Tax payer Satisfaction and Intention to Re-use Government site for E-filing

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Abstract

E-filing of taxes has been adopted by many countries and India is no exception. However the success of such systems depends on citizen's satisfaction and intention to re-use the e-filing system. This study proposed and empirically tested a model to understand the factors that influence adoption of e-filing system in India and found that perceived usefulness and perceived ease of use under conditions of website quality and information quality significantly enhance taxpayer's satisfaction and intention to re-use the e-filing system . The findings also indicate that the income tax department should redesign the existing e-tax filing architecture and put in place a system that ensures convenience and ease of use to the tax payers to motivate them to use it in the future.

Keywords: E-filing, citizen satisfaction, perceived usefulness, perceived ease of use, Trust, Computer self- efficacy.

1. Introduction

With the advent of World Wide Web in the nineties, there was a global shift towards deployment of IT by governments in various countries. Today, the citizens all over world are learning to fully utilize their internet and mobile connectivity in a wide range of ways. In India, several e-governance initiatives have been taken up by the government to give better service to its citizens but the citizens at large are expecting more and more online services from governments and corporate organizations to ease business transactions.

E-Government is defined as "a broad-based transformation initiative enabled by information and communication technology; (1) to develop and deliver high quality, seamless and integrated public services; (2) to develop constituent relationship management; and (3) to support the economic and social development goals of the citizens, business, and civil society at local, state, national, and international levels" (Grant and Chau 2006). There is a general agreement that e-governance has the potential to build better relationship between the government and its constituents and to empower citizens at large.

As per the United Nations E-Governance survey 2014 India is positioned 118 in E-Governance. However, the Income Tax Department of India has been successfully providing end-to-end e-delivery services, including online submission of tax returns, to its citizens on an anywhere, anytime basis since 2004. The e-taxation system of the income tax department provides key services like online registration, form download, filing of returns, online payment, online tax accounting, key notifications, provisions and enactments without much hindrance. Their collaborative, efficient, process-driven and secure online delivery system (Haryani et al. 2015) has been helpful in eliminating the cumbersome manual, bureaucratic service system to a greater extent.

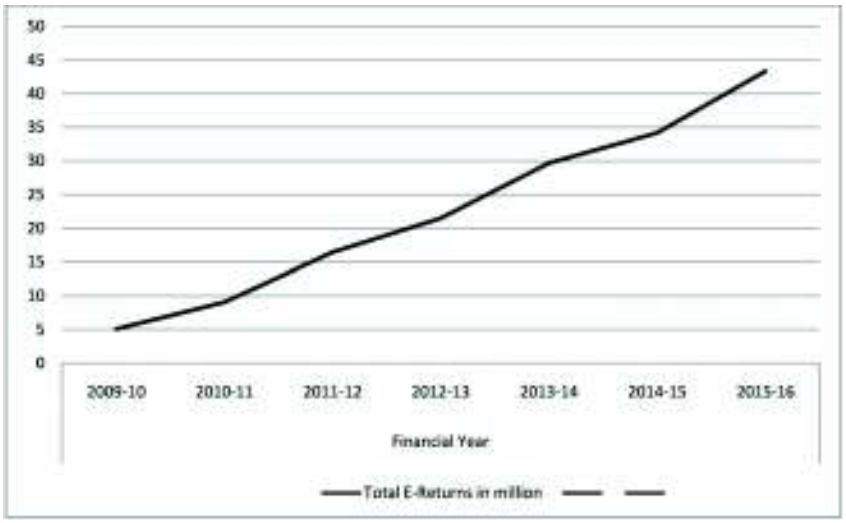
1.1 Income tax e-filing in India

In India, income tax e-filing was introduced on a voluntary usage basis for all categories of income tax assesses in September, 2004. It was made mandatory for all corporate firms in July, 2006 and for all companies and firms requiring statutory audit under section 44AB of Indian Income Tax Act in 2007. As per the notification dated 1st May 2015, every individual with an annual income of over Rs.5 lakhs will have to file tax returns in electronic form. In order to enable taxpayers to meet their normal tax obligations in a convenient manner without visiting Income Tax Office (FINMIN, 2008), the department has taken various measures with which the rate of e-filing has substantially increased (Figure1).

