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# Taxpayer's Perception on the E-Filling System Adoption in Tanzanian Cities

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#### **ABSTRACT**

Electronic filing system (e-filling) is a recent phenomenon in Tanzania. The Tanzanian Government, through its revenue authority, TRA, in the year 2020 introduced a tax e-filling system for the effective collection of various types of taxes. Since the inception of the tax e-filling system in Tanzania, only a few studies have focused on retailers' perceptions of using such a system. This study adopted a descriptive survey design conducted in Tanzanian cities using a set of closed-ended questionnaires to a random sample of 423 taxpayers. The main finding of the study showed that perceived usefulness and user satisfaction significantly influence users' adoption intention of e-filling ([ $\beta$  = 0.396, p < 0.000;  $\beta$  = 0.343, p < 0.000, respectively]). Additionally, the study indicated a broad discrepancy between the advantages of tax e-filling to taxpayers, hence downplaying its usage/adaptability. The study recommended that awareness-raising campaigns and training be initiated to understand the tax e-filling system better. Policy-wise, the study contributes to the Income Tax Act, Cap. 332 R.E., 2019, the Tanzania Development Vision 2025, and the National Strategy for Growth and Reduction of Poverty I & II.

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## 1. Introduction

Tax compliance affects the timely collection, which is crucial for public goods provision by the Government (Night & Bananuka, 2020). However, influencing tax compliance behaviour is increasingly challenging for local tax administrations and international organizations. Developing Countries like Tanzania are explicitly vulnerable to tax noncompliance and aggressive tax planning due to deficiencies in their legal tax framework and inadequate resources and expertise to monitor the underlying behaviour (Mo, 2003).

Literature has shown that the Tanzania Revenue Authority (TRA), the responsible organ for mobilizing domestic revenue, has for decades faced inefficiency in tax collections (Ernest & Young, 2020). In order to address the inefficiency, TRA has adapted several changes, one of them being the information and communications technology (ICT) usage application. Accordingly, in the late 2020s, TRA introduced an electronic tax filing system (Ratansi, 2020; Burgers & Mosquera, 2017; McCluskey & Huang, 2019). TRA adopted the e-filing mainly to file the statement of estimated tax payable by instalments, statement of revised tax payable by instalments, final return of income (ROI), statements and payment of tax withheld (half-yearly returns) and skill and development levy monthly return (Ratansi, 2020).

Research on tax compliance has noted that the adoption of technology, such as e-filing systems, has innumerable benefits in increasing voluntary customer compliance, time-saving and improving tax administration efficiency, as well as solving critical challenges of outdated tax forms, errors in capturing data and late submission of taxpayers returns (OECD, 2015; McCluskey & Huang, 2019). In some instances, the system has shown to address the problem of tax planning aggressiveness, resulting from unwillingness to comply with tax laws by taxpayers to avoid liabilities (Le, Men Thi, & Nguyen, 2021).

#### 1.1. Research Problem

Employing efficient and effective mechanisms to collect tax revenues from its taxpayers has to socially and technologically interact with the retailers without hindering their social and economic activities (Burgers & Mosquera, 2017). Understanding Taxpayer's perception of the system's adoption and usage is critical for a more efficient tax collection society (Barkhordari et al., 2017). This is based on the fact that tax e-filling system usage by taxpayers is more likely to result in a significant revenue collection to the respective Government. Secondly, the Taxpayer pays tax; therefore, they become central in the revenue collection tripartite, i.e. Government, revenue authority and taxpayers (Ernest & Young, 2020).

The introduction and use of the tax e-filling system in Tanzania is considered a breakthrough in tax collection activities. Nevertheless, challenges are still pertinent to

its usage, affecting the tax collection process (Le et al., 2021). Since taxation remains the primary source of the central Government's revenue meant for state-building and providing much-needed public goods and services, an examination of users' perception of the e-filling tax system is crucial.

Burgers & Mosquera (2017) have noted that tax administrations undertake different measures, including tax reforms in developing countries. However, the question of their success in addressing the tax avoidance problem still needs to be answered. Accordingly, innovating the tax system in Tanzania aims to improve tax efficiency and tax fairness as pillars to enhance revenue collection (Fjeldstad et al., 2019).

