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## RESEARCH ARTICLE

### ATTITUDINAL AND TECHNOLOGICAL DETERMINANTS OF ITAX SYSTEM ACCEPTANCE: THE CASE OF KENYA REVENUE AUTHORITY.

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#### ABSTRACT

Revenue authorities are continually implementing strategies to enhance quality of taxpayer services as well as optimize revenue collection within set timelines and budgets. In this regard, Kenya Revenue Authority introduced the iTax system, to enable taxpayers declare tax payable by themselves at the comfort of their homes and offices. This paper is premised on the Technology Acceptance Model. It designed to establish the factors that influence acceptance of the iTax system in Kenya. The variables examined and presented in this paper included the taxpayers' attitude towards technology and iTax system. The descriptive research design was used with the target population comprising of 5330 taxpayer property owners in eastern side of Nairobi city. A randomly selected sample of 98 respondents was identified and primary data gathered using a questionnaire. The results showed a positive correlation between user attitude and acceptance of the iTax system ( $r=0.888^*$ ,  $p < 0.01$ ). An analysis on technological determinants of iTax acceptance showed a positive technology suitability ( $r=0.871^{**}$ ,  $p < 0.01$ ). It was concluded that the positive attitude of taxpayers towards the iTax has greatly contributed to the acceptance of the system. In addition to the attitudes taxpayers are also variously influenced by the suitability, coverage and security of the iTax technology. The study recommends the need for continuous awareness creation, training on the system usage and consideration of user friendliness in systems upgrades.

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## INTRODUCTION

Great attention and focus has been given to the online tax system through information technology development (Adeyemi, 2013; Egowan, 2011; Mohsin and Raha, 2007). Taxpayers' behaviour towards tax system has equally evoked great attention among many revenue authorities especially in developed countries, Marti, Wanjohi, Magutu, Mokoro, (2010). Technology makes services offered to the citizens more effective and efficient. Adeyemi (2013) noted that with the progress made in information and communication technologies, revenue authorities are now able to enhance the systems of tax administration by addressing the ignorance of most taxpayers about the tax structure. However, in spite of this attention, Marti, et al., (2010) argue that the study of taxpayers behaviour towards tax system in developing countries are limited as they concentrate more in studies which would increase revenue collection and enforcement efforts at the expense of studies on taxpayers behaviour. The growth of usage of technology in tax systems coupled by the lack of adequate studies on tax payers' behaviour necessitated this study.

Governments are continually embracing new technologies in many sectors including e-Filing. This is however not without challenges. In Malaysia for example, the technological challenges include issues like standards, data integration, legacy maintenance and privacy as well as security (Mohsin and Raha, 2007). Nonetheless, most of the taxpayers and tax practitioners as well as tax agents in Malaysia provide a positive feedback towards the usage of e-Filing. Despite the challenges, taxpayers in Malaysia have given positive feedback about the e-Filing system. Lai, Siti and Kameel (2004) conducted a study on the state of technology preparedness by tax practitioners in Malaysia and their intents to use e-Filing system. The study concluded that while tax practitioners are optimistic about the new e-Filing system, they take caution on the security of internet technology. The study further established the presence of a significant positive relationship between the level of technology preparedness and intent to use the system. In Zimbabwe, Nyasha, Tendai, Makaita, Tasiyana et al. (2013) study on employees' attitude towards using Fiscalised Electronic Devices (FEDs) in the calculation of Value Added Tax (VAT) had the objective of examining the attitude of employees in Zimbabwe motor industry towards fiscal electronic device. The research established the use of fiscal electronic devices had a positive influence on tax collection in the Zimbabwe motor industry.

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In Kenya, administration of tax is the responsibility of the Kenya Revenue Authority established through an Act of Parliament on July 1st 1995 (Cap 469). In the year 2013, KRA shifted to a new paradigm towards e-Filing due to Self-Assessment System (SAS) and focused more on audit field. The Authority also aim at paperless filing. In general e-Filing process is not only convenient but it is also fast, accurate and secure. The four stages in e-Filing include taxpayers' enrolment using pin and password, entry of gross income, personal relief and allowed deductions. After these entries, the iTax system will automatically calculate the payable tax and the tax form will be received at the KRA electronically. Finally, the tax return form will be sent by email back to the taxpayer after being verified (KRA, 2013). A study conducted on iTax system and service delivery in Kenya by Kipkemoi (2015) established that employees' opinion about iTax had a statistically significant influence on service delivery to customers. Additionally, a study by Muturi and Kiarie, (2015) indicated that online tax system does affect tax compliance level among small taxpayers. The two studies, however, do not focus on the attitudinal and technological determinants of the end user of the iTax system. On the other hand, a study by Marti *et al.* (2010) found very strong relationship between the taxpayers' attitudes and tax compliance in Kenya. The current study focused on the influence of attitudes towards the technological and acceptance of the iTax system. Hence the key focus of the research included user attitude towards the iTax system and suitability of of the technology in the iTax system.

