FACTORS INFLUENCING THE ADOPTION AND USE OF INTEGRATED TAX MANAGEMENT SYSTEM BY MEDIUM AND SMALL TAXPAYERS IN NAIROBI CENTRAL BUSINESS DISTRICT, KENYA

BY

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DECLARATION

This is my original work and has not been presented for award of a degree in any other university or any other institution of higher learning for examination.

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This research report has been submitted for examination with my approval as the University Supervisor.

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DEDICATION

I dedicate this project to my fiancé, Patrick Ndegwa; you have been my rock and motivation as I pursued this course. To my parents, Mr. and Mrs. Omondi and to my wonderful sisters, Fiona Day and Georgina Sommy, I would not have made it without your moral as well as financial support, understanding and perseverance during my study period.

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TABLE OF CONTENT

PAGE

LIST OF TABLES

PAGE

LIST OF FIGURES

ABBREVIATIONS AND ACRONYMS

CBD	Central Business District
DOI	Diffusion of Innovation theory
DTD	Domestic Taxes Department
EAC	East African Cooperation
IT	Income Tax
IT (1)	Income Tax Return Form 1
ITMS	Integrated Tax Management System
KRA	Kenya Revenue Authority
LTO	Large Taxpayers Office
MST	Medium and Small Taxpayers
PAYE	Pay As You Earn
PIN	Personal Identification Number
SME	Small Medium Enterprises
TAM	Technology Acceptance Model
TPB	Theory of Planned Behavior
TRA	Theory of Reasoned Action
UTAUT	Unified Theory of Acceptance and Use of Technology
VAT	Value Added Tax

ABSTRACT

Tax is an important stream of revenue for government's development projects and therefore all efforts must be made by governments to ensure that it is accurately and efficiently collected so as to facilitate the government's operations. In an effort to maintain a modernized tax administration system, the Kenya Revenue Authority developed ITMS, an e-filing that integrates the processes of registration for tax purposes, tax preparation, tax filing and consequently tax payment. With the introduction of ITMS, it has become mandatory for taxpayers to register for tax purposes online using the system, but online filing of returns is yet to become fully mandatory and several taxpayers still opt to file their tax returns manually and physically drop them at K.R.A offices countrywide. This study sought to identify the factors that influence the adoption and use of ITMS by Medium and Small Taxpayers, focusing on those operating within Nairobi's Central Business District. The researcher outlined a detailed literature review and identified the variables for this research to be taxpayers' perceptions towards e-filing technology, user friendliness of the system, internet access and taxpayers' technical skills of filing tax returns. A target population of 660 taxpayers was selected and given the large population of registered taxpayers in Nairobi's C.B.D, a total sample size of 245 was picked as representative, to be the focus of this study. In addition ten tax consultants were also interviewed. A descriptive survey design was used. Stratified sampling technique was used to create a sampling frame ensuring that different and diverse types of entities were included in the survey. Data was collected using self–administered questionnaires and an interview guide. The collected data was analyzed using Statistical Package for Social Scientist software and findings presented using tables. The findings of the study revealed that with regard to taxpayers' perceptions towards e-filing technology, a majority of the taxpayers consider the development of ITMS a beneficial idea that motivated them to comply with their tax obligations. They however feel that K.R.A has not put enough measures in place so as to encourage more taxpayers to fully adopt the system. In terms of user friendliness of the system as a factor influencing the adoption and consequent use of the system, the findings of the study are that the taxpayers' use of the system is hampered by many challenges, majorly the lack of instructions on the website that would facilitate and ease the process of e-filing. The taxpayers have daily access to internet by use of computers in their business premises and this directly influences their use of the system as they can file their returns at the comfort of their business premises. The findings further revealed that the taxpayers are aware of their tax obligations and their respective due dates, however, majority are not confident that they can correctly calculate the tax due and payable and so they prefer to do a manual return where they can go to a K.R.A office and have a revenue officer go through the return with them and help them calculate the tax due. Government regulations such as the mandatory requirement to have a PIN for particular transactions were found to be most likely to influence the taxpayers to use ITMS. By gaining an understanding of these underlying adoption factors, K.R.A will be able to make changes that will greatly improve and increase taxpayers' adoption of ITMS, with the end results being increased compliance by taxpayers and allowing the authority to give quality service to taxpayers.

