
Profession as the Determinant on the Adoption of e-Taxation

*Bharti Motwani**, *Sharda Haryani***, *Sukhjeet Matharu****

e – Taxation is a system for submitting tax documents to the Internal Revenue Service through the internet or direct portal, usually without any paper documents. The overall aim of e-taxation is to replace cumbersome manual and bureaucratic service systems with collaborative, efficient, process-driven and secure online delivery. Cutting edge technologies have made solutions more user-friendly in terms of ease-of-use. Despite the rapid adoption of e- tax filing in many countries, researchers have argued that there might be differences in the perception of people belonging to different professions. The study first emphasises on factors within the Technology Acceptance Model (TAM) that effects the adoption of e-taxation. Then, it focuses on understanding differences in the perception of people belonging to different professions towards e-taxation. The study will serve as a useful guideline for development of strategies in promoting the tax e-filing service in India.

Keywords – *e-taxation, Income Tax Return, Internet.*

Introduction

e-Government refers to the use of ICTs by the public administration to create a networking structure for interconnectivity, service delivery, efficiency, effectiveness, transparency and accountability. e - File is a system for submitting tax returns to the Internal Revenue Service through the internet, usually without any need to submit paper documents. In 2007, Directorate of Income Tax introduced e-Filing as the process of electronically filing Income tax returns through the internet. Since then, various softwares with e-filing capabilities are available now as standalone programs or through websites for tax professionals from major software vendors for commercial use. The overall aim of e-taxation is to replace cumbersome manual, bureaucratic service systems with collaborative, efficient, process-driven and secure online delivery. Cutting edge technologies have made solutions more user-friendly in terms of ease-of-use. Appealing user interface and smooth

navigation make the experience easier than ever. Despite the rapid adoption of tax e-filing in many countries, researchers have argued that it is yet to establish an integrated system that is reliable especially in developing countries.

Electronic declaration is named electronic tax filing (Gellis, 1991) in International literature. e-tax payment

***Ms. Bharti Motwani**
Assistant Professor
PIMR, Indore

****Ms. Sharda Haryani**
Assistant Professor;
PIMR, Indore

*****Dr. Sukhjeet Matharu**
Assistant Professor;
PIMR, Indore.

is also called online taxation payment (UN, 2007) or e-tax lodgement (Turner and Apelt, 2004). Many countries have introduced internet taxation service (Horst *et al.*, 2007; Briggs, 2008) because information transmission through internet and safety mechanism of identity authentication have been well developed (Haque *et al.*, 2009) in these countries.

There are millions of salaried taxpayers in India. Of these, only few of them had submitted paperless income tax returns during previous assessment years. The government should increase its efforts to promote usefulness and user-friendliness of the e-filing system. According to Kumar and Anees (2014), the growth of e-filing has been continuous but not as rapid as expected in online-taxation. He found that there is lump sum 9.60% increase in e-filing from FY 2007-08 to 2013-14 which is appreciable in itself and this growth was possible only because of adoption of information technology by Income Tax Department. This increase may be due to the benefits enjoyed by the people over manual Filing of ITRs. According to Belanger and Carter (2008), the tax authorities could develop several methods of helping tax payers e-file such as a web-based tutorial or a video that guides the taxpayers throughout the e-filing process there by reducing psychological risks.

In India, a huge population can hardly afford to be left behind in harnessing the benefits of implementing e-government until citizens adopt the e-government initiatives that are intended for them (Margetts, 2006). Besides, most of the studies about e-government are conceptual in nature and empirical studies are limited (Fu *et al.*, 2004) and e-government research is in its early stages (Gupta and Jana, 2003). Lofstedt (2005) concluded from her review of literature that only a few studies have explored the core factors that influence adoption of e-services among citizens. This is the reason why the present study delves into understanding differences in perception of business and service class taxpayers towards the e-filing.

Review of Literature

Fu *et al.* (2004) outlined several factors mentioned in the literature to restrict or encourage e-government usage such as technical infrastructure, citizens' awareness and feeling, security, privacy issues and safety. Benefits of e-government are diverse, long

lasting and include less corruption, increased transparency, fast refunds, better delivery of government services to citizens, greater convenience, eliminates error notices, citizen empowerment through access to information, growth of revenues, better accessibility, easy documents handling and storing, cost reductions and more efficient government management. Among other benefits, enjoying cost-free preparation and lodgment of tax returns, cost-free transaction, easy accessibility, safety and security, all time availability and time saving, as most people can do their online tax return in a short time, and no location problems since returns can be completed on any computer (Davis, 1989; Geetha and Sekar, 2012; Morden Johanna, 2011).