However, experience with introducing new technology and information systems needs to be revised (McCluskey & Huang, 2019). However, despite the considerable advantages of the e-filing system to taxpayers and tax authorities, the system still needs to be utilized, whereby only a few taxpayers have switched to the e-system (Kimea et al., 2019). Therefore, this research has focused on assessing factors affecting taxpayers' perception of adopting ICT through the e-filing system in Tanzania.

# 1.2. Objectives

The general research objective is to assess factors affecting taxpayers' perception of adopting e-filing in Tanzania. Specifically, the research will try:

- 1. To examine the effect of taxpayers' perceived ease of use (convenience) on adopting the e-filing system in Tanzania
- 2. To examine the effect of taxpayers' perceived usefulness on the efiling adoption system in Tanzania
- 3. To examine the effect of taxpayers' perceived facilitating conditions on the e-filing adoption system in Tanzania.
- 4. To examine the effect of taxpayers' perceived behaviour on adopting the e-filing system in Tanzania. To examine the effect of taxpayers' perceived user satisfaction on adopting the e-filing system in Tanzania.

### 1.3. Theoretical Background

A growing number of academic research focuses on assessing users' computer technology acceptance and utilization determinants. Different models are proposed for such research, but mostly Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) are applied in social science studies.

# 1.4. The Theory of Planned Behaviour

The basis of the theory of planned behaviour (TPB) is in its ability to understand and foretell user behaviour towards new system adoption. It assumes that behavioural intentions determine behaviours and, under certain circumstances, perceived behavioural control (Khan et al., 2020). It is an extended version of the Theory of Reasoned Action (TRA) proposed by Ajzen and Fishbein (1980), stating that attitude relates to one's personal views about a behaviour after making logical and reasoned decisions. Based on the assumptions under TPB, behaviour is predicted through attitudes, behavioural intention, subjective and social norms, perceived power influence and perceived behavioural control over one's actions (Bosnjak et al., 2020; Liu et al., 2020).

TPB is widely applicable in research when determining the effect of behaviour in social science and has been widely applied in examining the role of ICT adoption to improve tax compliance and collection among tax payers (Nkwe, 2013). There are some studies which have adopted the TPB to explore the effect of ICT usage (such as egovernment system usage and mobile money services) on organisational performance (Chemisto & Rivett, 2018; Koloseni & Mandari, 2017). With e-tax system usage, attitudes towards using electronic tax systems as compared with traditional methods will pose a barrier towards tax compliance and, hence, tax collection by the Government.

## 1.5. The Technology Acceptance Model

One of the most extensively applied frameworks in the field of social sciences is the technology acceptance model (TAM) (Chao, 2019). TAM postulates how users first accept and then use technology based on their intention to adopt technological systems (Davis, 1989). According to TAM, system acceptance by users is determined by how they perceive it to be "easy to use" and "useful" to them (Pérez-Morote, Pontones-Rosa, & Núñez-Chicharro, 2020). These two perceived constructs determine the attitude towards adopting a specific technology and, consequently, the intention to use and adopt a particular technology (Lai, 2017; Munoz-Leiva et al., 2017).

Previous studies have empirically tested the application of the model by exploring users' behaviour intention on a number of areas such as mobile payment, acceptance of mobile phone payment systems, and differences in gender perception to adopt cashless transaction (Al-Gahtani, 2011; Lin et al., 2019; Essel & Wilson, 2017; Subawa et al., 2021). Such studies have confirmed the applicability of the model in offering practical and policy recommendations while contributing greately in the field of policy administration.

Some of the model's limitations are addressed by adding external variables to provide a more consistent prediction of system use, which in this current study,

facilitating conditions, user satisfaction, and taxpayers' behaviour are considered. Some other weaknesses of the TAM model are addressed by integrating core elements from other theories, including the theory of reasoned action (TRA) and the unified theory of acceptance and use of technology (UTAUT) model to predict or justify the adoption of new technology, its acceptance, and usage (Chao, 2019).