CHAPTER ONE
INTRODUCTION

1.1 Background of the study

An electronic filing system can be defined as one that enables taxpayers to register and submit their tax returns over the Internet. The system could have inbuilt software that has been pre-approved by the relevant tax authority to assist the taxpayers in calculating and consequently submit the correct amount of tax due. The benefits of e-filing over submitting manual returns to the tax office are that the return goes directly to the revenue authority's systems with a greatly reduced chance of human keying or document scanning errors. In addition E-filed returns cost less to process compared to a manual return both in terms of money and time to the revenue as well as the tax payer (Lemuria Carter, 2011). E-filing is also environmentally friendly as there is less paper used.

With the rapid advancement in information and communication technology that the world continues to experience, the operation of the tax collection and administration system continues to be a challenge for many authorities. Tax authorities are being challenged to maintain a modernized and responsive tax administration system so as to facilitate faster collection of taxes which is user friendly and also cost effective (Choong, 2010). An e-filing system integrates the processes of registration, tax preparation, tax filing and tax payment. Taxpayers therefore avoid the hassles of visiting the tax office and making long queues, the returns are filed at their convenience. It is in this regard that several tax authorities have embraced the change and adopted an e-filing approach.

Tax is an important stream of revenue for government's development projects and therefore all efforts must be made by governments to ensure that it is accurately and efficiently collected so as to facilitate the government's operations. In developed countries like Australia, Canada, the UK, US and New Zealand, several studies have been conducted to examine tax practitioners' acceptance of e-filing. For example, in the US, it was found that American tax professionals vary

widely in their attitudes, technology readiness, acceptance and utilization of e-filing technologies (ETAAC, 2002). In addition, the lack of perceived benefits, cost of compliance, lack of willingness to learn and perceived insecurities and misconceptions of the e filing service have impeded the tax professionals in the US from expending the resources to get involved (ETAAC, 2007). In a similar vein, in the UK, the ACCA survey found that professional accountants have shown no confidence in online tax filing (ACCA, 2002). The Electronic Tax Administration Advisory Committee (ETAAC) is recommending mandating certain taxpayers and tax practitioners to e-file personal and business tax returns in the US (ETAAC, 2009). In Singapore, studies indicated that the government needs to restore public trust in e-filing and to blend socio-political strategies, technology and taxation together.

In 2006, the Inland Revenue Board Malaysia (IRBM) streamlined the tax administration policies to embrace an e-filing system (Lai Ming, 2005).With the e-filing system, Malaysian taxpayers and tax agents can file their income tax returns electronically via the enabling Internet technologies, rather than through mail or physical visits to the tax office, thus simplifying the process of making returns for the taxpayer. In its first year of implementation of e-filing system for individual taxpayers, in spite of the extension of the tax filing deadline by one month and a promise to get faster tax refund for e-filers; just more than 120,000 out of 4 million individual taxpayers opted to use e-filing; which represented only 3% of the total individual taxpayers (The Star, 2006a). Factors attributed to this include taxpayers' discomfort about e-filing technology and the perceived insecurity of e-filing in addition to lack of internet self-efficacy and skills are Though it is yet to gain momentum, the number of taxpayers using e-filing has increased gradually from 538,558 in 2007 to 881,387 in 2008 (The Star, 2009). Most recently, the Malaysian Inland Revenue Board has been streamlining the tax administrative policies to embrace an e-filing system (Lai Ming, 2005).

In Uganda,with the commencement of an e-filing system code named 'e-Tax' in June 2009, at least UShs 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 (Mwonge, 2011) .The web-based application was developed to automate Uganda Revenue Authority's services enabling taxpayers 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 linked to the customs' Automated System for Customs Data (ASYCUDA) to further ease transactions. According to URA's Manager Business Analysis, Myra Ochwo, "Countrywide, taxpayers have embraced the e-Tax system and to date over 130,000 electronic Taxpayer Identification Numbers (TINs) have been issued." (Mwonge, 2011)

In Kenya, the Kenya Revenue Authority (K.R.A) was established in 1995 with a mandate to be a revenue collecting agency on behalf of the government and tax administration. It is a well known fact that the revenue generated from the taxation of individuals and businesses is an important stream of income for government. In an economy like ours that is struggling to remain afloat, it is even more important. Tax revenue is the source of funds used for development projects such as provision of infrastructure like good roads, stable power supply, stable water supply, all of which combine to create an enabling environment for businesses –and in turn the economy at large- to grow. K.R.A'S functions include providing advice on matters pertaining to the administration and collection of revenue; enhancing efficiency and eliminating tax evasion; facilitating economic stability and controlling exit and entry points to the country (Parliamentary Budget Office, 2010).