Lemuria *et al.* (2011) investigates the influence of six determinants on taxpayers' intention to adopt e-file systems. And the results indicate that three factors from the United theory of Acceptance as use of Technology model, UTAUT (performance expectancy, effort expectancy, and social influence) play a significant role in predicting taxpayers' e-filing intentions. More importantly, the research findings indicate that personal factors (web-specific self-efficacy (WSSE) and perceived security control), along with UTAUT factors, have a significant impact.

At present, there is very limited literature that focuses on the adoption of e-filing systems. Most of the literature related to e-filing adoption applies and extends the well known technology acceptance model (TAM) by Davis (1989), Wang (2002), Chang *et al.* (2005), Gallant *et al.* (2007), Theory of Planned Behaviour (TPB) by Fishbein and Ajzen (1975), Hsu and Chiu (2004) and Hung *et al.* (2006) and a unified model of both theories (Fu *et al.*, 2006) to assess the adoption intention of the e-filing system. Other literature such as Carter *et al.* (2008) used the Unified Theory of Acceptance and Use of Technology (UTAUT), while Wang *et al.* (2007) used the Innovation Diffusion Theory to observe e-filing adoption among taxpayers. Mohamed (2010) intended to predict e-procurement adoption through integrating the constructs of the technology acceptance model and the theory of planned behavior. Researchers found from the survey result that behavioral intention toward e-procurement technology is mainly determined by user's attitude and additionally influenced by perceived usefulness and subjective norm. Hussein *et al.* (2011) aimed to

investigate factors influencing citizens' intention to use e-filing in the Malaysian context.

According to Brahmhatt (2012), with regards to reason for using e-file, 84.22% of the e-filers agree that they choose e-filing over manual filing for convenience and 73.68% of the e-filers agree that they choose e-filing for speed, while 5.27% of e-filers were hoping to get faster returns. Overall, it can be concluded from the survey results that one of the most important reasons for e-filing is convenience followed by speed.

Kun *et al.* (2008) compared the web-based tax filing systems of Turkey and South Korea. The study shows that users in the two countries felt differently for such factors as ease of work, adequacy of the amount of information, display speed, convenience to life, job productivity, and help service. Although Turkey has a complex tax system Turkish users did not find the tax filing system difficult to use and that might be attributable to the fact that they are accounting professionals who frequently use the system.

Research Methodology

The study is aimed to understand the difference in perception of e-taxation users belonging to different professions.

The Sample: Data were collected from 250 respondents of which 237 have filed their returns personally and out of those only 110 i.e 46.4 percent had attempted e-filing. Data of these 110 respondents were subjected to further analysis. The detailed profile of the sample is given below in (Table 3).

Tools For Data Collection : Non probability judgemental sampling method was used for the collection of primary data. A self structured questionnaire was used for primary data collection which comprise of 37 items based on five point likert scale anchored from strongly disagree to strongly agree. The cronbach alpha is found to be 0.81 indicating good consistency among the items and hence the questionnaire is considered to be reliable.

Tools for Data Analysis:

Independent Sample T-Test was applied on 110 respondents taking four factors. T-test assumes that variables should have normal distributions. Non-normally distributed variables (highly skewed or kurtotic variables, or variables with substantial outliers) can distort relationships and significance tests. The skewness and kurtosis value of all the variables in our study were found to be lying between ± 1 (Table 4). Thus this shows that the distribution of all the variables is normal. Also the Kolmogorov-Smirnov statistic of all the variables were found to be significant which further confirms the normality of the data (Table 5).

Hypotheses Framing

Initially in a pilot study, data were subjected to principle factor analysis. Factor analysis helps to reduce a vast number of variables to a meaningful, interpretable and manageable set of factors. Data of 40 respondents was subjected to principal component factor analysis which resulted in four factors namely perceived ease of use, perceived usefulness, perceived security and perceived attitude. Out of which perceived attitude was measured using 6 items, perceived usefulness was measured using 15 items, perceived ease of use was measured used 8 items and perceived security was measured using 8 items.