# 1.6. The Unified Theory of Acceptance and Use of Technology Model

The unified theory of acceptance and use of technology (UTAUT) as articulated by Venkatesh, Thong, and Xu, (2012) in "User acceptance of information technology: Toward a unified view", is a technology acceptance model describing user intentions on the use of an information system and their subsequent usage behavior. The model has four variables posited to exhibit a significant relationship with adopting information technology, the expectancy of performance and efforts, social influence and facilitating conditions (Chao, 2019).

UTAUT model refers to facilitating conditions as the extent to which individuals believe that organizational and technical infrastructures exist to support system usage (Alalwana et al., 2017). Therefore, this study postulates that in addition to TAM and TPB variables, individual behaviour, user satisfaction, and facilitating conditions influence the adoption of electronic tax-filing systems.

## 1.7. Adoption of e-tax services in East Africa

Other countries in the region have also implemented e-filing systems to enhance efficiency, transparency, and accessibility in various sectors. Kenya, for example introduced the earliest form of the online filing of tax returns through the implementation of the Integrated Tax Management System (ITMS) in 2013 which was later-on replaced by the iTax (John, 2021; Gwaro et al., 2016). The iTax platform was developed by the Kenya Revenue Authority to allow taxpayers to file their returns online, make payments, and access their tax compliance status (Eilu, 2018; Bett & Yudah, 2017). Gwaro et al. (2016) found a significant relationship between computer literacy levels and tax compliance amongst SMEs in Nakuru, Kenya. Despite initial challenges such as user awareness and technical issues, iTax has significantly improved tax compliance and reduced processing times for taxpayers (Maisiba, & Atambo, 2016).

Rwanda has been a pioneer in adopting e-government services, including e-filing for business registration and tax payments. The Rwanda Online platform provides a one-stop portal for entrepreneurs to register their businesses, submit annual returns, and pay taxes online (Hakizimana & Santoro, 2023). This has streamlined administrative processes, reduce paperwork, and enhance the ease of doing business in the country. Electronic filing and payment of taxes have been mandatory since 2015, through E-tax

and M-declaration. The former is a free web-based platform designed to be used on computers and smartphones, and M-declaration, a feature phone-based application which enables mobile money payments and a simpler process for filing a return (Megersa, 2023).

Uganda has also made strides in e-government initiatives, including the introduction of the Uganda Revenue Authority's e-Tax system for online tax filing (Nawawi & Salin, 2018). The platform enables taxpayers to file returns, make payments, and track their tax obligations electronically. While the system has improved tax compliance and revenue collection, challenges such as internet connectivity and digital literacy among taxpayers remain (Night & Bananuka, 2020).

In conclusion, the experiences of other East African countries that have implemented e-filing systems demonstrate the potential benefits of digitizing administrative processes. These systems have the capacity to enhance government service delivery, promote transparency, and streamline operations, ultimately contributing to economic development and improved governance in the region.

## 1.8. Tax-filing systems in Tanzania

Like most other governments, the United Republic of Tanzania (URT) is challenged by the need for efficient and cost-effective service delivery, information and knowledge to the public (Fang, 2002). Before the advance in ICT, service provision by the Government and contact with citizens relied on bureaucratic procedures (Silcock, 2001). Technology advancements have helped governments realize increased efficiency, transparency, participation, and trust in filling, billing, payments, and application of various government services (Zoroja et al., 2020; Manoharan & Ingrams, 2018).

Effective August 2020, The Tax Revenue Authority (TRA) in Tanzania issued directives regarding its newly introduced tax returns filing system from the old manual filing system to an improved filing system (e-filing). The e-filing system has been adopted to simplify return filings and make it more efficient and appealing for businesses to file their tax returns more easily with less bureaucracy. Similarly, the system adoption is geared towards streamlining tax procedures, speed, and facilitating taxpayers' ease of use in filing returns within a shorter time.

# 2. Hypothesis Development

In this section, hypotheses for the study variables have been developed based on a review of past literature.

#### 2.1. Perceived Ease of Use

Simuyu and Jagongo (2019) have found that the perception towards online tax filing in terms of simplicity is significantly related to security. While taxpayers who rate electronic filing systems as not easy to use do not adopt them (Maisiba & Atambo, 2016). Therefore, an acceptable electronic tax filing system should be easy to learn and use. It is therefore hypothesized that perceived ease of use will positively affect intention to adopt and use electronic tax-filing systems.

