PERCEIVED USEFULNESS, EASE OF USE, USER'S EXPERTISE AND E-TAX SYSTEM ADOPTION IN UGANDA

A STUDY OF SMALL AND MEDIUM ENTERPRISES IN NAKAWA DIVISION, KAMPALA DISTRICT-UGANDA

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DECLARATION

I Vincent Nsibambi, declare that the work herein is presented in its original form and has not been submitted to any other university or institution for any academic award for examination.

Sign……

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APPROVAL

This work has been done under our supervision and has met the research requirements of Kyambogo University and is now ready for submission.

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Date……

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May the Almighty God Bless You All.

DEDICATION

I dedicate this work to God the Almighty and to my future wife to be and children that God will bless me with.

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LIST OF ABBREVIATIONS

SMEs	Small and Medium Enterprises
URA	Uganda Revenue Authority
e-TAX	Electronic tax
PWC	Price Water Coopers
e-GOVERNMENT	Electronic Government
ICT	Information Communication Technology
ASCD	Automated System for Customs Data
iTax	Integrated Taxation
OECD	Organization for Economic Co-operation and Development
SPSS	Statistical Package for Social Sciences
SMS	Short Message Service
VIF	Variance Inflation Factor

ABSTRACT

The study examined the effect of perceived usefulness, perceived ease of use and user's expertise on e-tax system adoption by SMEs in Nakawa division. The study specifically, examined the effect of perceived usefulness on e-tax system adoption, assessed the effect of perceived ease of use on e-tax system adoption and the effect of the moderating factor of user's expertise on the relationship between usefulness and ease of use of e-tax system adoption. A Technology Acceptance Model was used as the conceptual basis for this investigation. A cross-sectional study design was utilized in the study, where the study population comprised of SMEs in Nakawa division. Purposive sampling design was used to obtain a sample size of 132 SME s but only 90 SMEs were included in the study for the quantitative data. For qualitative simple random sampling design was utilized. All the relationships that is, between perceived usefulness, perceived ease of use, user's expertise, and e-tax system adoption were tested and found to be significant and positive except for user's expertise that had a negative relationship. Regression analysis revealed that perceived usefulness was a strong predictor of e-tax system adoption as compared to perceived ease of use. The results revealed that perceived usefulness was the most significant determinant of e-tax system adoption (Beta= 0.374, sig=0.000). Perceived ease of use was also significant (Beta= 0.258, sig= 0.010). However, the moderating factor of user's expertise was not significant in influencing the e-tax system adoption (Beta=0.035, sig= 0.725). The findings of the study revealed that a system will be adopted if it is regarded as useful, easy to use irrespective of having the expertise in using the system, provided that the use of the system is perceived to offer direct benefits to the user. It should be eminent therefore, that factors which influence technology vary. That is to say, what influences technology acceptance in one region or organization may not necessarily be the same in all cases. Therefore, the e-tax system designers and developers should enhance perceived usefulness either by adding new functional capabilities to the system, or by making it easier. This is to increase on the frequency of usage and rate of adoption of e-tax system.

CHAPTER ONE

INTRODUCTION

1.1 Introduction

In Uganda, Small and Medium-sized Enterprises (SMEs) are becoming more important to national economy due to their strategic significance in developing different industrial sectors country wide (Maad & Liedholm, 2008). However, one of the most important strategies that can effectively help SMEs to enhance their income tax payments is the use of e-tax system (Pant, Stiner, & Wagner, 2011).

The Government of Uganda introduced e-tax system in 2009 to help SMEs to enable them file taxes online. As it is a significant application that automates tax related processes in an attempt to increase effectiveness in assessing and collecting tax information (FU et al., 2006). By using e-tax, SMEs can improve accuracy and efficiency over Paper-Based Filing, lower costs, and faster refunds (Pant et al., 2011). And at a similar time, URA can reduce the costs of manual data entry and processing, eliminate human errors, and reduce the turnaround time for processing income tax return (Hu et al., 2009).

However, notwithstanding these benefits of the e-tax service and the advancement by the government of Uganda and the tax authorities to get more citizens to use the e-tax service, there are also several taxpayers who are reluctant to give up the old-style mode to pay their tax.

This introductory chapter discusses the background, the statement of the problem, purpose of the study, the specific objectives of the study and research hypotheses of the study, conceptual framework the significance of the study, justification of the study and scope of the study.

1.2 Background to the study

The background to the study is presented below under four perspectives; historical background, theoretical background, conceptual background and contextual background.

1.2.1 Historical background

The evolution of Information and Communication Technology (ICT) has resulted in a wide transformation towards automating business processes in all fields (Macnish & KNJ, 2012). Organizations in the 21st century adopted ICT to transform manual processes into Automated Processes in order to reduce costs, increase revenues and improve performance (Macnish & KNJ, 2012).

Electronic taxation refers to trans-organizational processes with data transfer between the IT systems of the professionals and those of the tax authorities. According to Australian National Audit Office (2015), E-taxation was first initiated in 1986 in the U.S.A. According to the World Bank Annual Report (2013), 66 economies had fully implemented electronic filing for payment of taxes as at 2010. In 83% of the examined countries, taxpayers are able to complete at least one phase of their tax compliance process electronically. In 2014, above 24 countries introduced modifications that made it easier or less costly for firms to file returns and pay taxes. The most shared feature of tax modifications globally was the insertion or enhancement of electronic filing system.

Governments world-wide, have invested heavily in electronic systems for the past two decades. Electronic tax system is one of e-Government applications that assist the Government in lessening corruption, promote transparency and accountability, and save significant costs in the process (Fischer, Smith, & Valk, 2012).

Electronic tax system is considered an e-Government service steering citizens (based on a Government to citizen environment, G2C) or businesses (based on a Government to business environment, G2B). Such system allows taxpayers to file, conduct, and redeem their tax payments using ICTs or the Internet services (Wasao, 2014). However, these benefits can only be reaped if the citizens adopt the e-Government initiatives that are intended for them (Margetts, 2012).

In Africa, for example in Australia, electronic tax-filing was initiated in 1987 within its transformation programme. By 1993, Canadian taxpayers launched electronic filling of tax returns through the e-filing, Malaysia, Netherlands & Uganda all commenced electronic payment of tax to their taxpayers. In March 2013, Egypt launched electronic payment of tax for its taxpayers, to keep pace with the international trade towards automated payments systems, especially for Government services (Barati , Moradi, Ahmadi, & Azizpour, 2014).

Basing on the above, active involvement of Government as well as citizens is an essential factor to the success of e-tax systems (Muhammad et al., 2016). On the other hand, e-tax systems are critical because they support countries based on tax revenue from citizens and businesses (Barati et al., 2014). With the rapid development in information and communication technology that the world regenerates to experience, the operation of the tax collection and administration system continues to be an experiment for many authorities. As a result, tax authorities are increasingly being opposed to maintain an efficient and responsive tax administration system so as to facilitate faster collection of taxes which is user friendly and also cost effective.

In Africa, Nigeria for instance modernized its tax administration services in the period between 2004 and 2013. The online system was known as Integrated Tax Administration

System (ITAS). The system was launched in 2013; its main purpose was to use technology to improve tax compliance with automation of all core processes of tax administration (World Bank, 2013).

The East Africa region was not left behind; Uganda and Tanzania were early reformers of their revenue administration systems in the Eastern Africa Region. Muwonge (2011) reports that in Uganda, the Uganda Revenue Authority (URA) in 2008 developed an online tax system called e-tax. He further comments that the purpose of the online tax system was to enable efficiency in the tax administration process as well as decrease the taxpayer's expenses in tax compliance.

1.2.2 Theoretical background

This study was guided by the Technology Acceptance Model theory which was developed by Davis (1989). He advances that an individual's intention towards using a system is mutually determined by perceived usefulness, the user's "subjective possibility that using a specific application system will increase his or her intention to use." Perceived ease of use, ''is the degree to which the user expects the target system to be free of effort" (Davis et al., p.217).

Davis (1989) further observed that perceived ease of use influences a person's intention to adopt the system and it also influences the person's perceived usefulness of the system. When a system is perceived as easy to use and interact with, the person will find it useful and will increase his intention to adopt the system. Accordingly, the perceived ease of use also has a direct effect on perceived usefulness (Suhani & Radiah, 2010).

In line with this view, it therefore anticipated that an increase in the user's intention to use E-tax system, the system must rise the performance of the taxpayer. That is, one can submit tax returns more efficiently and effectively as compared to conventional system and also it must

be easy to use and easy to understand (Chuttur, 2009). As a result, it is expected that the higher the degree of perceived ease of use, the higher the degree of perceived usefulness and the user's intention to use the system (Suhani & Radiah, 2010).

Paul and John (2003) suggested that Technology Acceptance Model is a useful model but has to be incorporated into a broader one which would include variables related to both human and social factors. Technology Acceptance Model might be helpful within and across organizations for assessing applications or technologies, or to make comparisons between user groups or applications.

Technology Acceptance Model was regarded as the most noticeable model in this study as it includes factors which are specific, simple, easy to understand and can be influenced through system design and implementation (Wangpipatwong, Papasratorm, & Chutimaskul, 2008).

1.2.3 Conceptual background

Davis (1989) states that perceived usefulness is the degree to which a person believes that using a particular system would enhance his or her job performance. According to Davis (1989), perceived usefulness has stronger impact on intention to use IT system as compared to perceived ease of use.

Davis (1989) states that perceived ease of use is the degree to which a person believes that using a particular system would be free of effort. Studies proved that perceived ease of use has a significant impact on perceived usefulness (Anuar & Radiah, 2010; Azmi, et al., 2012; Hikmet & Bhattacherjee, 2008). To sum up if we want to increase the user's intention to use e-tax system, the system must be easy to use and easy to understand.

User's expertise is the possession of all the knowledge and experience about using the computer systems and software products by the user (Ce`cille & L, 2008). This includes

functionality and technical processes. An expert user knows all the underlying basic concepts and the majority of the generalized objects contained in the data base for a particular system.

Warkentin and Mutchler (2014) stated that, adoption is the intention of citizens to involve in e-Government to receive information and request services from the Government. The adoption and usage of online Government services has a special implication for developing countries. Electronic tax system is referred to as the transmission of tax information directly to the tax administration using the Internet (Edwards & Dowe, 2010). Electronic tax system is one of e-Government applications that support the Government in decreasing corruption, ensure transparency and accountability, and save substantial costs in the process (Azmi & Kamarulzaman, 2014). The e-tax system makes an applicable impact towards improving the level of income generation and tax compliance by the taxpayers. This is because of its convenience, time saving, cost effectiveness from both the tax administrators and the taxpayers (Azmi et al., 2012).

The study also proposed the e-tax adoption model, which is derived from the technology acceptance model by Davis (1989). Technology Acceptance Model is extensively used and recognized to explain the relationship between perceptions and the use of technology. According to Davis (1989), the two main constructs that influence adoption are; perceived usefulness and perceived ease of use.

1.2.4 Contextual background

In Uganda, e-tax was adopted and implemented in June 2009; at least Ug shs. 7 trillion worth of revenue resulting from 1.4 million payments has been receipted through electronic tax payments. This revenue is a result of over 360,000 tax returns that have been received online (Muwonge, 2011).

The web-based application was advanced to automate Uganda Revenue Authority's services. This was to enable tax payers to access domestic revenue services such as registration, returns, payments and objections, and appeals through the internet daily from any part of the world. In 2011, e-tax was connected to the customs' Automated System for Customs Data to further ease transactions.

In Uganda, Uganda Revenue Authority (URA) was established in 1991 and charged with evaluating and collecting tax revenue quantified, implementing the laws regarding the collection of taxes and accounting for the revenue collected to the central organization (Zarei et al., 2008). The revenue department has improved its tax collection by operating an integrated tax administration system that offers 24-hour online services to tax payers (Azmi & Kamarulzaman, 2014). URA's online system has achieved and from which all revenues are collected. For example, in the financial year 2017/18 URA recorded 4,417,245 transactions and shs. 6 trillion was collected, this accounts for 75% of URA collections (National Budget, 2018).

Electronic tax payment initiatives like e-billing machines and mobile tax filing systems ease tax payment and save time compared to the old way of filing tax returns where tax payers had to spend hours lining up at banks or URA offices.

Still URA has also implemented an Electronic Cargo Tracking Software that is aimed at helping customs officials and stakeholders have real time information about the movement, location and any other developments on cargo under customs control (National Budget, 2018).

URA has now signed a contract with MTN Uganda in order to allow tax payments using mobile money services. This will permit tax payers to use mobile money for clearance of taxes and other non-tax revenue like driving permits, passport fees, government tender fees

and court fines among others (National Budget, PWC, 2017/2018). URA is also transforming into client-centric organization. MTN Uganda currently has about 8.7 million mobile subscribers that URA can tap and the platform facilitates payment of utility bills and pay TV (National Budget, PWC, 2017/2018).

The study basically focused on Nakawa division being one of the major divisions in Kampala district with most of manufacturing enterprises. These enterprises in Nakawa division represented the entire SMEs in Uganda with similar characteristics and operations.

1.3 Statement of the problem

In Uganda, the Government introduced e-tax system with the hope of helping SMEs and taxpayers to file, conduct, and redeem their tax payments using ICTs or the Internet services easily than carrying blocks of cash to the banks. Nonetheless, evidence indicates that the rate of e-tax adoption is still below the targeted number of registered taxpayers operating the e-tax system (Uganda Revenue Authority, 2017/18).