Perceived ease of use indicates the ease with which an individual learns to operate or use new technology or information system (Davis *et al.*, 1989). TAM is widely applied on the researches of information technology. In addition information systems that users' perception of ease to use and less complexity will increase the likelihood of its adoption and usage (Teo *et al.*, 1999).

H_{01} : There is no significant difference between the perception of business class and service class users with respect to perceived ease of use factor of e-Taxation system.

Perceived security is associated with the risk that users are exposed to in case the e-filing system malfunctions. This can happen during the last minute rush to meet the deadline of tax return submission. Financial risks measure monetary loss due to keying-in incorrect information in tax returns that may lead to the wrong calculation of tax payable. Time risk

measures the amount of time lost trying to learn to operate the e-filing system. Psychological risk means the feelings of frustration or anxiety in using the IT system by IT illiterate. Social risk means the negative perception that adopters of e-filing may face such as the loss of status in society. Privacy risks occur when private information such as monthly income, personal addresses, and bank account numbers are transmitted through the internet in an e-filing system. e-filing involves the transmission of information through the Internet (Anna *et al.*, 2010).

H₀₂: There is no significant difference between the perception of business class and service class users with respect to Perceived Security factor of e-Taxation system.

Attitude is classified into two factors: attitude toward the object and attitude toward the behavior. The latter refers to a person's evaluation of a specified behavior. This evaluation of a specified behavior leads to certain behavioral intention that further results in certain behavioral action. Here, the behavioural intention means the adoption of e-taxation.

H₀₃: There is no significant difference between the perception of business class and service class users with respect to Perceived Attitude factor of e-Taxation system.

Perceived usefulness refers to individual belief in improvement the degree of job performance through usage of new technology and information system.

H₀₄: There is no significant difference between the perception of business class and service class users with respect to Perceived Usefulness of e-Taxation system.

Results and Discussion

As per the table 2, since p value is less than 0.1 for H₀₂ and H₀₃ while it is greater for H₀₁ and H₀₄. Hence, it can be inferred that all the hypotheses except H₀₂ and H₀₃ are accepted at 10% level of significance. This means that a significant difference was observed in the perceptions of customers belonging to different professions regarding perceived security and attitude. This seems to be true since, in developing countries there is a lot of difference in the requirements and

working of users who are business men and a users who are doing jobs. Besides, information required and details to be entered are totally different by both of them and hence their attitude also varies. Since, the consumer is familiar with the functioning of e-taxation system, there is less probability for them belonging to different professions to have different perception regarding perceived usefulness and ease of use. Hence, no significant difference was observed in the perception of e-taxation users. Nowadays, with the development of technology, users belonging to both professions seem to have equivalent resources and equal access to the internet and hence no significant difference was observed for the perceived ease of use and usefulness. This also seems to be true because they are implemented in the same manner and have the same meaning to all types of users.

Recommendations

India is at a developing stage and there is more progress to come. Whatever may be the percentage of progress but there is an improvement year-by-year which convincingly shows the positive sign in the development of e-taxation system in India. To improve the perceived attitude of people, the government should invest in more advertising campaign that create awareness about the usefulness of e-filing. This campaign should be strategically administered during the tax filing months. The system's ease of use should also be stressed in the advertisement campaign. The user-friendliness of the system can be improved by creating web-based tutorials or videos that guides the taxpayers on how to use the e-filing system. 24 hours online services should be provided during the tax filing months so that the taxpayers could choose to e-file their returns at odd hours.

The government could employ multiple firewalls, use the latest anti-virus and worm detection software and communicate to taxpayers so that they become aware that the e-filing system is secure. To raise the trust of taxpayers helps taxpayers to understand the advantages and outweigh the disadvantages of on-line tax return system. With proper assistance from the tax-filing system and service centers, people can be made aware of benefits of filing income taxes online. Replications among other samples are needed

to validate the current finding. The study is confined to the taxpayers located in Indore city. So, the conclusion derived from the research cannot be made applicable as it is for the other parts of the states or other states. However, this paper makes a valuable contribution given the fact that there are only a limited number of comprehensive studies dealing with the taxpayers' perception towards e-file adoption.