**Literature review:** The perception of technology by tax authorities is regarded to be different to that of taxpayers. (Gordon 2010; Thomson 2010). Batrancea, Nichita, and Batrancea, (2012) argue that examining taxpayers' inner motivations, beliefs, perceptions, attitudes in order to accurately predict taxpayers' behaviour is critical. As a response to their quest, behavioural models of tax compliance have emerged. The models incorporate economic, sociological and psychological determinants. End user attitude is identified as one of the psychological determinants of technology adoption Gatotoh, Gakuu and Keiyoro, (2017). Attitude is defined as individuals' inclination and disposition toward a person, place, idea, or any other concept (Reed, Drijvers, and Kirschner, 2010; Crano and Prislín, 2008; Onu, 2016; Hannula, 2002). Given this apparent value in measuring broad attitudes, a wide range of tax compliance studies (Onu, 2016; Kirchler (2007) have assessed attitudes, even if they do not necessarily label it as such. Some studies (Barham and Fox, (2011); Bobek and Hatfield, (2003); and Orviska and Hudson, (2003) include attitude measures towards the behaviour of tax evasion. Technological factors also influence acceptance and use of any technology Amitabh, Sahu and Gupta (2009). For online tax systems to gain acceptance and successful, therefore, they must be easy to use, and accessible to all cadres of taxpayers Carter and Belanger (2004). Moreover, there is evidence that taxpayers will adopt the iTax system if they are sure the system is transparent (Lai, Siti and Kameel, 2004). This study is premised on the Technology Acceptance Model (TAM) (Davis, Bogozzi and Warshaw, 1989). TAM has been widely accepted and investigated by many researchers in diverse fields (Gatotoh, Gakuu and Keiyoro, 2017a), Lai and Honglei 2005); Vijayasathary; Hsu *et al.*, 2004); Shih, 2004). The aforementioned studies have demonstrated that the integration of TAM in technology-based research is accepted as an effective and useful model.

The use of this model is validated by other studies such as Rodney, (2017) and Geng, Wenjing, Tsang-Sing, (2009) who argue that attitudes towards using technological products may provide answers as to why consumers embrace or fail to embrace new technology.

## MATERIALS AND METHODS

The research adopted the descriptive survey design in order to examine the attitudinal and technological determinants of the iTax system. The variables under study were attitude towards technology and technology suitability. According to Gakuu, Kidombo and Keiyoro, (2018) and Kothari and Garg, (2014) descriptive research determines the state of affairs as they exist at the time of conducting the research. This study population was 5,330 registered landlords in Eastlands, Nairobi County. A sample of 98 respondents were selected using Yamane's sampling formula  $n=N/(1+Ne^2)$  (Yamane, 1967). A questionnaire was used to collect data for the study. The items used were adopted from a number of related studies for each of the constructs under study Tsai, Tsai, and Hwang, (2010) on PDA attitude scale, Gatotoh *et al.* (2017a) on mLearning adoption, and Kipkemoi, (2015) on iTax system and service delivery. Additional modifications were made by the researchers to suit the current study. Each statement was measured on a 5 point Likert scale (strongly agree, agree, uncertain, disagree and strongly disagree).

## RESULTS AND DISCUSSION

The results constitute both descriptive analysis and Pearson correlation analysis for both attitudinal and technological determinants of iTax acceptance.

**Descriptive results for attitudinal and technological suitability acceptance of the iTax system:** To measure the level of attitudinal and technological acceptance of the iTax system, a descriptive analysis was conducted. The results are presented in Table 1. The findings show that 50% of the respondents strongly agreed and 10% of respondents agreed that using the online system is a good idea. Twenty five percent 25% and 15% of respondents disagreed and strongly disagreed respectively. Further, the results show that 22% of the respondent strongly agreed, 35% agreed, 30% of respondents were neutral and 13% disagreed the statement that iTax online system is easy to learn while majority of respondents 47% of respondents agree and 53% strongly agree respectively that the iTax system has made it easy for them to file tax returns. Finally, 37% strongly agreed and 23% agreed respectively that the submitting tax returns online makes them uncomfortable. These results indicate mixed outcomes on the attitudinal statements presented. On the other hand, for technological constructs, majority of respondents 60% and 15% strongly agreed and agreed respectively, that the technology used for the iTax system is easy to adopt. Additionally, 40% strongly agreed while 10% agreed that there was inadequate public consultation on iTax technology implementation. On whether the respondents think that the iTax system is easily accessible, 45% of respondents strongly agreed while 30% agreed that the system was easily accessible. On saving time, majority of respondents 72% strongly agreed with 14% agreeing that the iTax saves time. On whether the iTax technology is easily understandable by taxpayers, majority of respondents 78% strongly agreed and 22% of agreed that iTax technology is easily understandable by taxpayers.