1.2 E-filing Options

An income tax return can be e-filed in three ways1. In Figure 1 E-filing of Income tax returns over the Years

1 https://incometaxindiaefiling.gov.in/eFiling/Portal/StaticPDF/HowToEfile.pdf?0.46627049184163116



Source: http://incometaxindiafiling.gov.in-e-filing statistics retrieved on 5th April 2016

the first option, the assessee can e-file his tax return digitally signed. This is an anytime, anywhere, and paperless filing process which does not necessitate any visit to the income tax office. But this facility can be used only if the assesse possesses a digital signature. In the second e-filing option, the return is filed on the internet, but without a digital signature. At the end of such e-filing process, the assessee prints out a single page receipt cum verification form (ITR-V) which he is required to sign in ink. This ink-signed ITR-V form is to be physically delivered in duplicate to the income tax office and one copy of it is returned to the assessee, duly acknowledged. This physical filing of ITR-V must be done within 120 days or else the date of filing ITR-V will be deemed as the date of income tax return filing. The third option provides the assessee to e-file their return through an e-return intermediary called Tax Return Preparer (TRP) who on payment of a prescribed fee, would do the e-filing and also assist the assesse in submitting the ITR-V to Income Tax Department. The very existence of Tax Return Preparer (TRP) itself indicates that e-filing in the present format is not simple for many tax payers.

Though online filing of return is made mandatory since May 2015, many issues still haunt the tax payers. There has always been concern about error free and user friendly tax administration. A single look at the Income Tax Department's e-filing website is enough to intimidate most users. The webpage has links which help the user to find out how much tax to be paid, how to file returns and even pay taxes online. However, it is presented as closely spaced links which could lead to user confusion about the order in which the process is to be carried out. As a result many assesees are forced to use third party assistance in filing their tax returns. Many web-based companies have made the process of filing very simple (Parab 2014). ClearTax.in, one such company, has helped around 300,000 individuals to e-file their tax returns during 2014-15 and around one million users during 2015-16 (Chengappa 2016).

The increase in the number of third party services is an indication that many tax payers either do not find the Government e-tax filing website usable. If the website is made simple and easy to navigate through the links, most tax payers could use it by themselves. This would not only help them secure their personal information but also avoid unnecessary expenses. Moreover, the users are often ignorant of the changes to the e-file website which is sometimes done without informing the user or performed at irregular intervals. Thus our study is motivated to understand the reasons that can help tax payers use the Government e-file website and not take assistance of third party vendors.

Studies on e-filing of taxes have been conducted in various parts of the world such as United States, Singapore, Taiwan, Malaysia, and India(Schaupp et al.2010, Tan et al. 2005, Chu and Wu 2004, Aziz et al. 2012, Ojha et al. 2009). Though factors such as perceived

usefulness, perceived ease of use, trust website quality, information quality, and self-efficacy and customer satisfaction have been studied in different countries, the same cannot be said about India. Ojha et al. (2009) research focused only on perceived ease of use as a factor affecting intentions to e-file that too among young Indian professionals. None of the other antecedents (perceived usefulness, website quality, information quality, and self-efficacy) or dependent variables (customer satisfaction, and intention to re-use) were studied. Our research conducted on regular tax paying public, aims to address this literature gap and tries to find reasons for why tax payers are moving to third party tax e-filing services. The findings could help the authority to incorporate suitable changes in the income tax e-filing architecture.

2. Review of Literature

Two major theories that many researchers have utilized in predicting the e-filing acceptance are Theory of Reasoned Action (TRA) and Theory of Planned Behavior (TPB) (Ajzen and Fishbein, 1975, Ajzenand Fishbein 1980). According to the theory a person's behavioral intention depends on the person's attitude towards the behavior, subjective norms (TRA) and perceived behavioral control (TPB). These studies, however, did not predict technology acceptance.

The Technology Acceptance Model (TAM) proposed by Davis (1989) addressed this gap by adding two major factors such as perceived usefulness and perceived ease of use. The results indicated that both determinants had great correlation with usage behavior. Venkatesh and Davis (2000) later introduced TAM2 model with subjective norm as a strong determinant of user acceptance. Various studies that followed also found that Perceived usefulness and ease of use have strong influence on user acceptance of e-filing system (Hung et al. 2006; Hussein et al. 2010,Chang et al. 2005, Lean et al. 2009). Many studies in the areas of consumer adoption of online tax filing using Government web sites have looked at issues such as trust, security, perceived risk and non-repudiation.

