	O/L	None	0
	A/L	None	0
	Diploma	3	6
	Degree	28	56
	Post Graduate	19	38
Designation	Lecturer	1	2
	Executive	12	24
	Accountant/ Manager	18	36
	Finance Manager	18	36
	Finance Director and Above	1	2
Work Experience	0-5 years	15	30
	5 -10 years	18	36
	10-15 years	14	28
	15-20 years	1	2
	over 20 years	2	4

Source: Author constructed

The largest proportion of the respondents represent came under in the age category of 36-45. This indicates that tax returns are handled by fairly matured staff in the Government owned enterprises. Hence, potential tax matters handling capacities of these staff seem to be higher than the rest of age category since this group is matured. Also, sample consists of 52% of male respondents and 48% female and among them 90% are married and only 10% unmarried respondents. The most of the staff responsible for tax matters in Government enterprises rest with in the staff who has at least a Degree qualification and it represent 56% of the respondents. Further, majority of the respondents are Accountant and Finance Mangers both having 36% and tax matters have been handled by Executives in 24% of entities and only 4% was handled by Finance Director and above positions. When we analysis the sample further, 36% respondents have 5-10 years' experience. The balance 30% have less than 5 years' experience, 28% have 11-15 years' experience, 2% have 16-20 years' experience and balance 4% have more than 20 years of experience.

All constructed had convergent validity values above 0.50, thus the convergent validity of the variables was confirmed. Then discriminant validity test was performed as it explains the degree of the differences among the constructs in the model. As, the square root of AVE closer or greater than correlation values between latent variables, it is concluded that the constructs had satisfactory discriminant validity. Composite Reliability (CR) values were used to evaluate the internal consistency of the constructs. All the constructs had CR values above threshold of 0.7. Further, the Cronbach alpha of the research study was tested and the Cronbach's alpha (α) of all the independent variables and dependent variable is greater than 0.837. As such, the internal consistency reliability of the measures used in this study could be considered to be acceptable.

Table 2: Validity and Reliability Tests

Variable	AVE	AVE)	CR	Correlation	Cronbach's Alpha
Website Quality	0.576	0.758	0.841	0.908	0.913
Trust	0.558	0.747	0.861	0.711	0.904
Perceived Ease of Use	0.542	0.735	0.756	0.809	0.880
Perceived Usefulness	0.506	0.711	0.832	0.701	0.903
Information Quality	0.580	0.762	0.754	0.682	0.837
Computer Self-Efficacy	0.676	0.822	0.877	0.809	0.853

Source: Author constructed

Regression Analysis

Table 3: Results of Coefficients of Multiple Regressions

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
(Consta	.188	.233		.806	.425
PEU	.158	.093	.161	1.706	.095
PE	.144	.071	.150	2.031	.048
CSE	.119	.095	.120	1.258	.215
TR	.071	.079	.073	.903	.371
IQ	-.059	.090	-.053	-.651	.519
WQ	.539	.083	.592	6.455	.000

Source: Field Survey

According to the Table 3, Website Quality and Perceived Usefulness are significant. Website Quality is the most significant at 0.01 levels. Perceived Ease of Use, Computer self-efficacy, Trust and information quality variables are not significant in this study.

Table 4: Model Summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.941 ^a	.885	.869	.205

a. Predictors: (Constant), WQ, PE, TR, IQ, PEU, CSE

b. Dependent Variable: TPS

Source: Field Survey

The R value of above table provides overall correlation between predictor variables and outcome variables. The R Squared value in this case is 0.885. This indicates that the exogenous variables in the research model account for 89% variance in the endogenous variable (Tax Payer Satisfaction).

Hypothesis Testing

In this research the researcher developed six (06) Hypotheses. The results of the hypothesis and corresponding decisions are stated in the following table 5.