In fact, the statistics from URA indicate that the number of registered taxpayers that are currently using the system continue to remain below the expected target. Specifically, there are only 87,463 taxpayers using the system yet the targeted number is 127,421 taxpayers (Uganda Revenue Authority, 2017/18). It is also noted that even for the SMEs that are attempting to adopt the e-tax system, don't use the system themselves. They instead hire external support or delegate other people to use the system on their behalf at a cost.

However, the system was designed to simplify transaction and reduce costs of making payments (Uganda Revenue Authority, 2017/18).

1.4 General objective

The general objective of the study was to investigate the effect of perceived usefulness, ease of use and the moderating effect of user's expertise on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

1.5 Specific objectives

i) To assess the effect of Perceived usefulness on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

ii) To establish the effect of Perceived ease of use on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

iii) To analyze the effect of the Moderating factor of User's expertise on the relationship between Perceived usefulness and Ease of use on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

1.6 Research hypotheses

H_{01}: There is no significant influence of Perceived usefulness on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

H_{02}: There is no significant influence of Perceived ease of use on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

H_{03}: There is no significant influence of the moderating factor of User's expertise on the relationship between Perceived usefulness and Perceived ease of use on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.

1.7 Scope of the study

The scope of the study includes; the Subject scope, Geographical scope and Time scope.

1.7.1 Subject scope

The study aimed at investigating the effect of perceived usefulness, ease of use and moderating effect of user's expertise on adoption of e-tax system by Small and Medium Enterprises in Nakawa Division, Kampala District – Uganda. The study specifically examined the effect of perceived usefulness on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda, assessed the effect of perceived ease of use on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda, analyzed the effect of the moderating factor of User's expertise on the relationship between Perceived usefulness and ease of use on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda. The subject scope was chosen because perceived usefulness and perceived ease of use are major antecedents for adoption of e-tax system. Therefore, the study sought to carry out a deeper understanding of the concepts.

1.7.2 Geographical scope

The geographical scope of the study was the SMEs in Nakawa Division, Kampala District – Uganda. Nakawa Division was chosen as the area of study because it is one of the major divisions in Kampala district with many SMEs. According to the Uganda Revenue Authority (2017/18), the number of registered SMEs under e-tax system is 522 enterprises in Nakawa division. Nakawa Division lies in the Eastern part of the city, bordering Kira Town to the East, Wakiso District to the North, Kawempe Division to the North-West, Kampala Central Division to the West, Makindye Division across Murchison Bay to the South-West and Lake Victoria to the South.

1.7.3 Time scope

The study covered a period of ten years that is from 2009 to 2019. The ten years were chosen in order to take a critical analysis of the data and related literature concerning e-tax adoption

for SMEs in Uganda. 2009 was chosen because it was during that year that e-tax system was initiated in Uganda. This implies that during many SMEs should have adopted the e-tax system of filing their tax returns. The study scope has been six months that is from January to June 30th 2019 when the research dissertations were expected to be submitted.

1.8 Significance of the study

Research findings of this nature are expected to be important to Developing nations like Uganda that have not fully embraced e-tax adoption in their operations, help in identifying the essence of perceived usefulness and ease of use on e-tax adoption system and also serve as a basis for future research by providing information on e-tax adoption in Uganda.

In highlighting the benefits, the taxpayers in Nakawa Division enjoy as well as the challenges that they face while using the e-tax system, which is leading to slow rate of adoption of the system and in the long run taxpayers failing to submit their returns and tax dues. Therefore, the study seeks to offer recommendations that will enable URA in putting in place strategies to enhance adoption of the system by the taxpayers.

The study expected to operate as a useful parameter for strategies development in fostering e-Government services; the research is to be useful to tax authorities in URA because it identifies the taxpayers' perceptions about the e-tax adoption system which could be a useful guide to the service providers in their strategic development or improvement of their e-tax system. The research findings are to help the clearing agents under the customs department in URA to ease the filing process of taxes that are to be paid and computed easily for assessment purposes.

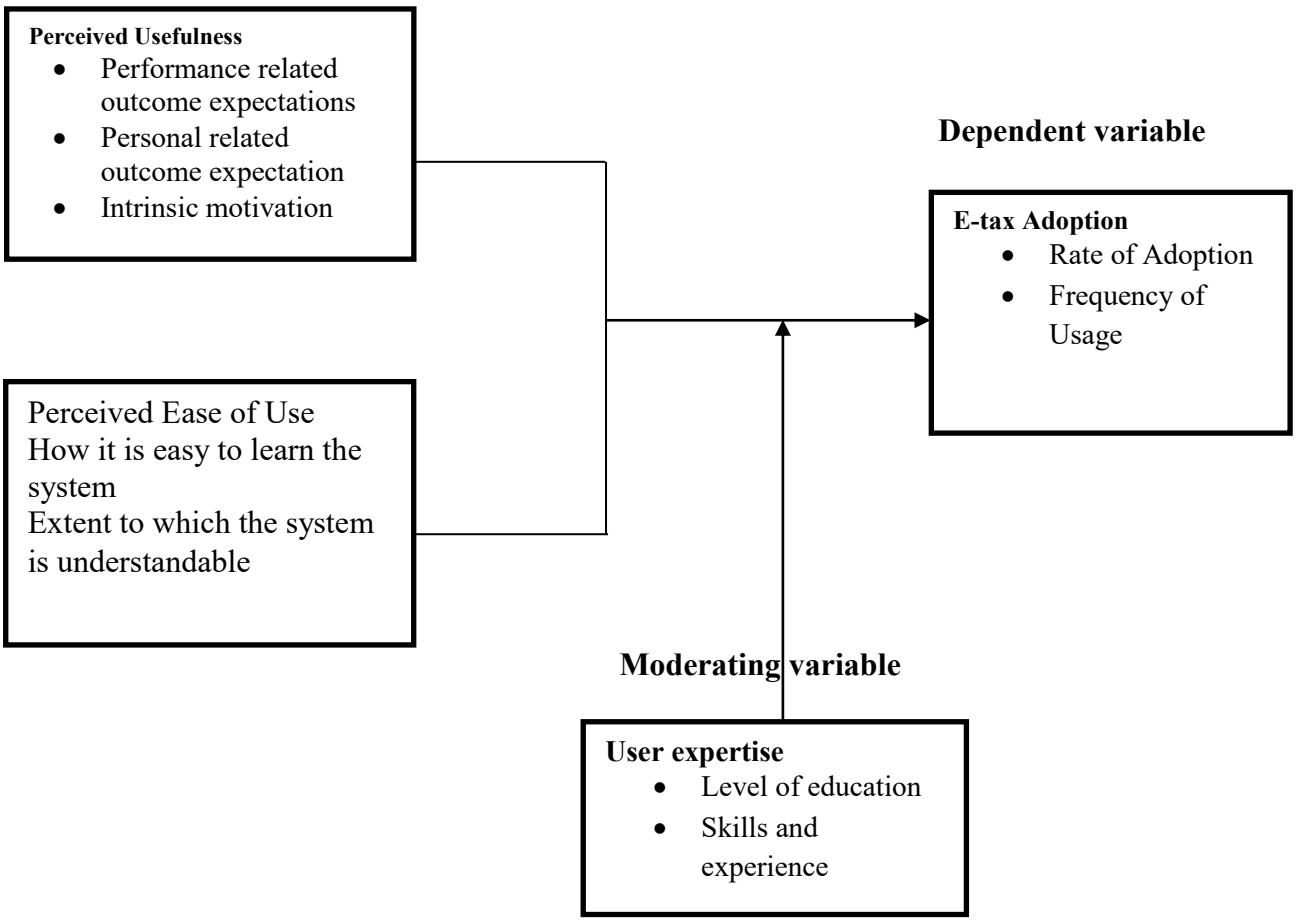
The study findings hope to assist students in appreciating the impact of e-tax systems in developing nations and in particular Uganda.

The study seeks to contribute towards sealing the gap that is in existence with regard to adoption of e-tax systems and also to highlight issues of interest that need further redress by future researcher.

1.9 Conceptual framework

Figure 1 below, gives the anticipated influence between the different aspects of perceived usefulness and ease of use of interest in the study and e-tax adoption.

Independent variables



Source: Based on earlier works of Vivian (2013), Mahatanonkoon (2015) and Murigu (2017) and modified by the researcher (2019).

Figure 1: Conceptual framework

The conceptual framework as illustrated above in figure one, is a diagrammatic representation of the variables that influence adoption and use of e-tax system.

This study focused on perceived usefulness and ease of use to explain the adoption of e-tax system by SMEs in Nakawa Division.

Perceived usefulness in the study was conceptualized along the dimensions of performance related outcome expectations, personal related outcome expectations and intrinsic motivation (Saade, 2007). Perceived ease of use was conceptualized along dimensions of how it is easy to learn the system and the extent to which the system is understandable.

Building on earlier studies on perceived usefulness, performance related outcome expectation was measured with two aspects; results, actions and behaviors. Personal related outcome expectation was measured by; anxiety and continued usage (Kim et al., 2007). Intrinsic motivation was measured by; interest, excitement, enhanced performance, persistence and confidence. The study of the role of user's expertise was measured using the level of education, skills and experience.

E-tax adoption has been delineated with rate of adoption and frequency of e-tax system usage. In relation to the above the Technology Acceptance theory postulates that user's adoption of a new data system is determined by their intention to use the system, which in turn is determined by their beliefs about the system (Wang, 2007). Still when a person perceives that using a system will boost their job performance; this has a direct influence on the intention to adopt the system (Davis, 1989). Still the moderating factor of user's expertise has been incorporated because as the users are willing to adopt the new system they need to have the relevant skills and expertise in using the system.

1.10 Operational Definitions of key terms

For this study the definitions of key terms are explained as follows:

A Micro Enterprise is defined as an enterprise employing maximum 4 people; annual sales/revenue turnover of maximum Ugandan Shillings 12 million and total assets of maximum Ugandan Shillings 12 million.

A Small Enterprise is defined as an enterprise employing maximum 50 people; annual sales/revenue turnover of maximum Ugandan Shillings 360 million and total assets of maximum Ugandan Shillings 360 million.

A Medium Enterprise is defined as an enterprise employing more than 50 people; annual sales/revenue turnover of more than Ugandan Shillings 360 million and total assets of more than Ugandan Shillings 360 million.

Warkentin et al. (2002) described adoption as the intention of citizens to engage in e-Government to receive information and request services from the Government.

E-tax system is referred to as the transmission of tax information directly to the tax administration using the Internet (Edwards & Dowe, 2010).

User's expertise is defined as possessing all the knowledge and experience about using the computer systems and software products by the user (Ce`cille & L, 2008).

Davis (1989) defined perceived ease of use as, the degree to which a person believes that using a particular system would be free of effort.

Davis (1989) defined perceived usefulness as, the degree to which a person believes that using a particular system would enhance his or her job performance.

1.10 Conclusion

This chapter provided an overview of the research area; it outlined the problem statement, conceptual frame work, general objective, as well as the specific objectives that the study aims to achieve. Chapter two reviews literature and published material on perceived usefulness, ease of use and user's expertise on adoption of e-tax system as guided by the general and specific objectives of the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section presents an analysis of the literature related to the study concepts and the research objectives. The literature in this study has been reviewed by putting into consideration works that have been done by other scholars regarding the variables in the study that is, perceived usefulness and ease of use on adoption of e-tax system and the underlying gaps in the literature that the study intends to fill are specified.

2.2 Theoretical Review

The theoretical background of the study has been embedded in the learning literature. To investigate the effect of perceived usefulness and ease of use on adoption of e-tax system in Uganda, the Technological Acceptance Model theory will be adopted.

2.2.1 The Technology Acceptance Model Theory

The Technology Acceptance Model (Davis et al., 1989) was developed in light of concerns that workers were not using ITs made available to them. It is based on the theory of reasoned action (Fishbein & Ajzen, 1975), a social behavioral theory useful for understanding a variety of behaviors. Their argument was that the central key to increase use was to first increase acceptance of Information Technology, evaluated by asking individuals about their future intentions to use Information Technology. Knowing the factors that molded one's intentions would allow organizations to influence those factors in order to promote acceptance, and thus increase adoption of e-tax system. The Technology Acceptance Model (Davis et al., 1989) has two major constructs of perceived usefulness and perceived ease of use.

Perceived usefulness is the degree to which a person believes that using a particular system would increase his or her job performance and perceived ease of use as the degree to which a person believes that using a particular system would be free of effort. Technology Acceptance Model shows that users' adoption of any new information system is determined by the users' intention to use that system, which is in turn determined by the users' beliefs about the system (Chuttur, 2009).

Technology Acceptance Model has been examined empirically in different parts of the world. This yields statistically dependable results and it has demonstrated to be one of the best reliable and easy models of explaining individual's intention of adoption of e-tax system (Moon, 2002). Technology Acceptance Model has been used by many researchers especially in information system to achieve a better understanding of Information Technology adoption and its success in organization. Technology Acceptance Model has proven to be a strong and robust framework to clarify adoption pattern of users (Horton et al., 2001).