References

- Anna A. Che Azmi and Yusniza Kamarulzaman (2010). Adoption of tax e-filing: A conceptual paper. *African Journal of Business Management*, 4(5).
- Belanger, F. and Carter, L. (2008). Trust and risk in e-government adoption. *Journal of Strategic Information Systems*, 17, 165-176.
- Brahmbhatt Mamta (2012). Tax Payers' Perception towards E-File Adoption: An Empirical Investigation. *GFJMR*, 5.
- Briggs BR (2008). Taxation of pentecostal churches in Africa: paradigm of pentecostals in Uganda. *Afr. J. Bus. Manage.* 2(1), 1-12.
- Carter, L., Schaupp, L. C., and Evans, A. (2008). Antecedents of e-File adoption: the US Perspective. Available: <http://ieeexplore.ieee.org/stamp/stamp.jsp?arnumber=04438920>.
- Chang, I-Chiu, Li, Yi-Chang, Hung, Wong-Fu and Hung, Hisn-Ginn (2005). An empirical study on the impact of quality antecedents on taxpayers' acceptance of Internet tax filing systems. *Government Information Quarterly*, 22 (3).
- Davis, F.D. (1989). Perceived usefulness, Perceived Ease of Use, and User Acceptance of Information Technology. *MIS Quarterly*, 13 (3).
- Fishbein M, Ajzen (1975). *Belief, Perceived attitude, Intention and Behavior: An Introduction to Theory and Research*. Addison-Wesley. Reading.
- Fu, J.R., Farn, C.K., and Chao, W. (2006). Acceptance of Electronic Tax Filing: A Study of Taxpayer Intentions. *Information & Management*, 43.
- Fu, J., Chao, W. and Farn, C. (2004). Determinants of Taxpayers' Adoption of Electronic Filing Methods in Taiwan: An Exploratory Study. *Journal of Government Information*, 30.
- Gallant LM, Culnan MJ, McLoughlin P (2009). Why People e-File (or Don't e-File) Their income taxes. Retrieved April 20, 2014, from: [//ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4076587](http://ieeexplore.ieee.org/stamp/stamp.jsp?tp=&arnumber=4076587).
- Geetha R. and Sekar (2012). E-Filing of Income Tax: Awareness and Satisfaction level of individual Tax payers in Coimbatore city. *Research Journal of Management Sciences*, 1(4), 6-11.
- Geetha R. and Sekar M. (2012). E-Filing of Income Tax: Awareness and Satisfaction level of individual. *Research Journal of Management Sciences*, 1(4), 6-11, 2319-1171
- Gellis, H.C. (1991). How to Get Plugged into Electronic Tax Filing. *Journal of Accountancy*, 56-60.
- Gupta, M. P. and Jana, D. (2003). E-government evaluation: a framework and case study. *Government Information Quarterly*, 20.
- Haque A, Tarofder AK, Rahman S, Electronic AR (2009). Transaction of internet banking and its perception of Malaysian online customers. *Afr. J. Bus. Manage.* 3(6).
- Horst M, Kuttischreuter M, Gutteling JM (2007). Perceived usefulness, personal experiences, risk perception and trust as determinants of adoption of e-government services in The Netherlands. *Comp. Hum. Behav.* 23(4).
- Hsu MH, Chiu CM (2004). Predicting electronic service continuance with a decomposed theory of planned behaviour. *Behav. Inform. Technol.* 23(5).
- Hung SY, Chang CM, Yu TJ (2006). Determinants of user acceptance of the e-Government services: The case of online tax filing and payment system. *Government Inform. Q.*, 23(1).
- Hussein R., Norshidah Mohamed, Abd Rahman Ahlan, Murni Mahmud (2011). E-government application: an integrated model on G2C adoption

of online tax. *Transforming Government: People, Process and Policy*, 5(3).

Kumar, M. and Anees M. (2014). E-Filing: Creating New Revolution in Taxation of India. *Global Journal of Finance and Management*, 6(4).

Kun Chang Lee, Melih Kirlidog, Sangjae Lee, Gyoongun Lim (2008). User Evaluations of tax filing web sites: A comparative study of South Korea and Turkey. *Online Information Review*, 32(6).

Lemuria Carter, Ludwig Christian Shaupp, Jeffrey Hobbs, Ronald Campbell(2011). The role of security and trust in the adoption of online tax filing. *Transforming Government: People, Process and Policy*, 5(4).

Lofstedt, U. (2005). E-government – Assessment of Current Research and Some Proposals for Future Directions. *International Journal of Public Information Systems*, 1, 39-52.

Meenal, Garg G.(2012). E-Filing of Taxes - A Research Paper, *International Journal of Enterprise Computing and Business Systems*, 2(1).