The application of Social Cognitive Theory (SCT) in computer or technology acceptance was attempted by Compeau and Higgins (1995). The variables used to predict technology acceptance were computer self-efficacy, outcome expectations-performance, outcome expectations-personal, affect and anxiety. The researchers found positive relationships between the dependent variable and all independent variables except for anxiety.

Research in the area of technology adoption has found self-efficacy as an important construct especially in the area of using online tax application (Hung et al., 2006, Carter et al., 2011, Hsu and Chiu, 2004). Self-efficacy according to Bandura (1997) is 'the capability of an individual to organize and execute the courses of action required to produce given attainments'. In the words of Compeau and Higgins (1995) it is an individual's judgment of his / her capability to use a computer. From a social cognitive theory perspective, self-efficacy is judged by the user's ability to decide what behaviors to engage, how to solve a problem when encountered and how to manage the behavior. Computer self-efficacy involves skills such as formatting disks and booting up the computer along with skills to use software to analyze data. It is assumed that the users, who have high degree of self-efficacy, would perform the tasks by themselves more likely than those who have less degree of self- efficacy.

Trust has been proposed as an important factor to adopt e-filing of taxes on Government sites (Hussein et al., 2011, Berdykhanova et al., 2010, Hung et al., 2006). Citizen trust can be positively influenced by institution based structures, their general disposition to trust, favorable social characteristics, and familiarity with government services (Warkentin et al., 2002). Electronic interaction will be higher when the users have a priori trust in their government and therefore the Government officials must engage the users by building a trustworthy relationship with them along with creating and maintaining a good web site to make its online efforts successful (Parent et al. 2005).When trust is high, citizens are more likely to value the benefits of e-government services. Therefore, governments should create and sustain trust when deploying their services (Venkatesh et al., 2016).

The DeLone and McLean IS Success Model (1992) introduced six major variables of information system success such as System Quality, Information Quality, Information System Use, User satisfaction, Individual Impact, and Organizational Impact. Seddon (1997) termed DeLone and McLean (1992) model confusing and miss specified and proposed a re-specified and

extended version of the model using perceived usefulness and satisfaction as success measures.

Website quality (WQ) and information quality (IQ) have also caught the attention of researchers as factors of importance while filing taxes electronically (Alshehri et al., 2012, Chen, 2010). The factors influencing website quality, according to Lee and Kozar (2006) are information relevance, price savings, security, tele-presence and reputation. The indicators of Information quality in the context of government e-services are preciseness, timeliness and sufficiency (Saha et al., 2012). Connolly et al. (2010) found that efficiency and ease of completion, two important dimensions of website service quality, significantly influenced e-taxpayer's perception of value and convenience and intention to use and recommend the website to their peers. Chan et al. (2010) found that Information Quality (IQ) has positive influence on Perceived Usefulness (PU). However, managing IQ was more difficult than managing WQ (Barnes and Vidgen, 2002).

Welch et al. (2005) in their research on e-government and citizen satisfaction have shown that citizens are generally satisfied with the e-government apparatus. However, they are critical about the transactional and interactive nature of the e-government websites. According to Chan et al. (2010), Information quality and system quality influence taxpayer satisfaction. The Unified Theory of Acceptance and Use of Technology (UTUAT) proposed by Venkatesh et al. (2003) unified eight theories available in the acceptance of technology literature and identified seven determinants / constructs namely performance expectancy, effort expectancy, social influence, facilitating conditions, attitude toward using technology, self-efficacy and anxiety that affect technology acceptance. They validated the model and came out with four direct / significant determinants of usage behavior namely performance expectancy, effort expectancy, social influence and facilitating conditions. Working on the UTUAT, Chan et al. (2010) found that performance expectancy; effort expectancy and facilitating conditions significantly influenced citizen satisfaction in both voluntary and mandatory adoption contexts.