Table 5: Interpreting results of Hypotheses

H	Hypothesis	Accept/Reject
H1	There is a significant relationship between perceive ease of use and satisfaction in E-filling of tax returns and user (tax payer)	Rejected
H2	There is a significant relationship between perceive usefulness and satisfaction in E-filling of tax returns and user (tax payer)	Accepted
H3	Computer self-efficacy significantly influence tax payer's satisfaction in E-filling of tax returns and user (tax payer)	Rejected
H4	Trust significantly influence tax payer's satisfaction in E-filling of tax returns and user (tax payer) satisfaction.	Rejected
H5	Information qualities significantly influence the satisfaction of tax payers in E-filling of tax returns and user (tax payer) satisfaction.	Rejected
H6	Website quality significantly influence the satisfaction of tax payers in E-filling of tax returns and user (tax payer) satisfaction.	Accepted

Source: Author Constructed

Discussion of Findings

The objectives of this study were to assess the satisfaction level of tax payers and significant factors that influences the current E-filing, as these obviously influence tax payers' satisfaction. Researcher explored the factors that effect on taxpayer's satisfaction to use the E-filing system and found that the higher the quality of the website higher the taxpayer's satisfaction. Further, perceive usefulness also demonstrates significance impact on taxpayer's satisfaction. Both of these have positive relationships motivate to understand the importance of online tax payment system. However, the pre-assumption was invalidated by the outcome of regression analysis with four variables. Based on the above findings it could be concluded that, Perceived Ease of Use, Self- efficacy, Trust, and Information Quality had not significantly influenced on determining Taxpayer Satisfaction in online tax filling system. The results presented here are not similar to what others have found previously in similar studies.

Conclusion

Despite the fact that four variables are insignificant further examination of indicators and each of these constructs will pave the way to improve the present RAMIS system. Still, reader should further check this insignificant result with caution. Because correlation may exist between Trust and Perceived Usefulness and Information Quality with tax payers' satisfaction. Titah and Barki (2009) stated that the most significant factor affecting E-Government service is trust. Further as per Zeithaml et al. (1985, p. 41) found that the "E-service users sometimes did not know how to use the system or to find the information". Saha et al. (2012, p. 300) found that the "accuracy of information, timeliness and completeness were the main criteria for the quality of information and positively related with the Taxpayer Satisfaction".

Implication for Management

Internet has changed the present scenario of work by reducing the workload handled manually. It promotes the business and Government in E-filing by satisfying taxpayers. Despite many benefits associated with E-filing, tax authorities face some major challenges towards the implementation of E-filing system, the crucial one is satisfaction of the taxpayers. This study might be fruitful for service providers in order to establish the technology-related Customer Relationship Management (CRM) to resolve the customers' queries and grievances. In this context, Inland Revenue Department (IRD) should focus on improving the quality of the website since according to the finding of this study the main factor affecting the taxpayer satisfaction is the quality of the website. Hence, if the quality of the website did not meet the requirement of the taxpayer, it must discourage the usage of the online filing of tax returns. Further, it is recommended to upgrade and install the system software, compulsory of IT help desk and technical manpower to address and resolve day to day problem of the taxpayers.

Government/IRD should allocate the budget annually for taxpayer's education and ICT training in E-filing, tax-awareness campaign and other services so that taxpayers could participate in this collaboration program.

Further Research

The findings of this study cannot be generalized extensively as the scope of the study is limited to one category of the corporate tax payers in Sri Lanka. A larger and more representative sample from all categories of tax payers may give boarder representation of taxpayers in Sri Lanka covering many districts. If the study has been done covering the districts apart from the Colombo the participants could have shed more light on the findings. Also, future research could compare third party assisted E-filing of taxes with Government E-filing facility to find out the reasons why citizens choose one mode over the other. It is suggested that the model may be tested in the context of other Government department such as Sri Lanka Railways to book tickets and to get information, Sri Lanka Telecom to report breakdowns and lodge complaints, Department of Examination to obtain results and certificates etc. The application of this model in mobile platform (M-Governance) may also be investigated in future studies.