Many studies have utilized the Technology Acceptance Model to explore individual behaviors toward the acceptance of e-tax system (Tarhini et al., 2015). Cakmak et al. (2011) analyzed the acceptance of tax office automation system between 185 tax officials in the city of Zonguldak in Turkey. In their research, they used the Technology Acceptance Model to assess the acceptance of tax office automation system. Results reveal that perceived usefulness and ease of use are significant predictors of employees' intention to use the tax office automation system.

The perception of the intended user towards information technology predicts the user's acceptance and intention to adopt the information technology. This is in connection with the principles pronounced in the Technology Acceptance Model theory.

It further discusses the perceptions of the intended users of the technology and how their perceptions impact their adoption of the technology. The Technology Acceptance Model theory was developed by Fred Davis in 1989 as a model that explains and predicts user acceptance of information (Thong et al., 2002).

In connection with the above, Moorthy et al. (2014) still examined a sample of 116 academic staff from three public departments and two private businesses of higher learning in Perak State in Malaysia to evaluate Malaysia Inland Revenue Board adoption intention. In their research, they utilized the Technology Acceptance Model to assess the acceptance of the electronic system. The study concluded that perceived ease of use and perceived usefulness are all related to the system intention to use. In this study, we will utilize the two major constructs of Technology Acceptance Model to assess the effect on adoption of e-tax in SMEs' in Nakawa Division.

2.3 Conceptual Review

The conceptual review describes a clear understanding of the concepts that are used in the study. This includes; understanding of perceived usefulness, perceived ease of use, user's expertise and adoption of e-tax system as explained below.

2.3.1 Perceived Usefulness

Perceived usefulness was defined by Davis (1989) as the extent to which a person believes that using the system will enhance his or her job performance. Davis further asserted that perceived usefulness has a direct influence on the intention to adopt a system as once the person becomes aware of the valuable functions the system possesses; they are more likely to adopt it. In the context of e-tax area, perceived usefulness is the extent to which taxpayers believe that using e-tax system would be useful for their enterprises, saves their time, and increases their performance (Doll et al., 1998).

2.3.2 Perceived Ease of Use

Davis (1989) defined perceived ease of use as, the degree to which a person believes that using a particular system would be free of effort. In the context of e-tax area, perceived ease of use is the extent to which taxpayers believe that using e-tax system is not challenging and easy to interact with, and allows taxpayers to accomplish their job in a little mental effort (Chau & Hu, 2007).

Studies showed that perceived ease of use has a substantial impact on perceived usefulness (Anuar and Othman, 2010; Azmi et al., 2012; Bhattacherjee and Hikmet, 2008). To sum up if we want to increase the user's intention to use e-tax system, the system must be easy to use and easy to understand.

Davis further observed that perceived ease of use influences a person's intention to adopt the system and it also influences the person's perceived usefulness of the system. When a system is perceived as easy to use and interact with, the person will find it useful and will increase his intention to adopt the system. Davis (1989) emphasized that perceived usefulness and perceived ease of use are individuals' subjective appraisal of performance and effort respectively; hence they are not necessarily objective.

Davis however believed that though these are just human beliefs, they are meaningful variables indicating behavioral determinants of adoption of an information system. Even studies proved that perceived ease of use is an antecedent of perceived usefulness (Azmi et al., 2012).

According to these studies to raise IT system user's intention, organizations should emphasize on perceived usefulness instead of perceived ease of use because according to these studies users prefer those IT systems that directly raise their job performance.

To sum up if we desire to increase the user's intention to use e-tax system, the system should increase the performance of the taxpayer. Taxpayers can now submit tax returns more efficiently and effectively as compared to conventional system.

2.3.4 User's Expertise

User's expertise is defined as possessing all the knowledge and experience about using the computer systems and software products by the user (Ce`cille & L, 2008). This includes functionality and technical processes. An expert user knows all the underlying basic concepts and the mainstream of the generalized objects contained in the data base for a particular system. Given an object that is new but similar to a known one, such a user has enough domain knowledge to infer how the palls of this new object work together to perform a function.

A naive user is one who does not know about specific objects in the data base, and does not necessarily understand the underlying basic concepts. A user is not necessarily naive or expert, however. For example, a user may know about several items in the data base. In this work, instead of rating the user as having some intermediate level of domain knowledge, we use explicit parameters to indicate the user's knowledge (Ce`cille & L, 2008).

2.3.5 Adoption of E-tax system

Warkentin et al. (2002) described adoption as the intention of citizens to involve in e-Government to receive information and request services from the Government. Therefore, adoption means the transfer (conversion) between an old system and a target system in an organization (or more broadly, by anyone). If a company works with an old software system, it might need to use a new system which is more effective, has more work capacity, etc. So, then a new system desires to be adopted, after which it can be used by users. The adoption and usage of online Government services has a special implication for developing countries.

The adoption of ICT and e-tax offer organizations more efficient resource management as well as making SMEs' file their tax returns faster (OECD 2012, 2012) Moreover, there are barriers for SMEs' adopting e-tax such as cost, size and skilled labour (Middleton & C, 2011).

This study focused on SMEs' and the fields of manufacturing services and retail. In addition, findings on e-tax adoption remain rare and few studies have focused on SMEs e-tax adoption. Therefore, this research needs to be carried out. The factors for e-tax adoption rate are awareness, accessibility, training, user support, local language, trust, attitudes and benefits. These requirements are added as external independent variables to perceived usefulness and are used to provide an extended model for adoption of e-tax in Uganda. It is hoped that once adopted and applied in Uganda the adoption rates of e-tax system will increase (Carter & Be`Langer, 2005).

Maiga and Asianzu (2014) in their study a consumer based model for adoption of e-tax services in Uganda, it was discussed that the benefits of e-tax services are connected to its adoption and usage thus e-tax adoption rates in developing countries remain low and so its benefits are not fully utilized.

2.4 Perceived Usefulness and Adoption of E-tax System

Several studies have been documented by different scholars to explore the effect usefulness on adoption e-tax system and conclusions have been drawn as they are explained below.

Santhanamery and Ramayah (2015) in their study the Mediating Effect of Perceived Usefulness towards Tax Service Quality and the continuance usage Intention of the e-filing system in Malaysia. The result revealed that perceived usefulness has a partial mediating influence on the relationship between tax service quality (Correctness, Response Time) with

the continuance usage intention. Perceived usefulness was discovered to be the most important predictor of continuance usage intention.

Susanto and Goodwin (2010) in their study, factors influencing citizen adoption of SMS Based e-Government services. The study indicates that whether or not citizens adopt SMS-based e-Government services is influenced by the fifteen beliefs about using SMS-based e-Government services. Among which included perceived usefulness as the most important factor in influencing the use of SMS-based e-Government services. This is because perceived usefulness was discovered out to be one of the factors that discourage individuals to adopt the system.

Previous studies have also revealed that perceived usefulness has a substantial positive influence on the behavioral intention (Fu et al., 2006). This indicates that the number of taxpayers who use e-filing can be increased by increasing the performance expectancy of the tax e-filing system to submit their tax return forms. Perceived usefulness is believed to be the strongest predictor for usage behavior when more individuals believe the technology could improve their job performance (Venkatesh, Morris, Davis, & Davis, 2003).

User perception as to the usefulness of the on-line information or services provided by the Government could significantly rise adoption rate. However, perceived usefulness goes hand in hand with perceived ease of use that is how easy it is for users to access navigate and consume the information.

However, according to the Al Hujaran et al. (2013), in their study about factors that influence Citizen Adoption for Government e-tax, tax payers were divided into adopters and non-adopters, for adopters perceived usefulness of e-tax services has a higher practical utility and influence which makes people to continue using the e-tax services.

Idawati, Ibrahim, Wasiu and Lamidi (2017) in their study perceived usefulness and the acceptance of tax e-filing system; Malaysia and Nigeria cases. Using survey questionnaire method, the study found out that the influence of perceived usefulness is challenging for Malaysia and Nigeria. It was discovered that perceived usefulness is substantial for the case of Malaysia but not substantial in the case of Nigeria. Understanding why results disagree may assist governments in investigating the opportunities to increase the tax e-filing acceptance rates in both countries.

In the study of Aslihan, Spaulding and Kerry (2015), the effects of outcome expectations on individual's anxiety and continued usage of mobile and continued usage of mobile devices. The study can also be related to technology Acceptance Model. The study surveyed how preconceptions of personal-related and business-related outcome expectations influence user anxiety and the continued usage of mobile devices. Data collected from 158 farmers who use mobile devices revealed that performance expected outcome helps reduce anxiety and both types of expected outcomes lead to continued usage. In the post-adoption era, one's ability to utilize mobile devices for personal and business-related purposes will fuel continued usage of smart devices. In relation to the study as explained earlier, it means that usefulness has an influence or effect on adoption of e-tax which the researcher wants to investigate whether the same findings also apply for the case of business entities in Uganda like other countries such as Nigeria and Kenya.

2.5 Perceived Ease of Use and Adoption of E-tax System

A number of scholars have studied the effect of easiness on adoption of e-tax and various conclusions have been made. Studies proved that perceived ease of use has a substantial effect on perceived usefulness (Anuar and Othman, 2010; Azmi et al., 2012; Bhattacherjee and Hikmet, 2008).

In order to rise the user's intention to use e-tax system, the system should be easy to use and easy to understand which means that the higher the degree of perceived ease of use the higher the degree of perceived usefulness and the user's intention to use e-tax system.

Forouzanfar et al. (2016) in their study listed these external factors as computer literacy, level of infrastructure, availability of assistance, ease of access, English literacy and self-efficacy. They noted that where users have computer usage knowledge and have had prior interaction with internet, this positively affects their perceived ease of use of the information system thereby aiding its adoption.

In addition to the above, Forouzanfar et al. (2016) further explained several preconditions to the perception of an information system's ease of use. These were the existence of support infrastructure, availability of assistance when needed, easy accessibility of the system, knowledge of the English language and the degree of self-ability to utilize a system.

Murigu (2017) with regard to perceived ease of use of the iTax online system. 73% of the respondents perceived that the online system would ease their work of preparing tax returns and making tax payments. The study showed that perceived ease of use has a positive influence on the adoption of the iTax online system. This is in line with Davis (1989) Technology Acceptance Model that postulates that when an online system is perceived easy to use and interact with; the individual will find it useful hence increasing the intention to adopt it.

Wang (2007) in his study on adoption of electronic tax filing systems in Taiwan used the extended technology acceptance model which is basically the original Technology Acceptance Model. This is in addition to the two factors namely perceived usefulness and perceived ease of use.

Wang introduced the new factor based on the belief that a person's intention to use an electronic tax filing system could be affected by his perception of the security and privacy concerns. The study was based on a sample of 260 users in Taiwan who had filed income tax returns. This revealed that perceived credibility had a stronger influence on the intention to adopt an online system than perceived ease of use and perceived usefulness.

Bojuwon, Mustapha, siti and Normala (2015) in their study they examined the mediating effect of perceived ease of use on the relationship between tax service quality and online tax system. A total of 206 examined data was investigated using structural equation modeling. The result revealed that perceived ease of use has a significant mediating effect on the relationship between tax service quality and online tax system. Therefore, the study contributed to understanding the effective usage of the online tax system through self-employed taxpayers that leads to increase in tax compliance and revenue generation in Nigeria.

2.6 User's Expertise and Adoption of E-tax System

A number of scholars have studied the effect of user's expertise on the relationship between usefulness and easiness on adoption of e-tax systems in different dimensions and conclusions have been made on the effect.

Akbar Barati, Shahriar and Bakhshayesh (2015) in their study of electronic tax system and the facing challenges. Results showed that: technical and infrastructural variables, social influence, the expected effort, legal issues, expected performance, information access and perceived risk having a factor of importance and more effect on the affective factors for the adoption of electronic tax, respectively.

Mitja, De`cman and Maja (2015) investigated the influence of information systems on taxation: A case of users' experience with an e-recovery information system. The findings revealed that the e-recovery system was well acknowledged among users and discovered to be very beneficial. Users emphasized the issue of inadequate training where they acknowledged that their work is faster due to e-recovery system use. The imperfections emphasized most often were the occasional system failures, upgrading delays, and connection interruptions, since users access the system through the internet.

Saha, Nath and Salehi-Sangari (2012) evaluated Government e-tax websites; an information quality and system quality method by giving examples of data collection. According to the data collected from the study the findings revealed that only the experienced citizens in the field of e-tax services were considered. The tax authority was not effective in the process of data collection meaning that tax authorities faced problems and issues in effecting the system and interact with citizens so as to increase the quality of the system.

Rehman, Esichaikul and Kamal (2012) assessed the e-Government application which is an integrated model on Government to Consumer adoption of online tax. The results approve that the small taxable companies in small or average size are more probable to be tech enthusiast or early adopters of e-filing process for their individual clients. The superior companies are slower and aren't willing to file the personal tax statements. They are also concerned about delays in their income through customs control system, internal systems and incorporation of communication.

However, Muhannad et al. (2014) in their study challenges and factors affecting the implementation of e-government in Jordan. The results of this study show that the most significant challenges and factors affecting the implementation of e-Government services in Jordan.

These are connected to budgeting and financial costs, human expertise, social influence, technological issues, lack of awareness, resistance of public employees, data privacy and security, the legal framework, the desirable technology, administrative obstacles, and trust or believing in e-government.