**H1**: Perceived ease of use will positively affect the intention to adopt and use electronic tax filing systems.

#### 2.2. Perceived usefulness

Previous extensive research in innovation adoption evidenced perceived usefulness's significant effect on adoption intention. Perceived usefulness, according to Jahangir and Begum (2008), is the degree to which a person's job performance is believed to be enhanced when using a particular system. Maisiba and Atambo (2016) observed that most taxpayers found it challenging to use electronic systems due to poor accessibility, unreliable internet connection, lack of adequate computer literacy and unpredictable power supply systems. While examining user acceptance towards Electronic Fiscal Device (EFD) usage in Tanzania, Temba (2015) observed that successful implementation of any new technology requires users to accept the new technology.

The fundamental reason electronic tax-filing systems are exploited is that people find the systems very useful in preparing tax returns. Thus, this study proposes the following second hypothesis:

**H2**: Perceived usefulness will positively affect the intention to adopt electronic tax filing systems.

## 2.3. Facilitating Conditions

According to Iqbal & Qureshi (2012), any new technology acceptance depends mainly on favourable conditions or surroundings, which significantly positively affect an individual's usage of information systems. The availability of resources to aid information system usage and adoption is considered an essential facilitating condition by Mubuke et al. (2017). Several literature have generally agreed that facilitating conditions significantly affect the intention to continue using information systems (Kamarozaman & Abdul Razak, 2021; Alraja, 2016).

In the context of e-filing, the resources may include accessibility to reliable internet, availability of mobile devices, and other related resources. Therefore, service availability and other related resources supporting the compliance process may

influence the Taxpayer's decision to use e-filling systems. Hence, the study's third hypothesis is proposed as:

**H3**: Facilitating conditions will positively affect the usage intention of electronic tax filing systems.

# 2.4. Taxpayers Behaviour

Mokhtar & Karim (2021) adopted the UTAUT model to examine the relationship between the five forecasters in the framework affecting students' behaviour when using the Google Classroom application for the learning process during the COVID-19 pandemic crisis. The study revealed that effort expectancy is a significant aspect of behavioural intention influence and social and performance expectancy. Furthermore, support and facilitating conditions provided by college lecturers and behavioural intention significantly influenced students' usage behaviour (Mokhtar & Karim, 2021).

Extensive last decade research has evidenced taxpayers' significant effect on behaviour and attitude of usage intention, both directly and indirectly through its perceived usefulness effect. For instance, Chan et al. (2000) uncovered that Hong Kong taxpayers need to be more tax-compliant. This is caused by Hong Kong taxpayers' low promising attitude on the electronic tax system. Moreover, Al-Debei et al. (2015) suggest that taxpayers will change their attitude and adopt electronic tax systems if they perceive it secure.

Behavioural variables such as values, social norms, and attitudes differ across countries and are considered relevant in tax compliance (Alm & Torgler, 2006). The inclination of a taxpayer to adhere to tax regulations is closely tied to behavioural standards, encompassing the individual Taxpayer's values and beliefs, as well as the societal norms prevailing in the broader community (Walsh, 2012). Therefore, the Taxpayer's behaviour is determined by norms, attitude, knowledge, and cultural background. Henceforth, this research puts forward the following fourth hypothesis:

**H4**: Taxpayers' behaviour will positively affect the intention to adopt electronic tax-filing systems.

#### 2.5. Perceived User Satisfaction

In predicting factors that affect students' behaviour when intending to use mobile learning tools, Chao (2019) found that behavioural intention is positively and significantly influenced by user satisfaction, trust, performance expectancy, and effort expectancy. Pozón-López, et al., (2021). state that user-perceived satisfaction and autonomous motivation strongly predict system use intention. Therefore, this research proposed the following hypothesis:

**H5**: Perceived user satisfaction will positively affect the intention to use electronic tax filing systems.

# 3. Research Methodology

The study has adopted a survey research design focusing on factors influencing taxpayers' intention to adopt an e-filing system in Tanzania. The study used primary data from questionnaires and analyzed using a Partial Least Square Structural Equation Model (PLS-SEM).