**Table 1. Descriptive results for Attitudinal and technological factors**

Item	SA		A		N		D		SD	
	f	%	f	%	f	%	f	%	f	%
Attitudinal factors										
Using the online system is a good idea	39	50	8	10	0	0	19	25	12	15
The online system is easy to learn	17	22	16	35	27	30	12	13	0	0
The online system has made it easy for me to file my tax returns	37	47	41	53	0	0	0	0	0	0
Submitting tax returns online makes me uncomfortable.	29	37	18	23	0	0	12	15	19	25
Technological										
The technology used on iTax is easy to adopt	47	60	12	15	0	0	12	15	7	10
There was inadequate public consultation on iTax technology	31	40	8	10	23	30	12	15	4	5
The iTax system is easily accessible	35	45	23	30	0	0	12	15	8	10
Use of iTax system saves time	56	72	11	14	0	0	5	6	6	8
iTax technology is easily understandable by taxpayers	61	78	17	22	0	0	0	0	0	0

**Table 2. Attitudinal and Technology suitability of Acceptance of iTax**

		Attitude towards technology	Technology in use
Acceptance of iTax	Pearson Correlation	.888**	.871**
	Sig. (2-tailed)	.000	.000
	N	78	78

\*\* . Correlation is significant at the 0.01 level (2-tailed).

Generally, more than half the respondents responded on the affirmative on all the attitudinal statements implying that the iTax system is acceptable to most of the users.

**Correlational results for attitudinal and technological acceptance of the iTax system:** A Pearson correlation analysis was conducted in order to determine the direction and strength of the correlation between attitudinal factors, institutional factors and acceptance of the iTax system. Correlation results were summarized in Table 2. The correlation analysis confirmed a significant positive relationship between user attitude and acceptance of the iTax system ( $r=.888^{**}$   $p < 0.01$ ). This means that users' acceptance of the iTax system, is influenced by their attitude towards the use of technology to file their returns. The correlation analysis confirmed a significant positive relationship between technology use and acceptance of the iTax system ( $r=.871^{**}$   $p < 0.01$ ).

### Discussion of findings

The descriptive results are consistent with Mutisya and Kavindah (2017) who find majority of the respondents 78.7% satisfied with the security that have been put in place by KRA even though there was varied opinion in terms of tax payer's personal data. The finding that attitude has a positive correlation with the acceptance of the iTax system, is consistent with Lai, Siti and Kameel (2004) whose study established the presence of a significant positive relationship between the level of technology preparedness and intent to use the system. The findings are also consistent with, Marti, et, al., (2010) who found that there is a very strong relationship between the taxpayers' attitudes and tax compliance in Kenya. Notably, however, Marti, et, al., (2010) focused on compliance while the current study focused on acceptance of the system. It is therefore clear that end user attitudes are critical whatever angle one looks at. Technological determinants showed a positive correlation with the acceptance of the iTax system. These findings are in agreement with consistent with the Technology Acceptance Model (TAM) which states that a user's acceptability of a new system is determined by the perceived usefulness of the system.

The results agree with the findings of Muita (2011) who found that for e-Filing system to effectively take off there is need to develop the infrastructure that will widen the coverage of the electronic tax system. The fact that attitudinal determinants had greater statistically significant relationship than technological determinants with respect to acceptance of iTax is consistent with Moon, Chan and Chang (2014). Moon *et al.*, find both user attitude and social influence statistically significant with respect to intention of use technology, with user attitude greater than social influence.

### Conclusion

It was concluded that the positive attitude of taxpayers towards the iTax has greatly contributed to the acceptance of the system. In addition to the attitude, taxpayers are also variously influenced by the suitability, coverage and security of the iTax technology. The acceptance is thus attributable to the many benefits that accrue to taxpayers when using the iTax system.

### Recommendation

The study recommends the need for continuous awareness creation, training on the system usage, encourage usage of available support structures and system upgrades must consider user friendliness as parameters for sustaining positive attitudes and subsequent acceptance.

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