According to Bhattacharjee and Premkumar (2004), continuance intention is an important long-term outcome and an indicator of information system success. From an e-filing perspective, factors such as assurance, reliability, perceived usefulness, convenience and security significantly predicted continuance intention (Hu et al., 2009).

3 Hypotheses and Research Model

3.1 Perceived Usefulness

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 to boost one's job performance. Several researchers have found its direct effect on intentions to use (Davis, 1989, Taylor and Todd, 1995). According to Fu et al. 2006 and Suki and Ramayah (2010), perceived usefulness is the most important predictor of behavioral intention. 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. With regard to citizen's satisfaction towards using e-filing system, we propose to test the following hypothesis:

H1: Perceived usefulness has significant positive effect on citizen's satisfaction of e-filing system.

3.2 Perceived Ease of Use

Perceived ease of use is an internal belief that an individual assessee holds about the mental effort involved in using a system (Davis 1989). Improvements in perceived ease of use may contribute to improved performance. Davis (1989) once proposed to test the generality of the observed usefulness and ease of use trade off while attempting to assess the impact of external interventions on internal behavioral determinants. The empirical research findings were, however, mixed (Chau 1996, Davis 1989). Wang (2003) found that perceived ease of use is a stronger predictor of people's intention to e-file 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. These results suggest the following hypothesis:

H2: Perceived ease of use has a significant positive effect on citizen's satisfaction of e-filing system.

3.3 Self-efficacy

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' (Compeauand 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 and 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) empirically 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 has a significant positive effect on citizen's satisfaction of e-filing system.

3.4 Trust (security)

Internet has provided greater convenience for tax payers to file taxes and make use of the online services. However, several assessees 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 and Bagga 2010).

According to Valacich and Schneider(2012), the tax payers should be assured of system security and information security. The system security protects unauthorized access and use and information security ensures the assesses 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 acceptance of e-filing system. Based on it the following hypothesis is proposed:

H4: Citizen Trust has a significant positive effect on citizen's satisfaction of e-filing system.

3.5 Information quality

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 includes such issues as the relevance, timeliness and accuracy (Aladwaniand Palvia 2002, Stockdale and Borovicka 2006). Information preciseness, timeliness and sufficiency were found to be key indicators of information quality in government e-services (Saha et al. 2012). Chen et al. (2009) found that information quality positively influences perceived usefulness. 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:

H5a: Information quality has significant positive effect on perceived usefulness.

H5b: Information quality has a significant positive effect on perceived ease of use.

H5c: Information quality has a significant positive effect on citizen's satisfaction of e-filing system.

3.6 Website quality

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. As mentioned in the review section, website quality is measured in terms of information relevance, price savings, security, tele-presence and reputation (Lee and Kozar 2006). 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:

H6a: Website quality has a significant positive effect on perceived usefulness.

H6b: Website quality has a significant positive effect on perceived ease of use.

H6c: Website quality has a significant positive effect on citizen's satisfaction of e-filing system.

3.7 Citizen satisfaction

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 (Bhattacherjee 2001 pp 355).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 pp 11) a user is satisfied when he or she is happy at the outcome of using the information products. 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 citizen satisfaction is operationalized as a measure of satisfaction with the income tax website. 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. Based on the study the following hypothesis is proposed:

H7: Citizen's satisfaction has positive effect on intention to reuse (Continue Intention) acceptance of e-filing system. (Figure 2)

4. Method

This research used primary data collected using questionnaires. Both online and offline mode was used for data collection. The questionnaire was divided into three parts. The first part contains questions about use of income tax portal and how long the respondent used it and the main purpose of using it. The second part of this survey instrument contains thirty nine questionnaire items that measured the eight constructs in the proposed model. These questionnaire items are measured using five point Likert Scale (from 1 - strongly disagree to 5 - strongly agree). These items were selected from previous related research and subsequently modified to fit the e-filing experience. The third part of the survey included questions regarding demographic and socio-economic status. Two prominent academicians reviewed the survey instrument to highlight any discrepancies in meanings. The problems found during review are resolved by making necessary corrections. The inclusion criteria for the study are only Indians who had paid income tax for the financial year 2014-15 and filed the income tax return electronically using income tax e-filing system. Convenience sampling method was used for the study as the researchers used both offline and online media for data collection. (Table 1)