Shih-wu and Hsi-peng (2012) carried out an empirical study of the on-line tax filing system in Taiwan on adoption of e-government services. The findings show that social norms and perceived features of relative use, compatibility and complexity significantly affect the intention of current user to accept the system. For potential adopters only social norms have substantial influence on their intention to use the tax system on filing online.

Still, Henry (2011) in his study the influence of electronic tax filing system on tax compliance and tax collection. The findings reveal that electronic tax filing system has enhanced compliance as it easy for tax payers to evaluate their tax obligations accurately and enable them file their returns on time.

The approach of tax payers and that of Uganda Revenue Authority staff towards the use of e-tax is positive. However, e-tax system has boosted costs on the side of tax payers and the current e-tax servers are over whelmed by the number of users hence being slow at times which makes many of the users prefer hiring experts.

According to Vivian Mandola (2013), in her study factors influencing the adoption and use of integrated tax management system by medium and small tax payers in Nairobi central business district Kenya. The findings revealed that the tax payers are conscious of their tax obligations and their corresponding due dates. However, majority are not self-confident that they can correctly calculate the tax due and payable.

Therefore, they desire to do manual return where they can go to a Kenya Revenue Authority office and have a revenue officer go through the return with them and help them calculate the tax due. This is also being done by many business entities in Uganda today.

2.7 Empirical Literature Review and Knowledge gap

The studies cited in the literature above mostly concentrate on perceived usefulness and ease of use and adoption of e-tax system of especially developed countries. These countries' systems and policies towards adoption of e-Government services like e-tax are not similar with that of Uganda. This therefore, makes this study relevant to be carried out so as to discover what takes place in Uganda.

Nevertheless, in Uganda some scholars such as Maiga and Asianzu (2014) have conducted their studies on factors that influence e-tax adoption. For example, a consumer based model for adoption of e-tax filing. However, very few scholars if not none has tried to examine the influence of perceived usefulness and ease of use on adoption of e-tax among SMEs. This is what is envisioned to be studied as a gap to be filled.

Still from the literature review discussed above, many studies have been conducted on e-tax adoption but have not incorporated in the moderating effect of User's expertise on the relationship between factors for adoption and adoption. This therefore, has prompted the researcher to examine the effect of user's expertise on adoption as being new knowledge that is being added to previous studies.

Most of the literature connected to e-tax adoption, relates and extends the well-known Technology Acceptance Model (TAM) by Davis (1989). Previous studies have discussed much on the significance of organizational factors in e-tax adoption.

The results reveal that Government as well as citizens' active contribution is equally important in success of e-tax system (Chang et al., 2005; Gallant et al., 2007).

Che Azmi and Ng (2010) in their study about the acceptance of the E-filing system by Malaysian tax payers developed a simplified model that consists of three constructs that include perceived usefulness, perceived ease of use and perceived risk as being a simpler model than any other form of electronic records. Therefore, this is in line with the extended Technology Acceptance Model by Davis that explains more the relationship among perceived usefulness, easiness and adoption of e-tax system in Uganda.

Bilal et al. (2015) in their study the impact of self-support factors on Citizens' e-tax adoption behavior. The findings revealed that citizens' self-support factors revealed important positive influence on perceived ease of use of e-tax systems while a statistically insignificant relationship was found with Perceived Usefulness. In addition, perceived usefulness and perceived ease of use of e-tax system had revealed substantial positive influence on intention to use e-tax system.

From the literature review above, perceived usefulness is substantial in affecting the adoption of e-tax system as stated by the different researchers as some discovered that it negatively influences a person's behavior to adopt the system. Whether, the e-tax system seems not be beneficial for the case of Uganda people have to use it whether it is in their interest or not it is the only way they can use to file their tax returns.

The literature establishes that ease of use has a positive effect on adoption of e-tax system. A system that is user friendly, reliable and simple without any complications enables the users to easily adopt it because their work is being simplified by using the system. Basing on the literature other factors such as system failure and compatibility were not considered yet these can also make the use of e-tax hard to the users.

2.8 Conclusion

This chapter presented a review of the available literature on the effect of perceived usefulness, ease of use, user's expertise on adoption of e-tax system by SMEs. The review discussed how SMEs' perception towards e-tax system affects their adoption of the system and how the technical skills and knowledge of use of the system affects its adoption. Chapter three will cover the research design and methodology adopted for this study.

CHAPTER THREE

METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology that is to be adopted for this study. It details the research design, the target population, sampling frame and the sample size. This chapter also outlines data collection procedures and methods, measurement of the study variables, issues of reliability and validity, analysis and ethical considerations in the study.

3.2 Research Design

The study design was a cross-sectional survey design. Using cross-sectional survey research method, multiple samples and variables can be examined and compared. Basing on the advantages of the cross-sectional survey design made it appropriate for this study (Creswell, 2017).

In this study, both qualitative and quantitative approaches were applied. Under the qualitative approach research methods are designed in a way that they help show the behavior and perception of a target audience with reference to a particular topic. There are different types of qualitative research methods like an in-depth interview, focus groups, ethnographic research, content analysis, case study research that are usually used. In this study, a case study design where multiple cases are investigated was adopted (Yin, 2009).

In the quantitative study, systematic examination of phenomena by collecting quantifiable data and performing statistical, mathematical or computational techniques was applied. In this study, several designs are suggested which include; Survey research designs, Correlational research, Casual-comparative research, Experimental research among others. However, a survey design was adopted for this study. In terms of time dimension of the study design one can choose to design a study as either longitudinal or cross-sectional. In the

longitudinal study, the study on the phenomenon is structured to take place for a number of years. However, in a cross-sectional study a snap short on the phenomenon is done. This particular design is popular with retail, SMEs, healthcare industries.

In integrating both the qualitative and quantitative research approaches a methodological triangulation was applied to make comparisons between the two approaches (Denzin and Norman, 1973). Triangulation involves using more than one option to gather data, such as interviews, observations, questionnaires, and documents. It analyses the consistency of findings obtained through diverse instruments and rises the chance to control, or at least evaluate, some of the threats or multiple causes influencing our result.

3.3 Population of the study

In this study, the focus was SMEs operating in Nakawa Division, Kampala district. Nakawa Division has 522 registered enterprises. Since Nakawa Division is wide with several areas which include; Nakawa, PortBell road, Bugolobi, Naguru, Kiwatule, Kireka, Jinja road, Kyambogo, Bweyogere, Mbuya, Bukoto, Kisasi, Ntinda among others. From the URA registry provided, the total number of SMEs in Nakawa Division in database was 522 registered SMEs. For the case of this study a target population of 200 SMEs was selected from Nakawa Industrial area, Nakawa Business Park, Bweyogere and Kyambogo. This is because these areas have most of the manufacturing SMEs such as beverage firms, metal fabrications, agro-processing and chemical manufacturing enterprises. These provided a good representation of SMEs in Nakawa Division from other areas.

3.3.1 Sample size

Given that in the quantitative study sample size is critical in the nature of the results that can be obtained, a sample size of 132 SMEs was selected using statistical tables of Krejcie and

Morgan (1971). Given that the sample size is small, the aim in the study was to collect from as many registered SMEs as possible. This was basically to ensure that meaningful statistics in the study are conducted. In the study, a total of 132 registered SMEs was considered. 42 SMEs failed to honor the appointment to meet them as most of the time they claimed to be busy with company activities. Therefore, only 90 SMEs have been included in the study. The response rate of the study was therefore 68%, this was relatively high as compared to the process of collecting data from SMEs given the nature of their operations.

3.3.2 Sampling Techniques and Procedure

Purposive sampling was used in the study. This involved identifying and selecting individuals or groups of individuals that were knowledgeable about or experienced with e-tax system and filing processes (Creswell, W, J, Plano, & Clark, 2011). This sampling was used to select 132 SMEs that were investigated.

However, for the 42 SMEs that were not included in the study, it became difficult to find appropriate time to collect filled in questionnaires from them as they were always busy confined with enterprises' activities.

3.4 Data Collection methods and instruments

Survey data collection method was utilized in the study to collect quantitative data. This involved the use of quantitative data collection approach. Quantitative data was collected using questionnaires that were filled in on 5-likert scale.

3.5 Data Collection Instruments

3.5.1 Questionnaire Method

This structured questionnaire was developed following recommendations by various scholars that include; Sekaran and Bougie (2010) and Saunders et al., (2009). The first section of the

instrument addressed issues of demographic data, section two the firm's characteristics, section three addressed the objectives of the study. This included; usefulness of e-tax adoption, ease of use and user's expertise on adoption of e-tax. This questionnaire had closed-ended questions because they are probably the type with which most respondents are most familiar. In addition, these types of questionnaires are used to generate statistics in quantitative research and are easy to analyze using computer analysis tools. Data collected was categorized, quantified and coded with respect to the research objectives of the study. Data was then captured using epidata and then exported to SPSS program for analysis giving the frequencies, percentages, and some basic descriptive statistics.

3.5.2 Interview Method

Interviews were conducted on managers of the enterprises to gain information on requirements that were needed for them to adopt the e-tax system which later were confirmed by data collected using questionnaires. Questions asked intended to lead the SMEs towards giving data to meet the study objectives and offer clarification of the quantitative data collected from the closed ended questions.

3.6 Procedure of Data Collection

Upon receiving an approval of the research proposal, a letter of introduction was obtained from the graduate school to ensure that the ethical guidelines are followed throughout the data collection process. This research letter was to build confidence of the SMEs in Nakawa Division that their opinions would not later on be used to follow them up by other tax authorities such as Uganda Revenue Authority. The research letter is included in the Appendix 6. With the support of research assistants, the questionnaires and interview guides were completed with the respondents. Data collection was conducted in two phases: a pilot study and a main study.

During the study, a letter of introduction from the university was presented together with a written application letter to the Town Clerk LC5 Nakawa Division. This was done in order to obtain permission to be allowed to conduct data collection exercise in Nakawa division. After being granted permission data was gathered from personnel in SMEs that are in charge of filing the tax returns for the enterprise using a questionnaire. To qualify to respond to the questionnaire, the respondent must have been a person in charge of filing taxes for the enterprise and familiar with e-tax system. The questionnaire required the personnel's perceptions on whether the e-tax system is beneficial and easy to use in relation to his/her expertise.

3.7 Validity and Reliability of Instruments

As observed by Vogt (2007), testing the validity and reliability of the instruments has been recommended to be acceptable to the population being studied. A pilot-study was carried out in Nakawa Division of Kampala City.

This was done by randomly selecting 30 SMEs from the Division business database provided by the revenue department of Nakawa Division for the registered SMEs. These 30 SMEs that were selected were not included in the study. The purpose of carrying out a pilot study was to ensure validity and reliability of the questionnaire.

3.7.1 Validity of instruments

Construct validity test was conducted for the research variables. Construct validity being the extent to which a particular item relates to other items measuring the same variable was examined using factor analysis. All items included in the study had factor loadings greater than the cutoff point of 0.50, as recommended by Nunnally (1978), and these items were the ones considered for final study as shown in table 3.1 on page 37.

3.7.2 Reliability of instruments

The first step in confirming reliability was providing clear operational definitions of the variables under study. Thereafter, internal consistency was measured through internal consistency reliability (Sekaran & Bougie, 2010) as well as split-half reliability using Cronbach's alpha. All items included in the study had the Cronbach's alpha greater than 0.70 apart from e-tax system adoption that had a value of 0.698 which is approximately to 0.70 thus considered satisfactory (Cronbach, 1951). After conducting several tests for validity and reliability the findings for each of the variables are presented in Table 3.1 on page 37.

Table 3.1: Factor analysis of the study variables, their measures and factor loadings

VARIABLES AND THEIR MEASURES	factor loadings
Usefulness a=0.84	
Using e-tax enhances effectiveness on the job when making tax payments	.742
Using e-tax makes it easier to file tax returns to URA	.684
We find e-tax useful in our enterprise	.769
Using e-tax gives us greater control over our company when making tax payments	.772
The e-tax system addresses our company related needs	.730
The e-tax has really helped to have accurate information on tax data	.742
The use of e-tax system meets our expectations	.588
Eigen value	**3.634**
Total Variance Explained	**66.26**
Kaiser-Meyer-Olkin (KMO)	**0.838**
Bartlett's Test of Spherecity	**224.505*** **
Ease of use a=0.883	
We find it easy to recover from errors encountered while using e-tax	.679
Interaction with the e-tax is easy for me to understand	.785
We find the e-tax system easy to use when filing the income tax	.821
The e-tax system is easy, clear and understandable	.882
It is easy for us to remember how to perform tasks using the e-tax system	.854
The e-tax system provides helpful guidance in performing tasks	.566
E-tax is simple, easy to understand and use without assistance	.719
Eigen value	**4.649**
Total Variance Explained	**64.48**
Kaiser-Meyer-Olkin (KMO)	**0.842**
Bartlett's Test of Spherecity	**394.069*** **
User's expertise a=0.810	
We have the required knowledge and computer skills to use the E-tax system	.630
We understand the e-tax laws and regulations in Uganda	.791
We can interpret e-tax and tax liabilities	.901
We always attend e-tax seminars and workshops on behalf of the business to update ourselves	.852
Eigen value	2.561
Total Variance Explained	64.024
Kaiser-Meyer-Olkin (KMO)	0.740
Bartlett's Test of Spherecity	134.647***
E-tax system adoption a=0.698	
We frequently use the e-tax system to file tax returns	.879
Filing taxes via e-tax is something we enjoy doing	.879
Eigen value	**1.547**
Total Variance Explained	**77.332**
Kaiser-Meyer-Olkin (KMO)	**0.500**
Bartlett's Test of Spherecity	**31.060*** **

N=90, ***p<0.000, ***p<0.01, *p<0.05, **a is** Cronbach Alpha coefficient computed for scales with three items and more.