References

- Adamson, I & Shine, J 2003, 'Extending the new technology acceptance model to measure the end user information systems satisfaction in a mandatory environment: A bank's treasury', *Technology Analysis & strategic management*, vol. 15, no. 4, pp. 441-455.
- Adhikari, R 2017, 'Satisfaction of Taxpayers in E-Filing of Income Tax (E-Vat): A Nepalese Scenario', *SJPG*, vol. 41, no. 2, pp.58-74.
- Ajzen, I & Fishbein, M 1975, *Belief, attitude, intention & behaviour: An introduction to theory & research. Philosophy & Rhetoric*, vol. 10 no. 2, pp. 130-132.
- Ajzen, I 1985, *From intentions to actions: A theory of planned behaviour*, Berlin, Springer.
- Aladwani, A. M & Palvia, P. C 2002, 'Developing & validating an instrument for measuring user-perceived web quality', *Information & management*, vol. 39 no. 6, pp. 467- 476.
- Aliaga, M & Gunderson, B 2002, *Interactive Statistics*, Thousand Oaks, Sage Publications.
- Ambali, A. R 2009, 'E-Government Policy: Ground issues in e-filing system', *European Journal of Social Sciences*, vol. 11, no. 2, pp. 249-266.
- Ato 2015, *E-tax [online]*, viewed 15 June 2020, < <http://www.itnews.com.au/news/ato-to-kill-off-e-tax-401902>>.
- Azmi C. A & Bee, L.N 2010, 'The Acceptance of the e-Filing System', *Electronic Journal of e-Government*, vol. 8, pp. 13-22.
- Belanger, F & Carter, L 2008, 'Trust & risk in E-government adoption', *The Journal of Strategic Information Systems*, vol. 17, no. 2, pp.165-176.
- Bell, J 2014, *Doing Your Research Project*, 6th edn, Maidenhead, Open University Press.

- Bhattacharjee, A 2001, 'Understanding information systems continuance: an expectation-confirmation model'. *MIS Quarterly*, vol. 25, no. 3, pp. 351-370.
- Bowerman, B, O'Connell, R & Orris, J 2003, *Business Statistics in Practice*, McGraw-Hill/Irwin, Boston.
- Cakmak, A F, Benk, S & Budak, T 2011, 'The acceptance of tax office automation system (VEDOP) by employees: factorial validation of Turkish adapted Technology Acceptance Model (TAM)', *International Journal of Economics & Finance*, vol. 3, no. 6, pp.107-116.
- Chan, FK, Thong, JY, Venkatesh, V, Brown, SA, Hu, PJ & Tam, KY 2010, 'Modelling citizen satisfaction with mandatory adoption of an E-government technology', *Journal of the Association for Information Systems*, vol. 11, no. 10, pp. 519-549.
- Chatfield, AT 2009, 'Public service reform through E-government: a case study of 'e-tax' in Japan', *Asymptotic & Computational Methods in Spatial Statistics*, vol. 7, no. 2, pp.135-146.
- Compeau, D R., & Higgins, C A 1995, 'Computer self- efficacy: Development of a measure & initial test', *MIS Quarterly*, vol. 19, no 2, pp. 189-211.
- Connolly, R., Bannister, F & Kearney, A 2010, 'Government website service quality: a study of the Irish revenue online service', *European Journal of Information Systems*, vol. 19, no. 6, pp. 649-667.
- Davis FD, Bagozzi RP & Warshaw, PR 1989, 'User acceptance of computer technology: a comparison of two theoretical models', *Journal of Management Science*, vol. 35, no 8, pp. 982-1002.
- Davis, F D 1989, 'Perceived usefulness, perceived ease of use, & user acceptance of information technology', *MIS Quarterly*, vol. 13, no. 3, pp. 319-340.
- DeLone, W H & McLean, ER 1992, 'Information systems success', The quest for the dependent variable', *Information Systems Research*, vol. 3, no. 1, pp, 60-95.
- DeLone, WH, & McLean, ER 2003, 'The DeLone & McLean Model of Information Systems Success: A Ten-Year Update', *Journal of Management Information Systems*, vol. 19, no.4. pp. 9-30.
- Department of Inland Revenue. (2019). *Annual performance Report*. Retrieved from
- Fagan, M H, Neill, S, & Wooldridge, B R 2008, 'Exploring the intention to use computers: An empirical investigation of the role of intrinsic motivation, extrinsic motivation, & perceived ease of use', *Journal of Computer Information Systems*, vol. 48, no. 3, pp. 31-37.
- Field, A P 2005, *Discovering Statistics Using SPSS*, Sage Publications Inc.
- Fu, JR, Farn, CK, & Chao, WP 2006, 'Acceptance of electronic tax filing: A study of taxpayer intentions,' *Information & Management*, vol. 43 no. 1, pp. 109-126.
- Gaur, A & Gaur, S 2009, *Statistical Methods for Practice & Research*, New Delhi.
- Geetha, R & Sekara, M 2012, 'E- filing of income tax: Awareness & Satisfaction level of individual Tax Payers in Coimbatore city, India', *Research Journal of Management Science*, vol. 1, no 4, pp. 6-11.
- Gefen D, Karahanna E, & Straub, D 2003, 'Trust & TAM in online shopping: an integrated model', *MIS Quarterly*, vol. 27, no. 1, pp. 51-90.