## 3.1. Study Area and Sampling Technique

This study focused on factors influencing taxpayers' intention to adopt the efiling system in Tanzania; for this purpose, the target population for the study is all business people who are subject to filing tax returns as per prescribed requirements of the Tanzania Tax Act. The study targets cities with active business activities. Thus, the main target area comprises Dar es Salaam, Dodoma, Mwanza, Mbeya, and Arusha. The sample was selected using random sampling whereby the individual taxpayers were chosen from public and private business establishments. Moreover, the sample comprises business people from various business categories such as manufacturing, retailing traders, wholesalers, education, construction, finance, clothing, and fashion.

#### 3.2. Data Collection

The quantitative data for this study were collected by using questionnaires. The questionnaires were designed to cover all of the construct's variables. They were designed with a closed question on a five-point Likert scale ranging from 1 = Strong Disagree to 5 = Strong Agree. Also, consideration was given to the choice of words due to the education level of the respondents. The questionnaire has been developed to include a total of 36 measurement items. The measurement items were adopted from past information systems, consumer behaviour, and economics. To ensure the validity of the contents of the questionnaire, the current study has followed Shrotryia and Dhana's (2019) recommendation by approaching experienced academicians and experts in technology and taxation research to validate the measurement items in each construct. They ensured that the questionnaires logically reflected what they were supposed to measure. Content validity is also recommended for improving scale items and resolving common bias issues (Tehseen Ramayah, & Sajilan, 2017; Rwehumbiza, 2021).

The questionnaires were distributed and retrieved from the respondents through online platforms (social networks, apps, and emails). 423 questionnaires were

distributed, and feedback from respondents was retrieved. Demographic Statistics of the respondent is presented in Table 1.

Table 1: Demographic Statistics of Respondent (N= 423)

Variable	Category	Frequency	(%)
Gender	Male	238	56.3
	Female	185	43.7
Age Range	18 years to 25	194	45.9
	26 years to 35	168	39.7
	36 years to 45	51	12.1
	46 years and above	10	2.4
Tax Payer Educational Level	Primary Level	6	1.4
	Secondary Level	65	15.4
	Certificate Level	26	6.1
	Diploma Level	81	19.1
	Bachelor	217	51.3
	Postgraduate Degree	14	3.3
	Masters Degree	13	3.1
	None	1	0.2
Size of the business (No. of employees)	1	163	38.5
, , ,	2-5	197	46.6
	6-10	45	10.6
	More than 10	18	4.3
Experience with tax returns	Yes	299	70.7
·	No	124	29.3

# 3.3. Analysis and Discussion of the Findings

Path analysis for the study was done by adopting a Partial Least Square Structural Equation Model (PLS-SEM). PLS-SEM is suitable for this study because it simultaneously evaluates multiple relationships among the variables (Jaya, Hermina, & Sunengsih, 2019; Mandari & Koloseni, 2022), helps to incorporate indirectly observable variables with indicator variables (Sarstedt, Ringle, & Hair, 2022), and accounts for item measurement errors which lead to more reliable findings (Jaya et al., 2019). The statistical analysis for this study was first conducted by the SPSS software version 22, which was used for data cleaning and screening. After that, the measurement model and structural model analysis were performed by using SmartPLS 3.0.

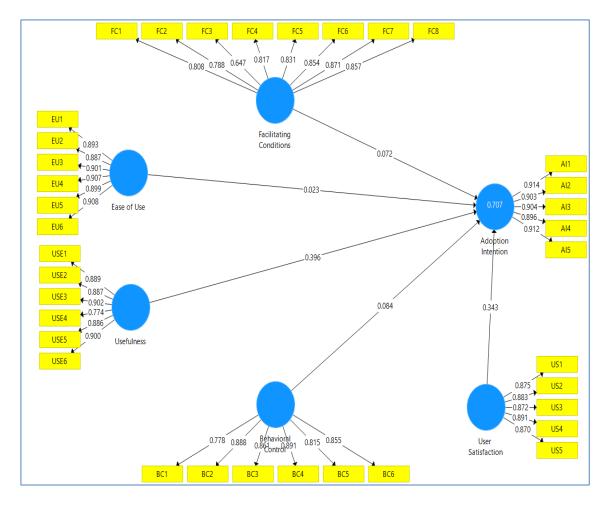
## 3.3.1. Reflective measurement model

All of the indicators in the measurement model were observed to be reflective. This study has met all the requirements based on the evaluation criteria suggested for

Inte	rnational Journal of Public Finance	
\	/ol. 9, No: 1, June 2024, pp. 17 – 38.	