The table 3.1 above implies that all the constructs were valid and reliable for obtaining findings.

3.8 Operationalization and Measurement of Variables

The constructs utilized in the study were operationalized as out lined below and this led to measuring their relationships quantitatively.

Perceived usefulness was conceptualized as one of the predictor variables and operationalized using performance related outcome expectations, personal related outcome expectations and intrinsic motivation. The items that were used to measure these constructs were put on a five point Likert scale ranging from "strongly disagree" to "strongly agree" on a scale of 1 to 5 respectively. The means were computed to enable the analysis; a similar measurement was adopted by other researchers such as (Murigu, 2017).

Perceived ease of use was conceptualized as another predictor variable and operationalized using how it is easy to learn the system and the extent to which the system is understandable. The items that were used to measure these constructs were put on a five point Likert scale ranging from "strongly disagree" to "strongly agree" on a scale of 1 to 5 respectively. The means were computed to enable the analysis, a similar measurement was adopted by other researchers such as (Murigu, 2017; Maiga & Asianzu, 2014).

User's expertise was also conceptualized as having a moderating role between usefulness, ease of use and adoption of e-tax system by SMEs and operationalized using level of education and skills and experience of users. It is expected that user's expertise has a moderating effect on the relationship between perceived usefulness, ease of use and adoption of e-tax system by SMEs. This is based on the Technology Acceptance Model theory that suggests that for users to perceive the system as useful and easy to use, users should have the required skills and expertise in using the system. The items that were used to measure these constructs still were put on a five point Likert scale ranging from "strongly disagree" to "strongly agree" on a scale of 1 to 5 respectively. The means were computed to enable the

analysis. A similar variable has been used by previous researchers such as has been used by previous researchers such as; (Akbar Barati, Shahriar and Bakhshayesh, 2015; Mitja, De`cman and Maja, 2015).

Adoption of e-tax system by SMEs was conceptualized as the dependent variable and operationalized using rate of adoption and frequency of usage. To measure the rate of adoption of e-tax system by SMEs, users were asked to respond to the extent to which they had adopted the e-tax system. Unlike other systems this is mandatory for all SMEs to file their tax returns using the e-tax system. The items that were used to measure these constructs were put on a five point Likert scale ranging from "strongly disagree" to "strongly agree" on a scale of 1 to 5 respectively.

The means were computed to enable the analysis. A similar technique has been previously used by researchers such as (Vivian Mandola, 2013; Al-Dmour, 2012; Awadhi, 2009; Kamarulzaman, 2010). Frequency of usage was measured on the basis of how often the e-tax system is used by the SMEs to file their tax returns. It is mandatory for all SMEs to adapt to the e-tax system in Uganda as it was to ease the process of filing tax returns. Some SMEs seem not to be using the system frequently though they adopted and registered for it with URA website.

The items that were used to measure these constructs still were put on a five point Likert scale ranging from "strongly disagree" to "strongly agree" on a scale of 1 to 5 respectively. The means were computed to enable the analysis. A similar technique has been previously used by researchers such as (Vivian Mandola, 2013; Al-Dmour, 2012; Awadhi, 2009; Kamarulzaman, 2010).

3.9 Data Analysis

Both quantitative and qualitative data analyses were conducted. It involved uncovering structures, extracting important variables, detecting any irregularity and testing any assumptions (Kombo & Tromp, 2006). Triangulation method of analysis was utilized to come up with appropriate conclusions and recommendations. The study is intended to analyze which and how much the hypothesized independent variables are relating to the adoption of e-tax system.

3.9.1 Analysis of Quantitative Data

The analysis entailed conducting descriptive statistics, correlation and regression analysis. Descriptive statistics were utilized to compute the mean, standard deviation and variances of items included in the study. Correlation statistics were utilized to assess the relationship between the dependent and independent variables. This was utilized to determine whether there could be a statistical substantial relationship between the dependent and independent variables.

Regression analysis were also conducted using linear regression to analyze the effect of usefulness on adoption of e-tax system by SMEs and the effect of ease of use on the adoption of e-tax system by SMEs. However, the moderating effect of user's expertise on the relationship between usefulness, ease of use and adoption of e-tax system by SMEs was analyzed using a hierarchical regression. But before conducting the regression analysis several assumptions were tested to check whether the variables were fit to run a regression analysis. The assumptions were as follows;

Diagnostic tests were conducted for data that exhibited non-normality characteristics which may lead to inaccuracy and distortion of the results. The Shapiro-Wilk Test that was introduced in 1965 by Samuel Sanford Shapiro and Martin Wilk was employed as the test for

normality in the study. This test is appropriate for samples that fall between 100 and 200. However, also the skewness and kurtosis values were based on to check on the items that were positively or negatively skewed. The items that were positively or negatively skewed were tested for normality again by using the log 10 and squared root approaches to ensure that the data was approximately normally distributed. For this study a Shapiro-Wilk test (*p>0.05) and a visual inspection of their histograms, normal Q-Plots and box plots showed that the variables were approximately normally distributed. This is illustrated in Table 4.3 on page 46 in chapter 4 showing the Kolmogorov-Smirov, Shapiro-Wilk, Skewness and Kurtosis values.

3.9.2 Analysis of Qualitative Data

All the qualitative data collected from owners or managers was edited on a continuous basis to ensure completeness. Data collected with the use of interview schedules was put into meaningful and exhaustive categories. This information gathered was analyzed and incorporated to build on and support the quantitative data collected so that it is enriched.

3.10 Ethical Considerations

An introduction letter approval from Graduate School of Kyambogo in quest for permission to continue with data collection was obtained. All the necessary requirements and suggestions were incorporated in the process of data collection to protect the respondents that participated in the interview exercise.

Still, for the qualitative study where interviews were conducted and obtained an informed consent. This was obtained from those that accepted and honored the appointments with them before undertaking to collect data from the field. Objectives of the research were explained and made known to the respondents so as to solicit their informed consent.

High level of confidentiality on the information provided by respondents through interview and questionnaires was highly maintained.

3.11 Limitations of the Study

The major limitation of this work is that it focuses on one e-tax system and in one country, which is why it may not be able to be generalized for all systems and countries. The responses were collected from the urban population which leaves out the contributions from the rural settings from whom more responses could have been identified (or a totally different set of response).

The study focused on SMEs in Nakawa division mainly those located in the urban area yet there could other SMEs in the rural areas. Those SMEs in the rural areas have not been considered in this study therefore, the results that will be obtained from the study do not represent the SMEs in rural areas.

The findings are likely to indicate a unique state of Nakawa division which may not represent all the SMEs in Uganda. This is because Uganda has various SMEs across the country as it's a government initiative for creation of employment opportunities.

Some of the questionnaires that were provided during the process of data collection were not returned. And also, the questionnaires that were returned some items were not selected and returned them not filled in. This was as a result of some companies being busy while others were not interested. The reason why the sample size reduced from 132 to 90 enterprises those were included in the study. On the other hand, further research can be done on the satisfaction levels of other electronic services currently being provided by the governments.

To increase the generalization of this finding, future research might employ a larger sample so that it can be generalized to the whole country. Further research can also be done to examine the levels of taxpayers' satisfaction to use e-tax system in Uganda.

3.12 Conclusion

The chapter outlined the research methodology that was employed to carry out this study. First the target population was defined, and then the sampling frame, sampling technique and sample size were described. The study was designed as a cross sectional research. Furthermore, the chapter presented a discussion on the type of data, data collection methods and the data collection instrument that was used. The research procedures including pilot testing and administration of the questionnaires have been discussed. Lastly, the chapter has presented the data analysis methods that were used to analyze the data collected. Chapter four will present results and findings of the data collected.

CHAPTER FOUR

PRESENTATION, ANALYSIS AND INTERPRETATION OF FINDINGS

4.1 Introduction

This chapter deals with the presentation, analysis and interpretation of the study findings. The chapter begins with the descriptive statistics of the study specifically on the perceived usefulness, perceived ease of use, user's expertise and adoption of e-tax system. Thereafter, the relationship between the key variables of interest, perceived usefulness, perceived ease of use and adoption of e-tax system is presented. In the last section, the regression analysis results for both the linear and hierarchical regressions are presented.

4.2 Descriptive statistics results of the study variables

The study sought to establish the influence of perceived usefulness, perceived ease of use, user's expertise and adoption of e-tax system among SMEs in Nakawa division. In order to present the descriptive results of the study variables, an analysis of the Means and Standard Deviations was done.

4.2.1 The characteristics of firms and respondents included in the study.

Table 4.2: Characteristics of respondents and SMEs included in the study

	Categories	Frequency	Percentage
Sex of respondents	Male	53	58.9
	Female	37	41.1
Position held in the company	Manager	41	45.6
	Executive	7	7.8
	Managing director	13	14.4
	Others	29	32.2
Age of respondents	Less than 20 years	3	3.3
	21-30 years	57	63.3
	31-40 years	26	28.9
	41-50 years	4	4.4
Level of qualification of respondents	Masters	7	7.8
	Bachelors	52	57.8
	Diploma	15	16.7
	Certificate	15	16.7
	Others	1	1.1
Nature of ownership of SME	Sole proprietorship	46	51.1
	Partnership	17	18.9
	Joint stock	19	21.1
	Others	8	8.9
Age of the firm	Less than 1 year	12	13.3
	2 years	19	21.1
	3 years	27	30.0
	4 years	15	16.7
	>5 years	17	18.9

Source: Based on primary data

As shown in Table 4.2.1 above most of the respondents were males that comprised of 58.9% compared to the females that comprised of only 41.1%. The majority of the respondents were managers comprising of 45.6% as their position that they hold in those firms, with only 7.8% Executive directors because these were always busy in meetings planning for their firms. Still most the respondents were between 21 and 30 years that comprised of 63.3%, this was so because these were interested in sharing information and the ones that were mainly active in the operations of the firms. Those that were less than 20 years which comprised of 3.3% were mainly students on their internships during that period.

It was still observed that many of these respondents hold a bachelor's degree in business related courses, thus being the right people to collect information as the area of study was not

a new thing to them. This made the process of interviewing easily conducted without much hardship. This shows that they had the qualifications and skills to file taxes using the e-tax system.

Basing on the above, most of the SMEs included in the study are Sole proprietorships constituting 51.1%, Joint stock companies with 21.1% and only 8% were in such sectors as; service for example washing bays. SMEs included in the study have been in operation for a period of three years with 30% and those that have been in operation for more than 5 years comprised of 18.9%.

Table 4.3: Tests for normality of study variables

Usefulness	***Statistics***	***df***	***Sig.***
Kolmogorov-Smirov	.072	90	.200*
Shapiro-Wilk	.980	90	.183
Skewness	.178		
Kurtosis	-.345		
Ease of use			
Kolmogorov-Smirov	.082	90	.179
Shapiro-Wilk	.982	90	.237
Skewness	.067		
Kurtosis	-.188		
User's expertise			
Kolmogorov-Smirov	.083	90	.170
Shapiro-Wilk	.971	90	.038
Skewness	-.025		
Kurtosis	-.785		
E-tax adoption			
Kolmogorov-Smirov	.105	90	.016
Shapiro-Wilk	.957	90	.005
Skewness	-.112		
Kurtosis	-.570		

N=90, ***p<0.000, *p<0.01, *<0.05

The Homoscedasticity test was carried out to prove an assumption that the variance of one variable is stable at all levels or relatively similar. Parametric tests that required data used to have homogeneity of variance were applied. Multicollinearity tests were also conducted to

test for collinearity and this arises when some individual independent variables are highly correlated (Hair et al., 2010). The higher VIF means that multi-collinearity effects are present. Hair, Sarstedt, Hopkins & G. Kuppelwieser (2014), stated that a problem of multi-collinearity is present if the factor is greater than 10. Independent variables and the moderating variables were tested by conducting mean centering using standardized values before conducting the hierarchical multiple regression (Farrar & Glauber, 2006).

After all the above tests had been done then linear regression model was utilized to empirically answer the study research hypotheses. All these were accomplished by the use of SPSS.

4.2.1 Results of Perceived usefulness of e-tax system among SMEs

Under this study variable respondents were asked whether they perceive e-tax system as being useful in filing their tax returns. Table 4 below shows the means and standard deviations of how the respondents agreed and disagreed on the statements that were presented to them.

Table 4.1: Reported level of perceived usefulness of e-tax system among SMEs

Actors	***Mean***	***Std. Deviation***
E-tax enhances effectiveness on the job when making tax payments	4.19	.886
E-tax system makes it easier to file tax returns to URA	4.20	.864
E-tax system is useful in an enterprise	4.09	.967
E-tax system gives greater control when making tax payments	3.98	.983
E-tax system addresses company related needs	3.43	1.227
E-tax system helps to save accurate information on tax data	3.91	.967
E-tax system meets the business' expectations	3.87	1.019

Note: These items were measured on a five point likert scale where 1=strongly disagree and 5=strongly agree. Std. Deviation indicates the degree to which individual scores by respondents are far from the mean.