- Ghauri, P & Gronhaug, K 2005, *Research Methods in Business Studies*, Harlow, FT/Prentice Hall.
- Hill, T, Smith, N D, & Mann, M F 1987, 'Role of efficacy expectations in predicting the decision to use advanced technologies, The case of computers', *Journal of Applied Psychology*, vol. 72, no 2, pp. 307.
- Hometax.go.kr 2015, *E-Tax of South Korea [online]*, viewed 15 June 2020, <<https://www.hometax.go.kr>>.
- Hsu, M K, Wang, S W, & Chiu, K K 2009, 'Computer attitude, statistics anxiety & self-efficacy on statistical software adoption behaviour, An empirical study of online MBA learners', *Computers in Human Behaviour*, vol. 25, no 2, pp. 412-420.
<http://www.ird.gov.lk/en/sitepages/default.aspx#>
- Hu, PJ, H, Brown, S A, Thong, J Y, Chan, F K, & Tam, K Y 2009, 'Determinants of service quality & continuance intention of online services', *The case of e-Tax. Journal of the American Society for Information Science & Technology*, vol. 60, no. 2, pp. 292-306.
- Hung, S Y, Chang, CM, & Yu, T J 2006, 'Determinants of user acceptance of the E-Government services, The case of online tax filing & payment system', *Government Information Quarterly*, vol. 23, no. 1, pp. 97-122.
- Hussein, R, Mohamed, N, Rahman Ahlan, A, & Mahmud, M 2011, 'E-government application: an integrated model on G2C adoption of online tax'. *Transforming Government: People, Process & Policy*, vol.5, no. 3, pp. 225-248.
- Hussein, R., Mohamed, N, Ahlan, A R., Mahmud, M & Aditiawarman, U 2010, 'An integrated model on online tax adoption in Malaysia', *European, Mediterranean & Middle Eastern Conference on Information Systems (EMCIS)*, pp.1-16.
- Ilhaamie, A G A 2010, 'Service quality in Malaysian public service: some findings', *International Journal of Trade, Economics & Finance*, vol. 1, no. 1, pp. 40-45.
- Iqbal, A, & Bagga, R K 2010, 'E-Governance: Issues in Implementation', In Proc. of the Int. Conference on e-Governance, Bangalore.
- Istd.gov.jo (2007) *ISTD_E-government*, viewed 15 June 2020 <<http://www.istd.gov.jo/ISTD>>.
- K, Puthur, J, Mahadevan, L & George, A 2016, 'Tax payer Satisfaction & Intention to Re-use Government site for E-filing', *Indore Management Journal*, vol.8 no. 1, pp. 46-59.
- Kamarulzaman, Yusniza & Che Azmi, Anna 2010, 'Tax E-filing Adoption in Malaysia: A Conceptual Model', *Journal of E-government Studies & Best Practices*, vol. 2010, pp.1-6.
- Kidder, L & Judd, C M 1986, *Research Methods in Social Relations*, 5th edn, The Dryden Press, New York.
- Kotler, P 2000, *Marketing Management*, The Millennium Edition. Person Prentice Hall, Upper Saddle River.
- Li, YN, Tan, KC, & Xie, M 2002, 'Measuring web-based service quality', *Total Quality Management*, vol. 13, no 5, pp. 685-700.
- Lim, CK 2001, 'Computer self-efficacy, academic self? concept, & other predictors of satisfaction & future participation of adult distance learners', *American Journal of Distance Education*, vol. 15, no. 2, pp. 41-51.