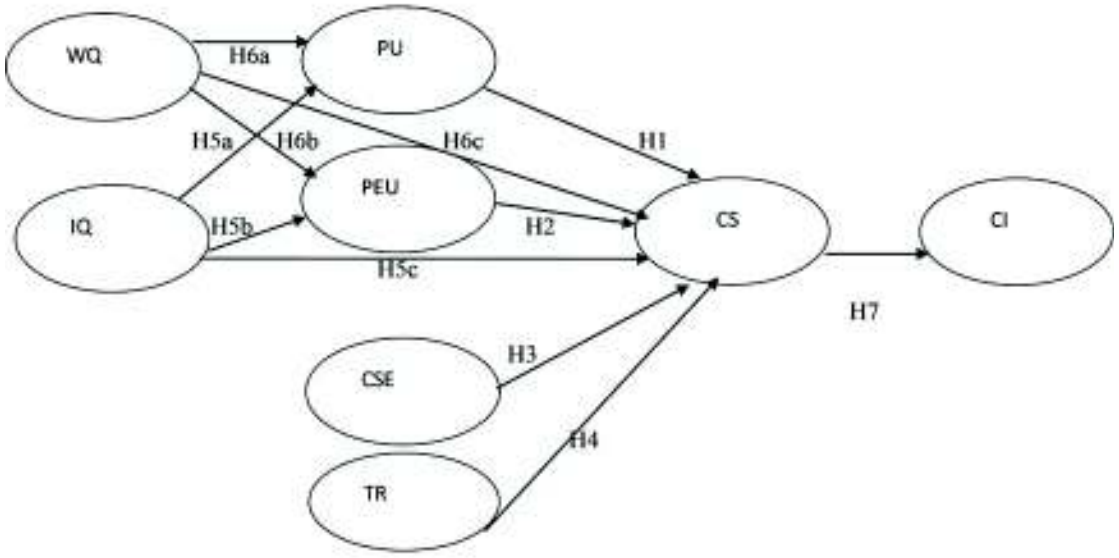
4.1 Data Collection

340 paper questionnaires were distributed out of which 245 fully filled data were received (72% response rate). Metro cities such as Mumbai, Kolkata, Chennai, New Delhi amounted to 45 % of the respondents. Non-metro cities such as Kochi, Thiruvananthapuram, Pune, Bangalore,Vizag, and Kozhikkode accounted for 24% of the respondents. The remaining data 31% of data was collected from towns in Kerala and Lakshadweep. 85 responses were collected online using Google forms. The final sample size stood at 330 comprising 72%offline and 38% online responses.

4.2 Respondent Profile

The sample consisted of 69% male respondentsand 31% females. About 61% of the respondents were under the age of 40 years, 24% were in the age group of 41-50 years and15% above 50 years of age. About 50% of the respondents were post graduates, 40% were under graduates and 10% Ph.D. holders. 38% of the

Figure 2.Proposed research Model



respondents had an annual income under 5 lakhs, 49% between 5- 10 lakhs and 13% above 10 lakhs.

5. Analysis and Results

The data was analyzed using Warp PLS version 3.0. Unlike covariance based approach the PLS approach focuses on maximizing the variance of the dependent variables explained by the independent ones instead of reproducing the empirical covariance matrix. PLS based Structural Equation Modeling has several advantages over covariance based Structural Equation Modeling. It works without assumptions about the distribution and with all types of measurement scales and suitable for small sample sizes.

The psychometric properties of the research instrument were examined by calculating Cronbach's alpha, composite reliability, and average variance extracted (AVE). Table 2 presents Composite reliability co-efficient, Cronbach's alpha average variance extracted (AVE) for all the measured constructs. All items measuring eight constructs demonstrated good internal