Evidence in Table 4.4 above shows the results of the responses on the statements seeking to find out the perceived usefulness of e-tax system by SMEs in Nakawa division. The study findings revealed that e-tax system makes it easier for SMEs to file their tax returns to URA with the mean of 4.20 and standard deviation of 0.864. The respondents still agreed that e-tax system enhances the effectiveness of the managers when making tax payments with a mean of 4.19 and a standard deviation of 0.886. Still the results revealed that e-tax system is useful to the SMEs (Mean=4.09, Std. Deviation=0.967), e-tax system gives greater control when making tax payments (Mean=3.98, Std. Deviation=0.983), e-tax system helps to save accurate information on the tax data (Mean=3.91, Std. Deviation=0.967) and e-tax system meets the business' expectations (Mean=3.87, Std. Deviation=1.019).

The aspects where usefulness of e-tax system was considered to be the least was where the system addresses the company related needs with a mean of 3.41and Std. Deviation of 1.227. This indicated that these respondents were neutral that e-tax system addresses their company related needs though they are using the system. Generally, the standard deviation statistics are not very high indicating reasonable validity of the reported mean values.

4.2.2 Results of Perceived ease of use of e-tax system among SMEs in Nakawa Division, Kampala District - Uganda

Given the perceived ease of use of the e-tax system, this was considered as an important aspect for SMEs in Nakawa Division. Table 5 below gives evidence regarding how the SMEs in Nakawa Division perceive the ease of use of the e-tax system.

Table 4.2: Reported level of Perceived ease of use of e-tax system among SMEs in Nakawa Division, Kampala district - Uganda

Actors	*Mean*	*Std. Deviation*
It is easy to recover from errors encountered while using E-tax	3.43	1.181
Interaction with the E-tax is easy to understand	3.52	1.008
E-tax system is easy, clear and understandable	3.61	1.109
E-tax system is easy to use when filing the income tax	3.68	.922
It is easy to remember how to perform tasks using the E-tax system	3.72	.924
E-tax system provides helpful guidance in performing tasks	3.60	1.036
E-tax is simple, easy to understand and use without assistance	3.46	1.062

Note: The respondents were asked to indicate the extent to which they perceive E-tax system to be easy to use. The responses were evaluated on a scale of 1 to 5 where 1=strongly disagree that E-tax system is not easy to use and 5=strongly agree that E-tax system is easy to use.

As shown in Table 4.5 above, the majority of the SMEs that were included in the study agreed that e-tax system makes it easy for them to remember how to perform tasks in their enterprises with a mean of 3.72 and a standard deviation of 0.924. They also agreed that e-tax system is perceived to be easy to use when filing the income tax with a mean of 3.68 and a standard deviation of 0.922.

Still respondents agreed that e-tax system is easy, clear and understandable with the mean of 3.61 and a standard deviation of 1.109. When it comes to how e-tax system is perceived to provide helpful guidance in performing tasks the mean obtained was 3.60 and a standard deviation of 1.036. This is also followed with the interaction with the e-tax system being easy to use which had a mean of 3.52 and a standard deviation of 1.008. This indicates that on average most of the participants in the study was approximately agreeing to e-tax system being easy to use when filing their tax returns.

However, the other related avenues in the area of ease of use of e-tax system such as e-tax system being simple, easy to understand without assistance scored the least mean with a value of 3.46 and standard deviation of 1.062 and the easiness to recover from errors encountered while using e-tax scored a mean of 3.43 and standard deviation of 1.181. This indicates that these were neutral of the extent to which the aspects were true in regards to perceived ease of use of e-tax system.

4.2.3 User's expertise of E-tax system among SMEs

Basing on the fact that e-tax system is currently used by SMEs in filing their tax returns to URA. Table 4.6 shows the extent to which SMEs in Nakawa Division have expertise in using the e-tax system in filing their tax returns to Uganda Revenue Authority.

Table 4.3: Reported level of user's expertise of e-tax system

Actors	*Mean*	*Std. Deviation*
We have the required knowledge and computer skills to use the E-tax system	3.73	1.110
We understand the E-tax laws and regulations in Uganda	2.92	1.265
We can interpret E-tax laws and compute tax liabilities	3.11	1.302
We always attend E-tax seminars and workshops on behalf of the business to update ourselves	2.87	1.238

Note: The respondents were asked to indicate their expertise in using the E-tax system. The responses were evaluated on a scale of 1 to 5 where 1=strongly disagree that they don't the expertise to use the E-tax system and 5=strongly agree that they have the expertise to use the E-tax system.

From table 4.6 above it can be seen that respondents were neutral with aspects presented such as; understanding the e-tax laws and regulations with a mean of 2.92 and a standard deviation of 1.265, the aspect of interpreting e-tax laws and computing tax liabilities scored a mean of 3.11 and standard deviation of 1.302 and when it came to attending e-tax seminars and workshops on behalf of the business to update themselves the score of the mean is 2.87 and standard deviation of 1.238. This indicates that with all the items that were contained in the study on the variable of user's expertise three of the four items the respondents were neutral.

With the aspect of having the required knowledge and computer skills to use the e-tax system the results show that the mean is 3.73 and standard deviation of 1.110. This indicates that they agree that they have the required knowledge and computer skills to use the e-tax system.

4.3 Adoption of e-tax system by SMEs in Nakawa Division, Kampala District - Uganda

With the current trend of SMEs in Uganda, all the SMEs are expected to adopt and use e-tax system in filing their tax returns. However, there are those that have not frequently used and adopted the e-tax system. Table 7 below shows the extent to which SMEs in Nakawa Division have adopted and frequently used the e-tax system.

Table 4.4: Results of adoption of e-tax system

Actors	Mean	Std. Deviation
We frequently use the E-tax system to file tax returns	3.67	1.190
Filing taxes via e-tax is something we enjoy doing	3.69	.979

Note: The respondents were asked to indicate the extent of adopting the E-tax system. The responses were evaluated on a scale of 1 to 5 where 1=strongly disagree with adoption of E-tax system and 5=strongly agree with adoption of E-tax system.

From table 4.7, respondents agreed to the aspect that they frequently use the e-tax system to file their tax returns with a mean of 3.67 and a standard deviation of 1.190 and also, they agreed to the aspect that filing e-taxes is something they enjoying doing with a mean of 3.69 and a standard deviation of 0.979.

This implies that the SMEs that were included in the study adopted the e-tax system in their system are frequently using the e-tax system to file their tax returns showing a slightly high degree of adoption of e-tax system.

4.4 Correlational analysis of the study variables

In the study, correlation was utilized to establish the strength and direction of the relationship between the study variables. The correlation is interpreted as being positive or negative and the study findings are revealed below.

4.4.1 The relationship between usefulness, ease of use, user's expertise and adoption of E-tax system

In the study, correlations were utilized to establish the relationship existing between the study variables. This correlation was utilized to gain a clear understanding of the relationship between the e-tax system adoption and the variables included in the study. Table 8 shows the relationship between the variables based on Spearman coefficient statistics.

Table 5: Results of correlation between perceived usefulness, ease of use and E-tax system adoption

Variables	**1**	**2**	**3**	**4**
Usefulness (1)	1			
Ease of use (2)	0.316**	1		
User's expertise (3)	-0.319**	-0.521**	1	
Adoption of E-tax system (4)	0.452**	0.345**	-0.503**	1

N=90, **correlation is significant at the 0.01level (2-tailed).

The evidence as presented in Table 8 above shows that there is a moderate but statistically significant relationship between perceived usefulness and adoption of e-tax system ($r=0.452$, $P<0.01$). This means that the adoption of e-tax system by SMEs in Nakawa division is related to perceived usefulness by 45%.

Secondly, perceived ease of use revealed a weak but statistically significant relationship with the level of adoption of e-tax system ($r=0.345$, $P<0.01$). This also means that SMEs adopted e-tax system because it is perceived to be easy to use by 34%. The results of the correlation also reveal that user's expertise which is the moderating variable also shows a moderate but statistically significant showing a negative relationship ($r=-0.503$, $P<0.01$).

4.4.2 Testing of hypotheses of the study variables

Testing of hypotheses was conducted using the bivariate tests to evaluate the strength of direct relationships between different variables. All of the tests employed revealed a

significance (alpha) level of 0.05 (5%). Table 9 shows the results of such tests using the chi-square cross tabulations to determine the level of influence between the independent and moderating variable with the dependent variable.

Table 6: Chi-square results testing hypotheses

Hypotheses	N	Test	Significance (P)	Decision
$H_0$1: There is no significant influence of usefulness on adoption of e-tax system by SMEs in Nakawa Division	90	Pearson One-tailed	0.008	Reject
$H_0$2: There is no significant influence of easiness on adoption of e-tax system by SMEs in Nakawa Division	90	Pearson One-tailed	0.000	Reject
$H_0$3: There is no significant influence of the moderating factor of user's expertise on the relationship between usefulness and easiness on adoption of e-tax system by SMEs in Nakawa Division, Kampala District – Uganda.	90	Pearson One-tailed Pearson One-tailed	0.19 0.16	Accept Accept

*Significant at the 0.05 level.

4.5 Regression analysis

The study also utilized the multiple linear regressions to determine the influence of the independent and moderating variables on the dependent variable included in the study. But before the regression was conducted several assumptions were considered such as mean centering of the independent variables to control multicollinearity issues that would distort the results. Tests for normality were also conducted to ensure that data was normally distributed. It is also important that the variables to be included in the model have reasonable correlation.

4.5.1 Regression analysis of the link between perceived usefulness, perceived ease of use and adoption of E-tax system by SMEs in Nakawa Division, Kampala District - Uganda

The regression analysis was utilized to determine how perceived usefulness and perceived ease of use influence the adoption of e-tax system. In this analysis, the multiple linear regression method was utilized to determine the extent to which e-tax system adoption is influenced by the perceived usefulness and perceived ease of use of the SMEs in filing their tax returns. All the variables that were included in the study had reasonable level of correlation. The results of the regression analysis are presented in Table 10 below.

Table 4.7: Multiple regression analysis of perceived usefulness, ease of use and adoption of E-tax system in Nakawa Division, Kampala District - Uganda

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.527[a]	.278	.261	.15536

a. Predictors: (Constant), usefulness, ease of use.

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.807	2	.404	16.718	.000[b]
	Residual	2.100	87	.024		
	Total	2.907	89			

a. Dependent Variable: e-tax system adoption

b. Predictors: (Constant), usefulness, ease of use

coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.093	.045		2.091	.039
	Usefulness	.468	.123	.374	3.822	.000
	Ease of use	.345	.131	.258	2.637	.010

a. Dependent Variable: e-tax system adoption

As shown in the Table 4.10 above, the regression model was statistically significant (F=16.718, sig = 0.000[b]). The coefficients show that perceived usefulness and ease of use explain 26.1% of the variations of e-tax system adoption by SMEs. However, perceived usefulness was observed to be a strong predictor (Beta= 0.374, sig= 0.000). This means that any developments made in e-tax system design to make it more useful the adoption of e-tax system is influenced by 37%. Perceived ease of use was also found to be significant (Beta= 0.258, sig= 0.010), though it is not as strong as usefulness in predicting the adoption of e-tax system.

Basing on the interviews conducted many of the enterprises interviewed believed that E-tax system was helping them to file their tax returns. However, many of them still were not using the system themselves but instead they hired specialists to file the tax returns on their behalf.

4.5.2 Regression analysis of the effect of the moderating variable of user's expertise on the relationship between usefulness and easiness on adoption of E-tax system by SMEs

The moderating effect was included in to determine its influence on the independent variables with the dependent variable. This was conducted using the hierarchical multiple regression model. The results of the hierarchical multiple regressions are explained in table 4.11 on the next page.

Table 4.8: Hierarchical multiple regression analysis of user's expertise and usefulness of E-tax system adoption in Nakawa Division, Kampala District - Uganda

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.469[a]	.220	.211	.16053
2	.470[b]	.221	.203	.16133

a. Predictors: (Constant), usefulness

b. Predictors: (Constant), usefulness, user's expertise

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.639	1	.639	24.805	.000[b]
	Residual	2.268	88	.026		
	Total	2.907	89			
2	Regression	.642	2	.321	12.342	.000[c]
	Residual	2.264	87	.026		
	Total	2.907	89			

a. Dependent Variable: e-tax system adoption

b. Predictors: (Constant), usefulness

c. Predictors: (Constant), usefulness, user's expertise

Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.161	.038		4.261	.000
	usefulness	.587	.118	.469	4.980	.000
2	(Constant)	.160	.038		4.166	.000
	usefulness	.600	.124	.479	4.835	.000
	User's expertise	.006	.018	.035	.353	.725

a. Dependent Variable: e-tax system adoption

Table 4.11 above, shows that the moderating effect of user's expertise when combined with perceived usefulness the adjusted R falls from 21.1% to 20.3%. This shows that user's expertise was not found to be a significant predictor of E-tax adoption (Beta= 0.035, sig= 0.725). This therefore, implies that the influence of the moderating factor changes in E-tax system adoption is explained by 3.5% of user's expertise. Thus, user's expertise does not greatly influence the adoption of E-tax system by the users. However, usefulness in the second model rises from 46.9% to 47.9% being now stronger in explaining the variations of E-tax system adoption by SMEs in Nakawa division.