26

accepting the reliability and validity of the PLS-SEM (Henseleret al., 2009; Henseler et al., 2015). Indicator reliability is presumed adequate when it has an outer indicator load of at least 0.4. Constructs with an outer load between 0.4 and 0.7 will be considered for deletion only if the removal increases its composite reliability and average AVE above the recommended threshold of 0.5 (Hair et al., 2016). As presented in Table 2 below, all original construct indicators have met the reliability and validity criteria. Reliability is measured by composite reliability and Cronbach Alpha rho\_a; the scores above 0.7 indicate the model has acceptable quality and reliable measurement items.



**NB:**FC = Facilitating Condition, EU=Ease of Use, USE = Usefulness, US=User Satisfaction, BC = Behavioral Control and AI = Adoption Intention

On the other hand, the model's convergent validity was examined using the average value extracted (AVE), and discriminant validity was evaluated using the heterotrait-monotrait ratio of correlation (HTMT) and Fornell-Larcker (1981). The construct is considered valid when it has AVE equal to or above 0.5. By scoring a value of 0.5 or higher, all of the study's constructs reflect convergent validity. Although the criteria for HTMT requires the construct to have a value of not more than 0.9 (Henseler

et al., 2009), the key criterion is to test whether it approaches 1.0 (Voorhees et al., 2016; Rwehumbiza, 2021). Table 3 shows that the maximum value of HTMT is 0.934, which is only for one construct; however, all of the remaining constructs have HTMT below 0.9. The criterion shows that all HTMT values are less than 1, implying that the independent and dependent constructs have discriminant validity. The study has also tested multicollinearity problems in models besides the validity and reliability. The results show that the value inflation factors (VIFs) have a maximum value of 4.1, implying no multicollinearity problem in the measurement model.

**Table 2: Measurement Model Evaluation Results** 

	Factor loadings, Fl	VIF	Cronbach' s Alpha, CA	Rho_A	Composite reliability, C.R.	Average Variance Extracted (AVE)
Al1	0.914	4.047	0.945	0.946	0.958	0.82
Al2	0.903	3.789				
Al3	0.904	3.534				
Al4	0.896	3.399				
AI5	0.912	3.840				
BC1	0.778	2.165	0.922	0.932	0.939	0.721
BC2	0.888	3.560				
BC3	0.861	2.980				
BC4	0.891	3.379				
BC5	0.815	2.324				
BC6	0.855	2.854				
EU1	0.893	3.743	0.953	0.953	0.962	0.808
EU2	0.887	3.571				
EU3	0.901	3.897				
EU4	0.907	4.099				
EU5	0.899	3.879				
EU6	0.908	4.033				
FC1	0.808	2.360	0.925	0.934	0.939	0.659
FC2	0.788	2.209				
FC3	0.647	1.663				
FC4	0.817	2.625				
FC5	0.831	2.452				
FC6	0.854	3.128				
FC7	0.871	3.315				

FC8	0.857	2.952				
US1	0.875	2.841	0.926	0.927	0.944	0.772
US2	0.883	2.904				
US3	0.872	2.748				
US4	0.891	3.157				
US5	0.870	2.747				
USE1	0.889	3.634	0.938	0.942	0.951	0.764
USE2	0.887	3.458				
USE3	0.902	3.949				
USE4	0.774	2.043				
USE5	0.886	3.442				
USE6	0.900	3.595				

Table 3: Heterotrait-Monotrait Ratio (HTMT) < 0.85.