Table 1 Construct details

Construct	Reference
Perceived ease of use	Ojha et al. (2009), Davis (1989), Carter and Belanger(2004), Roca et al. (2006), Gefen et al. (2003)
Computer self -efficacy	Suki and Ramayah (2010), Compeau and Higgins (1995), Wangpipatwong et al. (2008).
Trust (Security)	Parasuraman et al. (2005), Venkatesh et al. (2016), Cao et al (2005).
Information Quality	Chang et al. (2005), Liu and Arnett (2000), Eldon (1997), Smith (2001), Wangpipawong et al. (2005), McKinney et al. (2002), Stockdale and Borovicka (2006), Roca et al. (2006), Saha et al. (2012).
Website Quality/system quality	Wangpipatwong et al. (2005), Stockdale and Borovicka (2006), Cao et al. (2005), Aladwani and Palvia (2002), Saha et al. (2012).
Citizen's satisfaction	Oliver (1997), Cronin et al. (2000).
Continue Intention	Roca et al. (2006), Wangpipawong et al. (2008), Moorthy et al. (2014)

Table 2: Psychometric properties of the variables

Factors	Composite Reliability Coefficient	Cronbach's alpha Coefficient	Average variance Extracted
Perceived Usefulness (pu)	0.859	0.802	0.503
Web Quality (wq)	0.844	0.778	0.477
Information Quality (iq)	0.865	0.812	0.517
Computer self-efficacy(cse)	0.859	0.780	0.603
Perceived ease of use(peu)	0.838	0.741	0.565
Trust(tr)	0.839	0.743	0.565
Continue intention(ci)	0.851	0.767	0.589
Citizen's satisfaction(cs)	0.861	0.799	0.555

Table 3 Latent variable correlations

	PU	WQ	IQ	CSE	PEU	TR	CI	CS
PU	**0.709**							
WQ	0.624	**0.691**						
IQ	0.654	0.659	**0.719**					
CSE	0.520	0.500	0.487	**0.777**				
PEU	0.559	0.543	0.569	0.658	**0.752**			
TR	0.465	0.492	0.572	0.351	0.461	**0.752**		
CI	0.642	0.475	0.537	0.439	0.467	0.507	**0.767**	
CS	0.663	0.550	0.681	0.480	0.627	0.519	0.646	**0.745**

Note: Square roots of average variances extracted (AVE's) shown on diagonal.

consistencies as all Cronbach's Alpha values were above the recommended value of 0.70. The convergent validity is determined by factor loading and Reliability test of all variables using IBM SPSS software. The combined score of the items is 946.

The composite reliability coefficients in all the cases are above 0.7 which shows reliability. (Table 3)

The Model fit indices (Table 4) were also found to be above the threshold values and significant at <0.001 level confirming model fit.

6. Discussion and Recommendations

The primary purpose of this research is to understand the fundamental factors that influence the citizen's to use the e-filing system in the country. The secondary purpose of this research is to propose and empirically test a model that is capable of predicting citizen's intention to re-use e-filing system. We explored the antecedents of citizen's intension to use the e-filing system and found that the taxpayers who are satisfied with the e-filing system would use it again in the next filing session. The result shows that Perceived Ease of Use, Perceived Usefulness and Trust are positively related to Citizen Satisfaction. Hypothesis H1 and H2 are therefore accepted. The result further indicates

Table 4 Model Fit indices

Criteria	Value	Accept
Average path Coefficient (APC)	0.279, P<0.001	P<.05
Average block VIF (AVIF)	2.065	<=5
Average R-squared (ARS)	0.484,P<0.001	P<.05

that Perceived Ease of Use and Perceived Usefulness can be enhanced by improving Website Quality and Information Quality. This is in line with the findings reported in earlier studies on government websites by the researchers namely Gefen et al. (2002) and Azmi and Bee (2010).

Hypothesis H3 examined the effect of Computer self-efficacy on Citizen Satisfaction. The results indicate that the effect of Computer Self-efficacy (beta value = 0.094 and p> 0.05) on Satisfaction is not statistically significant. It may be due to the fact that the users have either third party services to file their returns or are computer literate to file their returns by themselves. Since most of the respondents possess higher qualifications, it is possible that they have used computers extensively and do not find e-filing different from other tasks performed using computers. Whatever the case may be, it is important to ensure that the website is made simple to enable the users, even to those who have no exposure in using websites earlier, to e-file their returns without any external assistance. On this note, the Government may consider offering the tax websites in local languages as well.