In the financial year 2004/05, K.R.A launched a Revenue Administration Reform and Modernization Programme (RARMP), with a goal is to transform "K.R.A into a modern, fully integrated and client-focused organization". Among the initiatives under the programme was automation and integration of ICT into the tax collection in a bid to modernize tax administration. It is in this regard that an electronic filing system was introduced and rolled out in December 2008 known as Integrated Tax Management System. With introduction of ITMS, KRA automated the issue of unique personal identification numbers (PINs) through the electronic registration (e-Registration) module. ITMS initially enabled registered taxpayers to

file their tax returns for VAT and PAYE online but over the years, the system has been upgraded to cover the filing of corporate as well as individual income tax returns, stamp duty, Turn over Tax and Land Rent.

The focus of this study was to establish the factors that influence the adoption and use of ITMS by Medium and Small Taxpayers since its inception to date and their experiences on using the system. The study also sought to investigate the motivators that KRA can put in place so as to encourage taxpayers to fully adopt the system.

1.2 Statement of the problem

In most countries, e-filing is not mandatory, rather it is offered as an option to taxpayers and their tax representatives. As a result, worldwide, several studies found tax users' resistance to use e-filing system remains a widespread problem. Although, the e-filing system may offer potential benefits to improve administrative compliance efficiency, the benefits gained may be obstructed by tax users' unwillingness to accept and use the new tax technology. In essence, the move to adopt an e-filing system is neither hassle free nor well accepted by all tax parties, particularly the tax agents and professionals (Kamarulzaman, 2010).

To date, there have been little published empirical studies on the reactions of taxpayers towards e-filing system, particularly in East Africa. Therefore, in considering that e-filing is the direction global tax authorities is taking, this study has emerged to find out how taxpayers and tax practitioners in Kenya as a developing nation, respond to e-filing endeavors put in place by K.R.A to address a research void, in order to fill up a knowledge gap. This study’s aim was to assess the attitudes and perceptions of Medium and Small Taxpayers towards the e-filing system as well as to examine the importance of various incentives that will motivate taxpayers to adopt the system.

K.R.A fulfils its tax administration and collection objective through its three revenue departments: Domestic Taxes, Customs and Road Transport Department. The Domestic Taxes

Department is further divided into three sub departments, based on the annual turnover of the taxpayers (K.R.A, 2012). Large Taxpayers' Office covering the taxpayers whose annual turnover is above Kshs 750 million. Medium Taxpayers' office manages taxpayers whose annual turnover is between Kshs 300 million and Kshs. 750 million. Taxpayers whose annual turnover is below Kshs 300 Million fall under the Medium and Small Taxpayers office and they were the major focus of this research.

Compared to other EAC countries, Kenya has a large modern and diversified economy with a vibrant private sector with many formalized enterprises, where majority of Medium and Small Taxpayers fall under. The informal sector, also known as Jua Kali is also growing at a fast rate and businesses in this sector are also categorized as Medium and Small Taxpayers (Group, 2010). It is in order to say that SME's must be nurtured and a favorable trading environment created, by strengthening the factors that lead to business success while mitigating the challenges and problems that threaten their advancement, so as to ensure their growth as they form a substantial portion of our growing economy. For this reason, an ideal tax policy needs to be adopted in order to ensure voluntary compliance, economic growth and proper utilization of resources. Their size and nature makes the issue of tax compliance one of particular importance especially since most SMEs have access to limited resources and inadequate expertise to comply with diverse and complicated regulation. High compliance costs can result in tax avoidance, tax fraud, and inhibit investment by way of diminishing competitiveness of the country in terms of taxation attractiveness (Ojochogwu, 2012).

At the end of the first year of its inception, 479,592 Medium and Small taxpayers had used ITMS to register for tax purposes while only 24,626 had used it for e-filing. Four years later, the number of taxpayers who have registered using ITMS has increased to 790,048 whereas those using the system for e-filing have reduced to 7,832 (K.R.A, 2012). In this regard, this study was conducted, focusing on Medium and Small Taxpayers based in Nairobi, with an aim to assess the taxpayers' willingness to adopt and use the e-filing system as well as their experiences in using the system. The study was conducted between March and July 2013.

1.3 Purpose of the study

The purpose of this study was to evaluate the factors that influence the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi Central Business District, Kenya.

1.4 Objectives of the study

This study was guided by the following objectives:

1. To determine how Medium and Small Taxpayers' perceptions towards e-filing technology influences their adoption and use of ITMS.
2. To assess user friendliness of the system as a factor influencing the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi Central Business District.
3. To examine the extent to which taxpayers' access to internet influences their adoption and use of ITMS as an e-filing system.
4. To determine the taxpayers' technical skills of filing tax returns as a factor influencing the adoption and use ITMS.