	Al	ВС	EU	FC	USE	US
Al						
ВС	0.773					
EU	0.763	0.802				
FC	0.734	0.808	0.768			
USE	0.836	0.824	0.905	0.777		
US	0.827	0.848	0.766	0.793	0.801	

#### 3.3.2. Structural Model

After having the assurance of meeting all of the necessary conditions at an acceptable level, the structural model was then evaluated to test this study's proposed model hypotheses. The beta, t-values, and P-values were employed to confirm the hypothesis (Sarstedt et al., 2022). This study also examined the predictive relevance of the model by using the blindfold procedure. The results in Table 4 reveal that the model has a coefficient of determination (R²) of 71%, which implies that the percentage of variation accounted for by the endogenous variables is substantially high. In other words, the result of R² indicates that the perceived facilitating condition, ease of use, usefulness, user satisfaction, and behavioural control explain 71% of the total variation of data related to the average size of users' intention to adopt e-filling, while other variables elucidate the rest.

In predictive relevance, the results reveal the predictive relevance of the adoption intention of e-filling (Q2 = 0.54). Following Geisser (1974) and Mandari and

Koloseni (2022), the current study model indicates a good predictive relevance since it has Q2 higher than Zero.

**Table 4: Coefficient of Determination and Predictive relevance** 

	R <sup>2</sup>	Q2
Adoption Intention	0.714	0.54

# 3.3.3. Structural Model Significance Testing Results

Table 5 shows the hypothesis testing results for the correlation between dependent and independent variables. Hypothesis 1 explains the relationship of perceived behaviour control to the adoption intention of e-filling; Hypothesis 2 explains the relationship of perceived ease of use to the adoption intention of e-filling; Hypothesis 3 explains the relationship of perceived facilitating conditions to the adoption intention of e-filling; Hypothesis 4 explains the relationship of perceived usefulness to the adoption intention of e-filling; and Hypothesis 5 explains the relationship of perceived user satisfaction to the adoption intention of e-filling; The results show that perceived usefulness significantly influences users' intention to adopt e-filling [ $\beta$  = 0.396, p < 0.000]. This supports Hypothesis 4. Similarly, bootstrapping analysis confirms user satisfaction's significant, positive influence on users' intention to adopt e-filling [ $\beta$  = 0.343, p < 0.000]. This supports Hypothesis 5.

Although the previous studies documented a positive relationship between behaviour control, ease of use, facilitating conditions, and users' adoption intention of e-filling (Zamzami & Putra, 2019; Moorthy et al., 2014), their relationships are not statistically significant in this study, leading to the rejection of Hypotheses 1, 2, and 3.

Table 5: Results of the Hypotheses Testing: Direct Relationship

Hypothesis	Contracts	Path Coefficient	T-Statistics	P-Values	Significance
H1	BC -> AI	0.084	0.947	0.172	Not Supported
H2	EU -> AI	0.023	0.331	0.370	Not Supported
H3	FC -> AI	0.072	0.979	0.164	Not Supported
H4	USE -> AI	0.396	4.886	0.000	Supported
H5	US-> AI	0.343	4.041	0.000	Supported

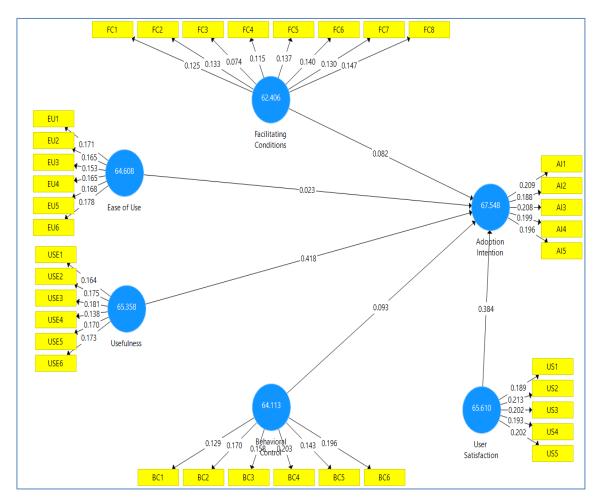
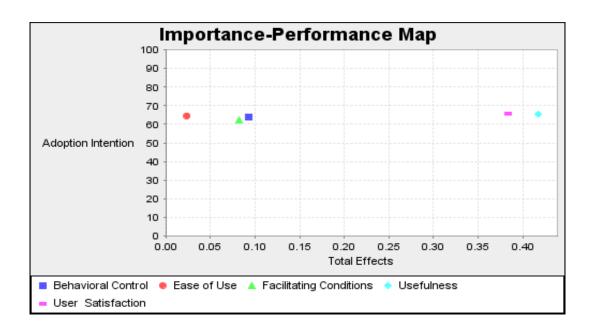