Mohamed Gamal Aboelmaged (2010). Predicting e-procurement adoption in a developing country: An empirical integration of technology acceptance model and theory of planned behavior. *Industrial Management & Data Systems*, 110(3).

Morden Johanna (2011). E-Tax system brings savings to Uganda taxman, accessed on 7th March 2015 thru: <http://www.futuregov.asia/articles/2011/mar/23/e-tax-system-brings-savings-uganda-taxman/>

Teo, T.S.H, Lim, V.G.K., & Lai, R.Y.C. (1999). Intrinsic and extrinsic motivation in Internet usage. *Omega: The International Journal of Management Science*, 27, 25-37.

Turner, I. and Apelt, C. (2004). Globalisation, Innovation and Information Sharing in Tax Systems: The Australian Experience of the Diffusion and Adoption of Electronic Lodgement. *e-Journal of Tax Research*, 2(2).

UN, (2007). Benchmarking E-government: A Global Perspective" <<http://unpan1.un.org/intradoc/groups/public/documents/UN/UNPAN021547.pdf>>

Wang H, Doong H, Lin F. (2007). Determinants of E-Government Service Adoption: An Innovation Diffusion Perspective. *IEEE Xplore*, 3458-3461.

WEBSITES & PRESS RELEASE

[1] <http://incometaxindiaefiling.gov.in>

[2] www.saraltaxoffice.com

[3] <http://www.ecommercetax.com/hardesty.htm>

[4] <http://www.taxsysteminindia.htm>

Table 1 : Group Statistics

	Pro- fession	N	Mean	Std. Deviation	Std. Error Mean
Usefulness	1	34	3.79	.6682335	.1146011
	2	76	3.94	.6994891	.0802369
Ease	1	34	3.81	.915042	.156928
	2	76	3.85	.664586	.076233
Security	1	34	3.68	.714600	.122553
	2	76	3.94	.690228	.079175
Attitude	1	34	3.65	.7928210	.1359677
	2	76	3.94	.7140848	.0819111

Table 2: Independent Sample Test

		F	Sig	T	df	Sig (2- tailed)	Mean differ- ence	Std. Error Diffe- rence	95% Confidence Interval of the Difference	
									Lower	Upper
Usefulness	EVA	0.6	0.4258	-1.053	108	0.2946	-0.149	0.14	-0.4322	0.132277
	EVNA			-1.07	66.3	0.288	-0.15	0.14	-0.4292	0.129345
Ease	EVA	11	0.002	-0.2	108	0.844	-0.03	0.15	-0.3372	0.276268
	EVNA			-0.17	49.2	0.862	-0.03	0.17	-0.381	0.320087
Security	EVA	0.2	0.634	-1.78	108	0.078	-0.26	0.14	-0.5419	0.028786
	EVNA			-1.76	61.6	0.084	-0.26	0.15	-0.5483	0.035118
Attitude	EVA	2.1	0.15	-1.92	108	0.057	-0.29	0.15	-0.5955	0.009028
	EVNA			-1.85	57.9	0.07	-0.29	0.16	-0.611	0.024534

Table 3 : Sample Demographics

Feature	Description	Sample	Percentage
Age	18-25	48	43.63
	25-40	46	41.81
	40-60	16	14.5
Profession	Business/ Self Employed	34	30.9
	Service	76	69.1
Education	Graduate	22	20.0
	Post graduate	78	70.9
	Others	10	9.1
Gender	Male	62	56.4
	Female	48	43.6
Marital status	Married	78	70.9
	Unmarried	32	29.1
Yearly income (in lac)	2-4	50	45.5
	4-6	48	43.6
	Above 6	12	10.9

Table 4. Descriptive statistics

	Ease	security	Usefulness	attitude
N Valid	110	110	110	110
Mean	30.7273	30.9182	22.5455	56.4091
Std. Deviation	5.97381	5.63757	4.08766	9.02829
Skewness	-.876	-.744	-.888	-.800
Std. Error of Skewness	.230	.230	.230	.230
Kurtosis	-.091	-.026	-.018	.419
Std. Error of Kurtosis	.457	.457	.457	.457

Table 5: Tests of Normality

Kolmogorov-Smirnov^a

	Statistic	Df	Sig.
Ease	.184	110	.000
Security	.133	110	.000
Attitude	.162	110	.000
Usefulness	.131	110	.000