1.5 Research questions

This research was guided by the following research questions:

1. How do Medium and Small Taxpayers' perceptions towards e-filing technology influence their adoption and use of ITMS?
2. How does user friendliness of the system influence the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi Central Business District?
3. To what extent does taxpayers' access to internet influence their adoption and use of ITMS as an e-filing system?
4. Does the taxpayers' technical skill of filing returns influence their adoption and use of the ITMS?

1.6 Significance of the study

This study sought to generate useful insights that can be used by the government, the tax authority as well as members of the public in order to boost tax collection in our country and consequently propel economic growth. The study highlights the changes brought on by the introduction of ITMS as an e-filing system, the benefits of using the system and consequently the challenges that Medium and Small Taxpayers operating within Nairobi Central Business District face in using the system in filing their tax returns and measures the revenue authority can put into place to improve the system.

In highlighting the advantages the taxpayers enjoy as well as the challenges that they face while using ITMS, which is leading to the slow rate of adoption of the system and in the long run taxpayers failing to submit their returns and submitting the tax due, the study sought to offer recommendations that will enable the revenue authority in putting in place motivative measures to enhance the adoption of the system by taxpayers and also to seal any revenue loss loopholes that may arise from taxpayers failing to use the e-filing system.

The study contributes towards sealing the gap that is in existence with regard to adoption of e-filing systems and also to highlight issues of interest that need further redress by future researchers. It also hopes to assist students in appreciating the impact of e-filing systems in developing nations and in particular Kenya.

1.7 Basic assumptions of the study

It was assumed that the respondents would be willing to participate in the study, be co-operative and provide accurate information when responding to the research questions. The research also assumed that the sample size chosen was adequate to enable the researcher draw a valid conclusion about the population.

1.8 Limitations of the study

Time constraint was a limiting factor because the study had to be concluded within a short time. Availability of funds was also a limiting factor to the study since the researcher was self sponsored. There was no assurance that the respondents would return all the questionnaires duly

completed, neither was there a guarantee that those interviewed would respond to all the questions put forward to them comprehensively. Some taxpayers were not willing to participate in the study for fear that it would expose their non-compliance to K.R.A.

1.9 Delimitations of the study

The study area has a high concentration of taxpayers falling under the MST category, and a wide variety of business activities due to the fact that it is the capital city of Kenya. It is also within the convenience of the researcher, this made the process of data collection easy, cheaper and less tedious. The researcher also took leave from work to make time to interview the taxpayers. The taxpayers' fear of participation was overcome by explaining to them the intent of the study and issuing the transmittal letter as well as the supervisors contact for verification purposes.

1.10 Definitions of significant terms

Central Business District: The commercial and often geographical heart of the city.

E-filing System: A computerized tax administration system that is especially designed to handle general tax administration from registration, assessment, filing of returns, tax payment and processing of claims and refunds.

ITMS: An electronic filing system developed by K.R.A to integrate registration of individuals and business entities for tax purposes, filing of tax returns and consequently tax payment.

Medium and Small Taxpayers: Individuals as well as business entities, duly registered for tax purposes, whose annual turnover is below Ksh.300 million.

Nairobi Central Business District: The area covered between the rectangular shape around Uhuru Highway, Haile Selassie Avenue, Moi Avenue and University Way in Nairobi, the capital city of Kenya.

Tax: Compulsory financial charge levied on citizens (individuals as well as business entities) of the country by the state to meet government expenditure, for which failure of payment is punishable by law.

Tax Obligation: Responsibilities pertaining to tax payment and declaring of tax returns which a person duly registered and having a PIN is required to observe.

1.11 Organization of the study

This report is organized into five chapters. Chapter one provides a background on the meaning and introduction of e-filing worldwide, particularly highlighting the development and introduction of ITMS as an e-filing system. The Chapter further states the statement of the problem, research objectives and research questions that the study aims to answer. Chapter Two outlines the various schools of thought that have been brought forward with regard to adoption of technology. The variables of the study are discussed with reference to studies conducted by other researchers as well as published material on the same.

Chapter three outlines the research design and methodology to be used for purposes of completing the study. It also describes in detail, the research design, target population, the sample, sampling procedure to be adopted as well as the data collection instruments. Chapter four contains data analysis, presentation and interpretation of the findings while chapter five provides a summary of findings, its discussion, conclusions and recommendations. This is followed by references and appendices sections.

CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

This chapter outlines the various schools of thought on e-filing, as an emerging trend worldwide. This Chapter identifies the various theories put across by various scholars in relation to adoption of technology. For the research questions identified in Chapter One, the researcher highlights the findings of different authors, on the factors influencing the use and adoption of e-filing systems, presenting the results of their studies. The chapter also analyses literature related to other factors that may influence the adoption of systems and new technologies by people.

2.2 Theoretical framework

This study borrows heavily from existing research that is increasing. It was influenced by the following theories which have been put across by various scholars with regard to adoption of technology in society:

2.2.1 Diffusion of Innovation (DOI) Theory

This theory which seeks to describe the patterns of adoption of technology, explaining the mechanism of the adoption and further predicting whether and how a new invention or innovation will be successful, was advanced by Everett Rogers in 1962. The DoI theory proposes that technological innovation is communicated through particular channels, over time, among the members of a social system. Based on this definition, using e-filing technology is a fairly new practice in Kenya and can be seen as an innovation for each individual internet user.

According to (Rogers, 2003), the stages through which a technological innovation passes involves five steps which typically follow each other in a time-ordered manner. The stages are:
Knowledge: An individual learns of the existence of the innovation, understands its functioning and seeks information on how to use it correctly.

Persuasion: This is the forming of a favorable attitude to the technology/innovation after the knowledge stage in the innovation-decision process.

Decision: At this stage, the individual chooses to adopt or reject the innovation. Rogers defines adoption as 'full use of the innovation as the best course of action available' and rejection means not using the innovation.

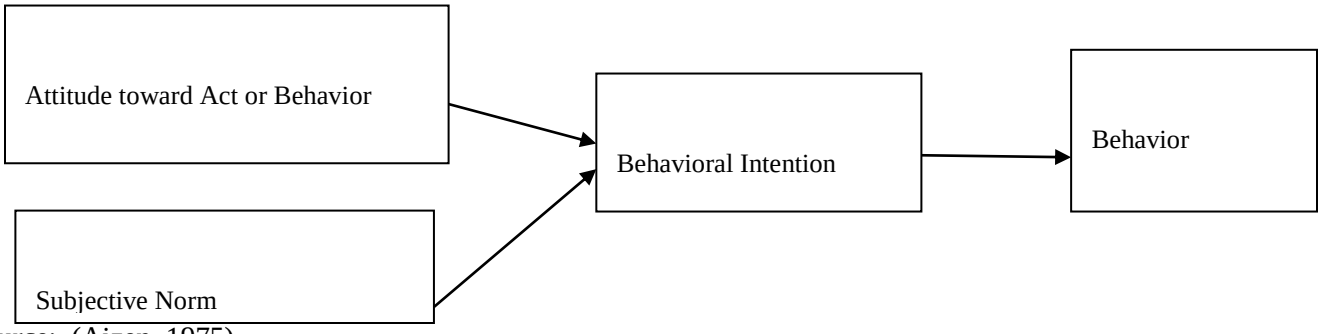
Implementation: This is the stage at which the innovation is put into practice or use.

Confirmation: At this stage, reinforcement is based on positive outcomes from the innovation and the individual looks for support for his / her decision.

Innovation decisions may be optional (where the person or organization has a real opportunity to adopt or reject the idea), collective (where a decision is reached by consensus among the members of a system), or authority-based (where a decision is imposed by another person or organization which possesses requisite power, status or technical expertise) (Sahin, 2006).

2.2.2 Theory of Reasoned Action (T.R.A)

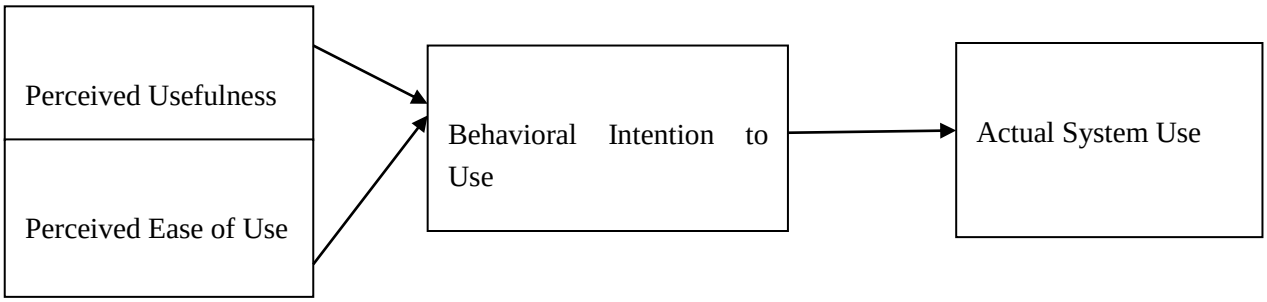
This theory was advanced by Fishbone and Ajzen in 1975. The figure below is a diagrammatic representation of the theory. The theory is based on the proposition that an individual's behavior is determined by his / her behavioral intention to perform that behavior, which provides the most accurate prediction of behavior (Fishbein and Ajzen, 1975). Behavioral intention is a function of two factors: one's Attitude toward the behavior and Subjective Norm. Attitude toward the behavior is defined as "a person's general feeling of favorableness or unfavorableness for that behavior" (Ajzen and Fishbein, 1980). Subjective Norm is defined as a person's "perception that most people who are important to him think he should or should not perform the behavior in question" (Ajzen and Fishbein, 1980).