Hypothesis 4 reveals that Trust has no significant effect (Beta value = 0.060, p> 0.05) on Citizen Satisfaction. In a recent poll conducted by the Organization for Economic Cooperation and Development (OECD), India secured second position amongst 40 countries in a survey on trust in national governments for the year 2014. Switzerland stood at

Table 5: Test of hypotheses:

Hypotheses	Statement	P value	Beta Value	result
H1	Perceived usefulness will have a significant positive effect on citizen's satisfaction of e-filing system.	<0.001	0.296	Supported
H2	Perceived ease of use will have a significant positive effect on citizen's satisfaction of e-filing system.	<0.001	0.279	Supported
H3	Computer self-efficacy will have a significant positive effect on satisfaction of e-filing system	.418	0.010	Not Supported
H4	Trust in the Income tax e-filing site will have a significant positive effect on satisfaction of e-filing system	0.060	0.094	Not Supported
H5a	Information quality of the income tax e-filing site will have a significant positive effect on perceived usefulness	<0.001	0.452	Supported
H5b	Information quality of the income tax e-filing site will have a significant positive effect on perceived ease of use	<0.001	0.436	Supported
H5c	Information quality has a significant positive effect on citizen's satisfaction of e-filing system	<0.001	0.279	Supported
H6a	Web site quality of the income tax e-filing site will have a significant positive effect on perceived usefulness	<0.001	0.316	Supported
H6b	Web site quality of the income tax e-filing site will have a significant positive effect on perceived ease of use	<0.001	0.248	Supported
H6c	Website quality has a significant positive effect on citizen's satisfaction of e-filing system	0.433	0.010	Not Supported
H7	Citizen' s satisfaction has a significant positive effect on continuance intention to continue with the e-filing system	<0.001	0.650	Supported

the top with Norway in the third position (Mehra 2015). 73% of the Indian respondents answered "yes" to the question 'Do you have confidence in the national government? This indicates that they have a-priori trust in the government and therefore Trust as a factor has little or no impact on the citizens' decision to use the e-filing system.

Das (2012) reported that over 3000 grievances were received from citizens who used the e-filing facility. Though the income tax department has ordered better monitoring of complaints by tax payers (PTI2015), the citizen's should be able to navigate through the website easily to find information or functions that will help them file taxes intuitively. Support for H5a, H5b, H5c, H6a and H6b reveals that the website should continue to provide useful information such that citizens don't have to look elsewhere for pertinent information required to e-file their taxes. The efforts to pre-populate income data and other vitals of the taxpayer (PTI 2016) by improving information quality would help to improve the usefulness quotient of the e-filing website and reduce the errors that might creep in if citizens were asked to provide the information by themselves.

Hypothesis H6c investigated the effect of website quality on satisfaction of e-filing system. The result indicates that website performance (Beta value = 0.010, $p > 0.05$) has no significant effect on satisfaction. Such a contradictory result could be due to citizen's perception that the Government is generally inefficient, which is reflected in the quality of the website. Thuscitizens are resigned to possible longer transaction times for completing their e-filing. Previous experiences of the Government have not been straightforward for the citizens highlighted by inefficient management of tax money (Bok 1997, Parent et al. 2005). Also, there could be lack of awareness about third party services and citizens might be more inclined to take on the free e- filing offer compared to the charges they incur when using third party service, thus disregarding website quality.

Hypothesis H7 shows that citizens who are satisfied with the e-filing system will continue to use the e-filing system in the following year. This shows that our results are in line with prior TAM studies conducted on this area (Roca et al. 2006, Chen et al. 2009).

7. Limitations and Future Research Directions

The study investigated the factors that lead to the reuse of e-filing system among taxpayers in India. Due to resource constraint, sample size of the study was limited to 330 respondents. The finding cannot be generalized extensively as the scope of the study is limited to 10 cities in India and few towns in Kerala. A larger and more representative sample from all states and union territories may give boarder representation of taxpayers in India. A survey of rural India participants could shed more light on the findings reported in our research especially on the relationship between computer self- efficacy and citizen satisfaction as computerization of rural India has been on the rise. Also, future research could compare TRP 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 sites such as Indian railways, Ministry of Petroleum and Natural Gas, High Courts of various States etc. The application of this model in mobile platform (m-governance) may also be investigated.

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