- Lim, ET, Tan, CW, Cyr, D, Pan, SL, & Xiao, B 2012, 'Advancing public trust relationships in electronic government: the Singapore E-filing journey', *Information Systems Research*, vol. 23, no 4, pp. 1110-1130.
- Marakas, GM, Yi, MY, & Johnson, RD 1998, 'The multilevel & multifaceted character of computer self-efficacy: Toward clarification of the construct & an integrative framework for research', *Information Systems Research*, vol. 9. No. 2, pp. 126-163.
- Mathwick, C, Malhotra, N, & Rigdon, E 2001, 'Experiential value: conceptualization, measurement & application in the catalog & Internet shopping environment?' *Journal of Retailing*, vol. 77, no 1, pp. 39-56.
- Menard, S 1995, *Applied logistic regression analysis (Sage university paper series on quantitative application in the social sciences, series no. 106, 2nd edn, Thousand Oaks, CA, Sage*
- 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 & Policy*, vol. 3, no. 1, pp. 65-90.
- Oliver Richard, L 1997, *Satisfaction: A behavioural perspective on the consumer*, New York, NY: Irwin McGraw-Hill, pp. 291-325.
- Performance Report 2018*, Inland Revenue Department of Sri Lanka.
- Poolsuk, W, Methawasaraphak, P 2019, 'A Factors Affecting to Taxpayers' Satisfaction of E-Filing System in Thailand', *Ganesha Journal*, Vol. 15, 2019 (2019), pp. 140-150.
- Rahim, MA, Ahmad, J, Aziz, R A, Hamid, KCA & Nen, ZM 2012, 'The promotion of electronic filing technology', *2012 IEEE Symposium on Humanities, Science & Engineering Research (SHUSER)*, pp.1603-1606, IEEE.
- Ramayah, T, Ling, C Y, Suki, N M, Ibrahim, A, and Teknologi, FP 2005, 'Determinants of Intention to Use an Online Bill Payment System among MBA Students'. *E-Business*, vol. 9, pp. 80-91.
- Saha, P, Nath, A K, & Salehi-Sangari, E 2012, 'Evaluation of government e-tax websites: an information quality & system quality approach'. *Transforming Government: People, Process & Policy*, vol. 6, no. 3, pp. 30-32.
- Sekaran, U, & Bougie, R 2010, *Research methods for business: A skill-building approach*, 5th edn, John Wiley & Sons, Haddington.
- Staub, D, Boudreau, M C & Gefen, D 2004, 'Validation guidelines for IS positivist research', *Communications of the Association for Information Systems*, vol. 13, 380-427.
- Stockdale, R, & Borovicka, M 2006, *Using Quality Dimensions in the Evaluation of Websites*, In *Information & Communication Technologies in Tourism 2006*, Springer Vienna. pp. 344-357.
- Suki, N M., & Ramayah, T 2010, 'User acceptance of the E-government services in Malaysia: structural equation modelling approach', *Interdisciplinary Journal of Information, Knowledge, & Management*, vol.5, no. 1, pp. 395- 413.
- T, Ryad, & H, Barki 2009, 'Nonlinearities between Attitude & Subjective Norms in Information Technology Acceptance: A Negative Synergy?', *MIS Quarterly*, vol. 33, no.4. pp 827-44.

- Taherdoost, Hamed 2016, 'Validity & Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research', *International Journal of Academic Research in Management*, vol.5, pp. 28-36.
- Taylor, S, & Todd, P A 1995, 'Understanding information technology usage: A test of competing models', *Information Systems Research*, vol. 6, no 2, pp. 144-176.
- Valacich, JS, Schneider, C, & Jessup, LM 2012, *Information systems today: Managing in the digital world*, Prentice Hall.
- Venkatesh, V, Thong, J Y, Chan, F K, & Hu, PJ 2016, 'Managing Citizens' Uncertainty in E-Government Services: The Mediating & Moderating Roles of Transparency & Trust', *Information Systems Research*, vol. 27, no. 1, pp. 87-111.
- Wang, SY 2003, 'The adoption of electronic tax filing systems: An empirical study', *Journal of Government Information Quarterly*, vol. 20, pp. 333-352.
- Wangpipatwong, S, Chutimaskul, W, & Papsatorn, B 2008, 'Understanding citizen's continuance intention to use E-government website: A composite view of technology acceptance model & computer self efficacy', *The electronic journal of E-government*, vol. 6, no. 1, pp. 55-64.