Source: (Ajzen, 1975)

2.2.3 Technology Acceptance Model (TAM)

An adaptation of TRA, this theory was advanced by Venkatesh and Davis, and it purports that an individual's behavioral intention to use a system is determined by two beliefs: perceived usefulness, defined as the extent to which a person believes that using the system will enhance his or her job performance, and perceived ease of use, defined as the extent to which a person believes that using the system will be free of effort (Venkatesh, 2000). TAM theorizes that the effects of external variables (e.g., system characteristics, development process, training) on intention to use are mediated by perceived usefulness and perceived ease of use. According to TAM, perceived usefulness is also influenced by perceived ease of use because, other things being equal, the easier the system is to use, and the more useful it can be. Over the years, TAM has become well-established as a robust, powerful, and parsimonious model for predicting user acceptance (Venkatesh, 2000).



Source: (Venkatesh, 2000)

The TAM model proposes the following relationship between the adoption of a new technology and this variable: The higher the perceived usefulness of the new technology, the more likely it is to be adopted by the consumer. This proposition points to the fact that the decision to adopt a new technology service, for example, ITMS, is based on a subjective perception on the part of the user (Dimitrova & Chen, 2006).

2.2.4 Unified Theory of Acceptance and Use of Technology (UTAUT)

This model was formulated by Venkatesh and others and it aims to explain user intentions to use an information system and subsequent usage behavior. The UTAUT model is comprised of eight

theoretical models namely ; TRA, TAM, the motivational model, the theory of planned behavior (TPB), the innovation diffusion theory, the model of PC utilization, the social cognitive theory and a model combining the TAM and TPB. The goal of UTAUT is to understand one's intention to use an information system (IS) and the actual usage of the system (Venkatesh et al., 2003).
The theory holds that four key constructs (performance expectancy, effort expectancy, social influence, and facilitating conditions) are direct determinants of usage intention and behavior. Gender, age, experience, and voluntariness of use are posited to mediate the impact of the four key constructs on usage intention and behavior (Venkatesh V, 2003).

Performance Expectancy in this theory has been defined as the degree to which an individual believes that using the system will help him or her to attain gains in job performance. The authors identified 5 constructs as measuring some kind of performance expectancy, namely perceived usefulness, extrinsic motivation, job-fit, relative advantage, and outcome expectations.
Effort Expectancy is defined as "the degree of ease associated with the use of the system." (Venkatesh V, 2003). Three constructs reflect the notion of effort expectancy, namely perceived ease of use, complexity, and ease of use.

Social Influence is defined as "the degree to which an individual perceives that important others believe he or she should use the new system."
Facilitating conditions are defined as "the degree to which an individual believes that an organizational and technical infrastructure exists to support use of the system." With regard to this definition, the following constructs capture the notion of facilitating conditions: perceived behavioural control, facilitating conditions and compatibility. In their model comparison, the authors found out that when both performance expectancy constructs and effort expectancy constructs were present, facilitating conditions became non-significant in predicting intention. However, the results also showed that facilitating conditions had significant impact on usage behaviour (Venkatesh V, 2003).

Experience, voluntariness, gender, and age were confirmed as significant moderating influences. Almost every relationship in the model is moderated. Age, for example, moderates all key relationships of the model.

Influenced by these theories, this study sought to determine the factors influencing the adoption and use of ITMS by taxpayers, particularly borrowing from the TAM Theory that an individual's behavioral intention to use a system is determined by the extent to which the person believes that using the system will enhance his or her job performance, in this case their tax compliance and the extent to which the person believes that using the system will be free of effort and a simple process.