Figure 2: BootStrapping

## 3.3.4. Importance-Performance Map Analysis (IPMA)

The importance-performance analysis provides a better interpretation of PLS results and further assessment thereof. The analysis reveals weaknesses that should be resolved for improved performance on the adoption intention of e-filling. Action must be e taken on the independent variables with relatively high performance (or high path coefficients to extend the level of performance of dependent variables (adoption intention of e-filling). Figure 2 shows each independent latent variable's performance level and its impact on the adoption intention of e-filling. Figure 2 shows that perceived usefulness followed by user satisfaction is highly relevant to users' intention to adopt e-filling due to their significant influence. Therefore, it is essential for the Tanzania government, especially the Tanzania Revenue Authority (TRA), to invest efforts in maintaining and increasing the performance of these two constructs.



#### 4. Conclusion and Recommendations

#### 4.1. Conclusion

Recently, Tanzania has introduced an e-filling system in an attempt to ease the whole process of submitting tax returns. The new system was introduced to ease the whole process of tax collections from taxpayers to tax authorities. The essence is to increase tax compliance and expand the tax base. While the system is expected to make a conducive environment for taxpayers to comply with their tax obligations, the response rate is still low. Many taxpayers are still using manual systems to file returns. Based on the study's findings, the problem of low response is caused by many factors, including lack of awareness, unreliable access to the internet, several system breakdowns, and inadequate training on how to use the system.

However, the study reveals that taxpayers acknowledge the system's advantages. Also, their intention to adopt the system is highly influenced by its usefulness and user satisfaction. Therefore, the system developers are advised to increase training and awareness programs for users and improve the system's usefulness to ensure reliable accessibility of the system.

#### 4.2. Recommendations

Past literature has shown the importance of evaluation of technology acceptance levels of users to enhance the chances of variety of new technology implementation and further implementation efforts (Baskan Ozgen & Turan, 2007). Similarly, this study provides numerous important implications for building and promoting effective electronic government services in general. Based on the study findings, TRA should pay

more attention to improving employee support on e-system usage, which has been shown to influence people's behavioural intention to adopt the e-filling system in Tanzania. The following provides some insightful recommendations for electronic government implementation based on the findings of this research; the following strategies are recommended:

First and foremost, the Government should develop computer literacy among Tanzanians by focusing on lessening the digital divide. Specifically, TRA needs to formulate training promoting universal e-learning for taxpayers on electronic government usage. Secondly, costs related to ICT usage need to be revised so they can be affordable to most SMEs.

## 4.3. Study Limitations

The study was constrained by resource availability to allow a broader geographical coverage. In order to address these constraints and all expected risks, the study used a survey study with a random sampling technique within the major Tanzanian cities. The study also used formal organizations using the e-file system for tax returns.

## 4.4. Suggestion for Further Studies

A structured questionnaire was used to ensure a large sample of SMEs were involved in the study. However, another study on the same topic can be done using interviews to give room to a profound understanding of issues and attitudes of e-filing to taxpayers. Furthermore, further studies can directed towards informal sectors to examine their knowledge, attitude, and behaviour towards e-filling. Moreover, a comparative study can be done to explore the attitude and knowledge of public and private formal organizations towards e-filling.

## 4.5. Policy Contributions

Most SMEs still need to learn about electronic tax filing systems' role and practical usage. Accordingly, the critical role of policies such as the Income Tax Act, Cap. 332 R.E., 2019, Tanzania Development Vision 2025, and the National Strategy for Growth and Reduction of Poverty I & II should focus on streamlining innovation adoption in formalizing and operating local SMEs. This should be spearheaded with knowledge of identifying the effect of user acceptance and adopting tax-filing electronically. An assessment of such variables have been presented in this study and can, therefore, open a room for depicting taxpayers' decision on the usage and adoption of electronic tax-filing systems.

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#### **Author Contributions:**

Hawa Munisi - Idea, Purpose, Planning and Design, Literature and Citation, Method, Data Collection, Data Analysis and Discussion, Writing and Format, Final Approval and Responsibility, Overall Contribution - 40%.

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