Basing on the interviews conducted some of the managers of the enterprises did not possess the required skills to file tax returns. The enterprises that were interviewed however said that

the E-tax system was more efficient compared to the manual system of filing tax returns.

Table 4.9: Hierarchical multiple regression analysis of user's expertise and ease of use of E-tax system adoption in Nakawa Division, Kampala District - Uganda

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.395[a]	.156	.147	.16694
2	.409[b]	.167	.148	.16680

a. Predictors: (Constant), ease of use, b. Predictors: (constant), ease of use, user's expertise

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.455	1	.455	16.310	.000[b]
	Residual	2.452	88	.028		
	Total	2.907	89			
2	Regression	.486	2	.243	8.739	.000[c]
	Residual	2.421	87	.028		
	Total	2.907	89			

a. Dependent Variable: E-tax system adoption

b. Predictors: (Constant), ease of use

b. Predictors: (Constant), ease of use, user's expertise

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.174	.042		4.105	.000
	Ease of use	.528	.131	.395	4.039	.000
2	(Constant)	.184	.043		4.242	.000
	Ease of use	.527	.131	.395	4.034	.000
	User's expertise	.020	.019	.105	1.069	.288

a. Dependent Variable: E-tax system adoption

From table 4.12 above, the study findings reveal that perceived ease of use with the influence of moderating factor, the changes in the e-tax system adoption are explained by 39.5% which is not different from the linear regression model results.

However, the adjusted R rises from 14.7% to 14.8% being a very slight increase of 0.1%. This shows that user's expertise is not a significant predictor of e-tax system adoption. Therefore, in the study the moderating effect of user's expertise has influence on usefulness in explaining the changes in the adoption of e-tax system by SMEs in Nakawa Division than perceived ease of use.

4.6 Conclusion

The chapter presents the results and findings after an analysis of the primary data collected from the respondents. The results and findings are presented in the form of tables. Descriptive statistics after analysis of the data has also been presented. In the next chapter, the discussions of the results will be done and conclusions as well as recommendations for further studies provided.

CHAPTER FIVE

SUMMARY, DISCUSSIONS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter discusses the presentations in relation to the study objectives. In this study, the objectives were mainly to establish the effect of perceived usefulness on adoption of e-tax system, to establish the effect of perceived ease of use on adoption of e-tax system and to analyze the effect of moderating factor of user's expertise on the relationship between perceived usefulness and ease of use on adoption of e-tax system among SMEs in Nakawa division.

5.2 Summary of key findings

Basing on the study findings in the previous chapter, results revealed that most of the SMEs in Nakawa division agreed that e-tax system was useful in filing their tax returns. This revealed by a grand mean of 3.95 which approximately to 4.0 indicating that perceived usefulness was supported by most of the SMEs that were contained in the study. Still with perceived ease of use the SMEs that were included in the study, the majority of them still agreed that e-tax system was found to be easy to use with a grand mean of 3.57. With the aspect of user's expertise, the majority of the SMEs that were included in the study were neutral about having the required knowledge and expertise in using the e-tax system in filing their tax returns with URA. This is explained with a grand mean of 3.15.

The correlations conducted results revealed that there is a moderate but statistically significant relationship between perceived usefulness and adoption of e-tax system ($r=0.452$, $P<0.01$). Secondly, perceived ease of use revealed a weak but statistically significant relationship with the level of adoption of E-tax system ($r=0.345$, $P<0.01$).

And the results of the correlation also reveal that user's expertise which is the moderating variable also shows a moderate but statistically significant showing a negative relationship ($r=-0.503$, $P<0.01$).

Testing of hypotheses was conducted using the bivariate tests to evaluate the strength of direct relationships between different variables. For example, the null hypothesis that there is no significant influence of usefulness on adoption of e-tax system by SMEs in Nakawa division was rejected basing on the Chi-square correlations conducted with a P value of 0.008 being less than the significant level of 0.05. The second hypothesis that there is no significant influence of ease of use on adoption of e-tax system by SMEs in Nakawa division was also rejected with a P value of 0.000.

Lastly, the third hypothesis that there is no significant influence of the moderating factor of user's expertise on the relationship between usefulness and ease of use on adoption of e-tax system by SMEs in Nakawa division was accepted with a P value of 0.19 being greater than the significant level of 0.05.

Basing on the regression analysis that was run the study findings revealed that perceived usefulness and ease of use explain 26.1% of the variations of e-tax system adoption by SMEs. However, perceived usefulness was observed to be a strong significant (Beta= 0.374, sig= 0.000). And perceived ease of use was also found to be significant (Beta= 0.258, sig= 0.010), though it is not as strong as usefulness in predicting the adoption of e-tax system.

The moderating effect of user's expertise when combined with perceived usefulness the adjusted R falls from 21.1% to 20.3%. This showed that user's expertise was not found to be a significant predictor of E-tax adoption (Beta= 0.035, sig= 0.725).

The study findings reveal that perceived ease of use with the influence of moderating factor, the changes in the e-tax system adoption are explained by 39.5% which is not different from the linear regression model results.

5.3 Discussion of findings

Under this section the study findings are being explained in relation to the literature reviewed and find out whether the study findings are in line with what other previous researchers investigated.

5.3.1 The effect of perceived usefulness on adoption of E-tax system

The study findings on the regression model with adoption of e-tax system as the dependent variable explained 26.1% of the variance and the statistics indicates that it is statistically significant at the $P<0.01$ level. Perceived usefulness was observed to be a strong predictor (Beta= 0.374, sig= 0.000). This means that any developments made in e-tax system design to make it more useful the adoption of e-tax system is influenced by 37%. This was in line with the following previous works of different researchers as illustrated in the literature review. For example; Davis et al., (1989), asserted that perceived usefulness has a direct impact on the intention to adopt a system as once the person becomes aware of the valuable functions the system possesses; they are more likely to adopt it. This is due to the fact that SMEs believe that using e-tax system would be useful for their enterprises, saves their time, and improves their performance (Doll et al., 1998)

Further, Santhanamery & Ramayah (2015) in their study the Mediating Effect of Perceived Usefulness towards Tax Service Quality and the continuance Usage Intention of the E-filing system in Malaysia. Also, the result revealed that Perceived Usefulness has a partial mediating effect on the relationship between tax service quality (Correctness, Response Time) with the continuance usage intention. Still, perceived usefulness was discovered to be

the most significant predictor of continuance usage intention.

Tony, Dwi Susanto and Robert (2010) in their study, factors influencing citizen adoption of SMS Based E-Government services. Among which included perceived usefulness as the most important factor in influencing the use of SMS-based e-Government services. This is because perceived usefulness was found out to be one of the factors that discourage individuals to adopt the system.

Still, previous studies have also revealed that perceived usefulness has a significant positive influence on the behavioral intention (Fu et al., 2006). This indicates that the number of taxpayers who use e-filing can be increased by increasing the performance expectancy of the tax e-filing system to submit their tax return forms. Perceived usefulness is believed to be the strongest predictor for usage behavior when more individuals believe the technology could improve their job performance (Venkatesh et al., 2003).

However, according to the Al Hujaran et al. (2013), in their study about factors that influence Citizen Adoption for Government e-tax, tax payers were divided into adopters and non-adopters, for adopters perceived usefulness of e-tax services has a higher practical utility and influence which makes people to continue using the e-tax services.

Along the similar lines, Idawati, Ibrahim, Wasiu and Lamidi (2017) in their study perceived usefulness and the acceptance of tax e-filing system; Malaysia and Nigeria cases. Using survey questionnaire method, the study found out that the effect of perceived usefulness is contradicting for Malaysia and Nigeria. It was found that perceived usefulness is significant for the case of Malaysia but not significant in the case of Nigeria. Understanding why results change may assist governments in exploring the opportunities to increase the tax e-filing acceptance rates in both countries.

In relation to the study findings above, it means that usefulness has an influence or effect on adoption of e-tax which has been statistically been investigated among SMEs in Nakawa division. The same findings also apply for the case of other business entities in Uganda and in other countries such as Nigeria and Kenya. Therefore, the system developers should ensure e-tax system is upgraded to be more useful to the users in order to increase their level of adoption and frequency in use. This is evidenced with interviews conducted with some of the SMEs included in the study where the majority agreed that e-tax system is useful and simplifies their tax filing processes. Due to lack of enough sufficient evidence to support the null hypothesis, the alternative was considered showing a significant influence.

5.3.2 The effect of perceived ease of use on adoption of E-tax system

Perceived ease of use was also found to be significant (Beta= 0.258, sig= 0.010), though it is not as strong as usefulness in predicting the adoption of e-tax system. This means perceived ease of use can only influence the changes in the adoption of e-tax system by 25.8%. Indicating that in order to increase the user's intention to use e-tax system, the system must be easy to use and easy to understand which means that the higher the degree of perceived ease of use the higher the degree of perceived usefulness and the user's intention to use e-tax system.

This is in line with, Murigu (2017) with regard to perceived ease of use of the iTax online system. Where 73% of the respondents perceived that the online system would ease their work of preparing tax returns and making tax payments. The study revealed that perceived ease of use has a positive influence on the adoption of the iTax online system. Still in the same understanding with Davis (1989) Technology Acceptance Model that postulates that when an online system is perceived easy to use and interact with, the individual will find it useful hence increasing the intention to adopt it.

The study findings are in line with conclusions of previous studies by Bojuwon, Mustapha, siti and Normala (2015) in their study where they examined the mediating effect of perceived ease of use on the relationship between tax service quality and online tax system. And a total of 206 surveyed data was analyzed using structural equation modeling. The result revealed that perceived ease of use has a significant mediating effect on the relationship between tax service quality and online tax system. Therefore, the study contributed to understanding the effective usage of the online tax system through self-employed taxpayers that leads to increase in tax compliance and revenue generation in Nigeria.

However, basing on the study findings perceived ease of use is positively significant with adoption of e-tax system by SMEs in Nakawa division though it is not as strong as perceived usefulness in predicting the variations of e-tax system adoption. Still with interviews conducted e-tax system proved not be easy to use by some of respondents included in the study. These said that the system requires experienced and technical personnel a reason as to why they are not frequently using it. Therefore, the system developers should ensure that the system is designed in a way that is easier to use and understand by the users so as increase the level of adoption. Due to lack of enough sufficient evidence to support the null hypothesis, the alternative was considered showing a significant influence.

5.3.3 The effect of the moderating factor of user's expertise on the relationship between usefulness, ease of use and adoption of E-tax system

The study findings revealed that user's expertise was not found to be a significant predictor of E-tax adoption (Beta= 0.035, sig= 0.725). This therefore, implies that the influence of the moderating factor changes in E-tax system adoption is explained by 3.5% of user's expertise. However, usefulness in the second model rises from 46.9% to 47.9% being now stronger in explaining the variations of e-tax system adoption by SMEs in Nakawa division.

With perceived ease of use the study findings revealed that perceived ease of use with the influence of moderating factor, the changes in the e-tax system adoption are explained by 39.5% which is not different from the linear regression model results.

This shows that user's expertise is not a significant predictor of e-tax system adoption. Therefore, in the study the moderating effect of user's expertise has influence on usefulness in explaining the changes in the adoption of e-tax system by SMEs in Nakawa Division. The results are in agreement with the conclusions made by Mitja, De`cman and Maja (2015) who conducted an investigation on the effect of information systems on taxation: A case of users' experience with an e-recovery information system. The findings revealed that the e-recovery system was well accepted among users and found to be very beneficial. Users emphasized the issue of inadequate training where they acknowledged that their work is faster due to e-recovery system use. The imperfections emphasized most often were the occasional system failures, upgrade delays, and connection interruptions, since users access the system through the internet.

In the study coducted by Parmita, Atanu and Esmail (2012) evaluated Government e-tax websites; an information quality and system quality approach by giving examples of data collection. According to the data collected from the study the findings revealed that only the experienced citizens in the field of e-tax services were considered. The tax authority was not effective in the process of data collection meaning that tax authorities faced problems and issues in implementing the system and interact with citizens so as to improve the quality of the system.

Similary, Rehman et al. (2012) assessed the e-Government application which is an integrated model on Government to Consumer adoption of online tax. The results confirmed that the small taxable companies in small or average size are more likely to be tech enthusiast or early

adopters of e-filing process for their individual clients. And bigger companies are slower and aren't willing to file the personal tax statements. They are also concerned about delays in their income through customs control system, internal systems and integration of communication.

In the same line, Andy (2012) investigated about developments in tax e-filing practical views from the coal face. Results reveal that perceived features of experiencing and being visible capability affect the acceptors late acceptance aim. However, this feature doesn't have a substantial impact on primary adopters.

However, Muhannad et al. (2014) in their study challenges and factors affecting the implementation of e-Government in Jordan. The results of this study reveal that the most substantial challenges and factors affecting the implementation of e-Government services in Jordan are related to budgeting and financial costs, human expertise, social influence, technological issues, lack of awareness, resistance of public employees, data privacy and security, the legal framework, the needed technology, administrative obstacles, and trust or believing in e-Government.