2.3 Taxpayers perception towards technology

Perception and attitude towards technology has been identified as one of the major factors that influence the adoption of a new innovation or technology, even in the theories as explained in Section 2.2 of this study. According to the definition of Rogers (1983) in the DoI theory, the use of ITMS as an e-filing system in Kenya can be considered a novel approach since it is perceived as an innovation by its users. Rogers proposes that there are five distinct categories of adopters: innovators, early adopters, early majority, late majority and laggards. Use of ITMS in Kenya can be said to be still in the early stage of adoption. As per the diffusion of innovations classification, those citizens who have already started to use the system can be classified as early adopters. The DOI theory specifies that 'early adopters' of an innovation have common characteristics. Early adopters are most often educated young users enjoying fairly high incomes (Rogers E. , 1983) and many studies have pointed to the fact that citizens who make use of online facilities correspond to this description (Streib, 2003).

Despite the numerous benefits associated with an e-filing system such as reduced interaction between taxpayer and tax collection officials, reduced queues at tax authority offices, reduced tax collection cost, tax authorities face some major challenges towards the implementation of the e-filing system, one major challenge being the public perception of the e-filing system (Kamarulzaman, 2010). A feeling of increased anxiety and stress due to lack of experience or

comfort with using technology or feeling threatened by technology could prevent a cusomer from being inclined to change to a technology delivered service (Fournier, 1998).

In his survey, Michael Boone conducted a quasi experimental survey within 8 different states in America to assess the factors that best explain whether a taxpayer adopts the new technology of electronic filing and once they have adopted e-filing, the factors that predict taxpayers' satisfaction with the process. Incorporating the various theories of technology adoption, Boone concludes that a modified version of TAM seems to provide a very solid basis for exploring the factors that affect adoption of state internet filing systems (Boone, 2012). Basing his research on the survey he sent to 1000 taxpayers within eight different states in America, he confirmed his hypothesis that with regard to perceived ease of use, the more that an individual feels that a particular filing method (between the e-filing and manual method) is easier to use, the more likely they are to use that particular filing method to file their state tax return. Boone's research also confirmed that the more useful individuals perceive their chosen filing method, the more likely they are to use that method to file. Boone's study was however limiting in that the number of respondents who had actually used the state's website to file was insufficient to conclude on the factors that influenced their choice to e-file.

Carter and Schaupp's study in 2011 borrowed from UTAUT and proposed a model of e-diffusion that purports that an individual's intention to use an e-government system, such as K.R.A's ITMS, is influenced by three technology adoption factors (effort expectancy, performance expectancy and social influence), two trust factors (trust of government and trust of the internet) and two personal factors (computer anxiety and optimism bias) (Lemuria Carter, 2011). Through an online survey administered to 260 participants, the study proved that it agreed with Venkatesh' theory that performance expectancy is the strongest predictor of intention to use a new system; belief that e-filing will help an individual file his/her taxes more efficiently will greatly influence the individual to use the e-filing system. Carter and Schaupp's study also confirmed the hypothesis that computer anxiety, defined as the uneasiness or fear occurring when an individual is presented with the possibility of using an information system, has a

negative effect on an individual's intention to use the e-filing system. While valid results were produced, there was limited diversity in the sample that Carter and Schaupp's study chose to conduct their research. It was composed of graduate and undergraduate students who have a higher affinity towards technology and also have ready access to technology as compared to the average citizen.

Results show that user's attitude towards the e-tax filing and payment system remains the most powerful predictor for user intention (Mahadeo, 2009). Intention to use an e-tax filing system is largely influenced by perceived use, perceived ease of use and positive attitude.

2.4 User friendliness of the system

This study sought to assess the extent to which user friendliness of the ITMS system influences the adoption and use of the system by taxpayers. After using an e-service over the Internet, the public may find the e-service system easy and useful or otherwise. Since the public cannot directly communicate with tax personnel, see or touch the tax forms as the service is provided online, the e-filing service system delivered to them may not perform as expected. In addition, the public may be burdened by the time and effort spent learning the new system and accommodating any services failure (Sweeney et al., 1999). The information system utilized for the e-filing system needs to be stable and reliable enough to handle a large amount of information processing, especially during the peak period of e-filing and particularly on the due dates for different tax heads such as V.A.T (20^{th} of every month), P.A.Y.E (9^{th} of every month). User friendliness of the system is a factor that greatly influences taxpayers' adoption and use of the system and consequently, the service provider has to ensure that the e-filing system can handle the heavy processing of data during the month(s) of tax submission, ensuring that the system runs smoothly and efficiently during the tax filing period each year (Kamarulzaman, 2010). If for example, the system suffers from frequent service time-out, system down time or even failure to respond, taxpayers might be reluctant to adopt the e-filing system.