Further, Shih-wu and Hsi-peng (2012) carried out an empirical study of the on-line tax filing system in Taiwan on adoption of e-government services. The findings revealed that social norms and perceived features of relative use, compatibility and complexity significantly affect the intention of current user to accept the system. For potential adopters only social norms have significant effect on their intention to use the tax system on filing online.

Still, Henry (2011) in his study the influence of electronic tax filing system on tax compliance and tax collection. The findings revealed that electronic tax filing system has enhanced compliance as it easy for tax payers to evaluate their tax obligations accurately and enable them file their returns on time. However, e-tax system has increased costs on the side

of tax payers and the current e-tax servers are over whelmed by the number of users hence being slow at times which makes many of the users prefer hiring experts.

According to Vivian Mandola (2013), in her study factors influencing the adoption and use of integrated tax management system by medium and small tax payers in Nairobi central business district Kenya. The findings revealed that the tax payers are aware of their tax obligations and their respective due dates. However, majority are not self-confident that they can correctly calculate the tax due and payable. Therefore, they prefer to do manual return where they can go to a Kenya Revenue Authority office and have a revenue officer go through the return with them and help them calculate the tax due. This is also being done by many business entities in Uganda today for example the majority of the SMEs that were incorporated in the study in Nakawa division. Therefore, due to presence of enough sufficient evidence to support the null hypothesis, the alternative was rejected showing no significant influence of the moderating factor of user's expertise.

5.4 Conclusions

The study investigated the effect of perceived usefulness, ease of use, user's expertise and adoption of E-tax system among SMEs in Uganda. The study examined different dimensions of perceived usefulness, perceived ease of use and user's expertise on how they influence the adoption of e-tax system.

The study adopted a cross sectional research design to address the issues in the study. Using a structured questionnaire data was collected from SMEs using a purposive sampling method to select those SMEs that were incorporated in the study. In the study analysis was done at different levels starting with the descriptive statistics, followed by correlations and thereafter regression analysis was also conducted.

All the relationships tested were discovered to be significant and positive except for user's expertise that had a negative relationship. Regression analysis revealed that perceived usefulness was a stronger predictor of e-tax system adoption than perceived ease of use. The hypotheses still were tested and the results revealed that the two null hypotheses on perceived usefulness and ease of use were rejected due to lack of sufficient statistical evidence to support them (usefulness, $P<0.008$ and ease of use, $P<0.000$). Therefore, we conclude that perceived usefulness and perceived ease of use have a significant influence on e-tax system adoption by SMEs in Nakawa division. However, for the moderating factor of user's expertise the null hypothesis was accepted against the alternative hypothesis due existence of enough statistical evidence to support the null hypothesis ($P>0.19, >0.16$).

Conclusion can therefore be made that the factors that motivate individual users in different societies to accept technology should be conducted prior before introducing the technology. These studies could enable organizations to determine the factors that are likely to lead to high outcomes rather than simply copying what has worked elsewhere; due to the differences in settings and perceptions.

5.5 Recommendations

The findings of the study revealed that perceived usefulness was discovered to be more important in influencing e-tax system adoption by SMEs in Nakawa division. Therefore, the e-tax system designers and developers should enhance perceived usefulness either by adding new functional capabilities to the system, or by making it easier. This is to increase on the frequency of usage and rate of adoption of e-tax system.

The results of the study also revealed that perceived ease of use and perceived usefulness are correlated positively. Therefore, the factors that motivate individual users in different societies to accept technology should be conducted prior before introducing a new system

that is to say, training of staff, the financial benefits of new system, system simplified user's manuals, trial usage, persuasion for usefulness, and so on, rather than simply copying what has worked elsewhere.

For SMEs to easily adapt to e-tax system adoption and be able to frequently use it the top executives and managers in each organization should understand what the system does. However, this ought not be left to only technical personnel and actual users. Therefore, organizations should allow SMEs to participate in the decisions to adopt a new tax filing system. URA should foster a higher level of commitment of SMEs by educating them about the need and relevance of the chosen e-tax system that suits their nature of operations. However, according to officials from URA the system was initially designed for URA technical staff in the tax assessment, filing to ease on the process of collecting taxes and improving revenue collection.

5.6 Further areas of research

This study focused on perceived usefulness, ease of use, user's expertise and adoption of e-tax system. However, the model can explain only 26.1% of usefulness and ease of use while for user's expertise as a moderating factor was found not be significant by having a very slight influence. A large percentage of the un explained variance suggests the need for additional research incorporating the un investigated variables such as perceived trust, perceived risk and motivation to use e-tax system.

The study was limited to cross sectional research design; therefore, future researchers can also conduct a longitudinal study to determine whether the same findings can be obtained around the same area of study. To increase the generalization of this finding, future research might employ a larger sample so that it can be generalized to the whole country.

Further research can be done to investigate the levels of taxpayers' satisfaction to use e-tax system in Uganda. The study can also investigate the issues that have been faced, by the tax authority in implementing the e-tax system and in interacting with the tax payers. The results of such direction can be very helpful in improving the quality of e-tax system. On the other hand, further research can be done on the satisfaction levels of other electronic services currently being provided by the Governments.

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APPENDICES

APPENDIX I: QUESTIONNAIRE

Dear Respondent,

I am **Vincent Nsibambi** a student of Master's in Business Administration of Kyambogo University under Graduate school, Department of Management Science. This survey is intended to investigate the effect of Perceived Usefulness, Ease of Use and User's expertise on adoption of E-tax system of SME's in Nakawa Division. The purpose of the study is purely academic and the information given will be treated with the highest degree of confidentiality. I humbly request for your time to provide me answers to the questions enclosed within. Thank you for accepting to participate in this survey and your response is highly appreciated.

SECTION A: RESPONDENT'S CHARACTERISTICS

1. What is your sex? (Tick the most appropriate answer)
    1. Male ☐
    2. Female ☐

2. Position held in the Company
    1. Manager ☐
    2. Executive director ☐
    3. Managing director ☐
    4. Others (specify)……

3. What is your age bracket? (Tick the most appropriate answer)
    1. Less than 20 years ☐
    2. 21 – 30 years ☐
    3. 31 – 40 years ☐
    4. 41 – 50 years ☐
    5. Over 50 years ☐

4. What is your highest level of qualification? (Tick the most appropriate answer)
    1. PhD
    2. Masters ☐
    3. Bachelors ☐
    4. Diploma
    5. Certificate ☐
    6. Others (specify)…….

SECTION B: FIRM'S CHARACTERISTICS

5. Nature of Ownership (Tick the most appropriate answer)
    1. Sole proprietorship ☐
    2. Partnership ☐
    3. Joint stock company
    4. Others (specify)……

6. Number of years in existence (Age of the firm)
    1. Less than on year ☐
    2. 2 years ☐
    3. 3 years ☐
    4. 4 years
    5. More than 5 years ☐

SECTION B: from the statements below circle the extent to which you agree to the statement 1- Strongly Disagree (SD), 2- Disagree (D), 3- Neutral (N), 4- Agree (A) and 5- Strongly Agree (SA).

CODE	USEFULNESS OF E-TAX SYSTEM	SD	D	N	A	SA
U1	Filing tax returns would be difficult to be done without E-tax	1	2	3	4	5
U2	Using E-tax enhances my effectiveness on the job when making tax payments	1	2	3	4	5
U3	Using E-tax makes it easier to file tax returns to URA	1	2	3	4	5
U4	We find E-tax system useful in my enterprise	1	2	3	4	5
U5	Using E-tax system saves the time used in filing tax returns	1	2	3	4	5
U6	Using E-tax gives us greater control over my company when making tax payments	1	2	3	4	5
U7	Using E-tax system improves our company's expected performance	1	2	3	4	5
U8	Using E-tax system allows me to accomplish more work than would otherwise be possible	1	2	3	4	5
U9	The E-tax system addresses our company related needs	1	2	3	4	5
U10	The E-tax has really helped to have accurate information on tax data	1	2	3	4	5
U11	The use of E-tax system meets our expectations	1	2	3	4	5
U12	The E-tax system is reliable when used	1	2	3	4	5
U13	The E-tax system is available all the time	1	2	3	4	5
U14	The E-tax system performance is fast when used and reliable	1	2	3	4	5
U15	Using E-tax services increases our productivity	1	2	3	4	5
	EASE OF USE OF E-TAX SYSTEM	**SD**	**D**	**N**	**A**	**SA**
E1	We often become confused when we use the E-tax system	1	2	3	4	5
E2	We make errors frequently when using E-tax system	1	2	3	4	5
E3	We need to consult the user manual often when using E-tax	1	2	3	4	5
E4	Interacting with the E-tax system is often frustrating for us	1	2	3	4	5

E5	Interacting with the E-tax system requires a lot of our mental effort	1	2	3	4	5
E6	We find it easy to recover from errors encountered while using E-tax	1	2	3	4	5
E7	We find it easy to get E-tax system to do what we want it to do	1	2	3	4	5
E8	We find it cumbersome to use the E-tax system	1	2	3	4	5
E9	Interaction with the E-tax is easy for me to understand	1	2	3	4	5
E10	We find the E-tax system easy to use when filing the income tax	1	2	3	4	5
E11	The E-tax system is easy, clear and understandable	1	2	3	4	5
E12	It is easy for us to remember how to perform tasks using the E-tax system	1	2	3	4	5
E13	The E-tax system provides helpful guidance in performing tasks	1	2	3	4	5
E14	The E-tax system often behaves in unexpected ways	1	2	3	4	5
E15	E-tax is simple, easy to understand and use without assistance	1	2	3	4	5
	USER'S EXPERTISE	**SD**	**D**	**N**	**A**	**SA**
UE1	We have the required knowledge and computer skills to use the E-tax system	1	2	3	4	5
UE2	We have used the E-tax system to file the company tax returns for the past 10 years	1	2	3	4	5
UE3	The company hires an IT specialist to file tax returns using the E-tax system	1	2	3	4	5
UE4	We understand the E- tax laws and regulations in Uganda	1	2	3	4	5
UE5	We always advise management on E- tax planning issues	1	2	3	4	5
UE6	We can interpret E-tax laws and compute tax liabilities	1	2	3	4	5
UE7	We always attend E-tax seminars and workshops on behalf of the business to update ourselves	1	2	3	4	5
UE8	We use the services of a tax consultant in order to file tax returns due to lack of knowledge	1	2	3	4	5

UE9	Lack of access to personal computer and internet discourages the use of e-filing	1	2	3	4	5
UE10	We prefer doing manual tax submission of queueing at URA office as opposed to e-filing	1	2	3	4	5
UE11	Our business does not have internet access	1	2	3	4	5
UE12	Our business has developed a mobile App for access URA services	1	2	3	4	5
	ADOPTION OF E-TAX SYSTEM	**SD**	**D**	**N**	**A**	**SA**
AD1	We frequently use the E-tax system to file tax returns	1	2	3	4	5
AD2	We predict that we will use E-tax system in the future	1	2	3	4	5
AD3	We will experiment with an E-tax service and then decide whether or not to use it in future	1	2	3	4	5
AD4	We intended to use an internet filing method for my income tax return next year	1	2	3	4	5
AD5	Filing taxes via E-tax is something we enjoy doing	1	2	3	4	5
AD6	E-tax discourages us from being tax compliant because it's not easy to use or access	1	2	3	4	5
AD7	The use of E-tax saves the company the cost of complying with URA tax legislation	1	2	3	4	5
AD8	The use of E-tax has improved our level of adopting to URA tax legislation	1	2	3	4	5

APPENDIX II: INDEPTH INTERVIEW GUIDE

1. Do you believe that the concept of E-tax system is helping you to easily file your tax returns?
2. How often do you the system to file your tax returns?
3. When did you adopt the E-tax system in your enterprise?
4. For how long have you used the E-tax system to file your tax returns?
5. Does your enterprise have the required expertise and skills to file the tax returns?
6. In comparison to the manual system of filing tax return, would you say that E-tax system is efficient?
7. In your own opinion, how best do you think E-tax system should be designed to enable tax payers to fully adopt it and use it often?

THANKS SO MUCH FOR YOUR TIME. GOD BLESS YOU.

APPENDIX III: KREJCIE & MORGAN TABLE FOR DETERMINING SAMPLE SIZE

	S	N	S	N	S
10	10	220	140	1200	291
15	14	230	144	1300	297
20	19	240	148	1400	302
25	24	250	152	1500	306
30	28	260	155	1600	310
35	32	270	159	1700	313
40	36	280	162	1800	317
45	40	290	165	1900	320
50	44	300	169	2000	322
55	48	320	175	2200	327
60	52	340	181	2400	331
65	56	360	186	2600	335
70	59	380	191	2800	338
75	63	400	196	3000	341
80	66	420	201	3500	346
85	70	440	205	4000	351
90	73	460	210	4500	354
95	76	480	214	5000	357
100	80	500	217	6000	361
110	86	550	226	7000	364
120	92	600	234	8000	367
130	97	650	242	9000	368
140	103	700	248	10000	370
150	108	750	254	15000	375
160	113	800	260	20000	377
170	118	850	265	30000	379
180	123	900	269	40000	380
190	127	950	274	50000	381
200	132	1000	278	75000	382
210	136	1100	285	1000000	384

Note. —*N* is population size. *S* is sample size