Mahadeo's study conducted in Mauritius, whose objective was to identify factors leading to the acceptance and diffusion of e-government systems in a developing country context, using the e-tax filing system of Mauritius Revenue Authority as an example of an e-government system, singled out compatibility as a factor (Mahadeo, 2009). Compatibility has been defined as the 'degree to which an innovation is perceived as consistent with the existing values, past experience and needs of potential adopters' (Rogers E. , 1983). Therefore if the e-system is compatible with the user's working and lifestyle and meets his/her needs, that is, the taxpayer is able to file their tax return with minimum difficulty, in good time and with the resources at his/her disposal (for example type of machine, laptop, P.C, I pad etc), it is likely that they will adopt and use the system.

Research conducted in Kuwait, a developing country like Kenya, to identify the attitudes and perceptions of citizens towards the adoption of e-government services concluded that online services are indeed easy to learn and use, especially when support is provided (Awadhi, 2009). Findings of the qualitative survey conducted using a series of focus groups indicated that more than half (63%) of the participants attested to the fact that any online e-government services needed to be easy to use if they were to be used by those with little internet experience, which is common, particularly in developing countries. A weakness of this study, however, is that participants of the study were undergraduate and postgraduate students who already use internet as part of their daily routine, as opposed to the taxpayers who are the focus of this study who may not have the know how or daily access to internet.

2.5 Access to internet

Being a developing country, internet penetration in Kenya is largely limited to urban areas and the cost is yet to be termed as affordable by the majority. In addition, the knowledge and skill of using internet also remains limited to a few individuals who have access to internet. For this reason, the researcher has chosen to study access to internet and affordability of internet services as a factor influencing the use of ITMS by Medium and Small Taxpayers. In his research which focused on state revenue agencies and their electronic tax filing mechanisms for state individual

income taxes, Boone identified computer access, type of access and level of compatibility as factors influencing the adoption of e-filing in United States (Boone, 2012). Using an online survey distributed to 1000 taxpayers within 8 different states, he confirmed the hypothesis that the greater an individual's access to computers at home or in the office, the more likely it is that the individual will file taxes online, as had been proposed by Bandura (Bandura, 1986). The same study further proved that individuals with high speed internet connections are equally likely to file their returns online. With regard to cost of internet access, Boone's study also revealed that individuals for whom cost of internet is a factor are less likely to file online. Carter and Shaupp's study in 2011 which proposed a model of e-file diffusion integrating acceptance factors and personal factors to assess the impact of adoption, trust and optimism on e-file utilization echo Coetzee and Eloff's proposal that Trust of the Internet (TOI) is also a salient predictor of e-service utilization (Eloff, 2005). This suggests that users will consider attributes of the e-service provider and characteristics of the Internet before using an electronic government service (Lemuria Carter, 2011).

Morris and Awadhi's study revealed that more than half of the participants of their study claimed that any online e-government service needs to be easy to use if they are to be used by those with little internet experience (Awadhi, 2009). This suggests and confirms that the greater an individual's internet experience, the availability and access to internet facilities, the easier it would be for him/her to learn and use e-government services. In this case of this study, Morris and Awadhi's conclusion would be interpreted to mean that the greater a taxpayers' internet experience in terms of availabilty and access to internet facilities, the easier it would be and more likely that the taxpayer would choose to learn and consequently use ITMS as an e-filing system.

According to Abdul Ambali (Ambali, 2009), the fact is that the gaps in IT infrastructure can affect people's retention to continue using the system provided by the government. Above all, the findings of his study in identifying the factors and ground issues in e-filing system show that users must perceive the technology somehow useful, easy and friendly as well as security guaranteed. His paper also suggests that more IT infrastructures and other incentives should be

provided to encourage the public to use the system. The same paper raises a valid concern with regard to government staff, and in this regard, the revenue agency staff, that an effective capacity building program for the staff that can help facilitate readiness of the people to use the system, if e-filing is to become a successful policy program. Thus, the agency's staff must play effective roles to respond to the public perceptual complaints about the e-filing system (Ambali, 2009)

Closer home, Kangave attests that some of the filing methods used in Canada as a measure of improving tax administration, for example, may be expensive for Uganda's taxpayers. Internet services, for example, are still very expensive and there are still high levels of illiteracy. Even more, many literate Ugandans do not have access to computers (Kangave, 2005). This is a scenario which many taxpayers in Kenya can relate to and it was the aim of this study to investigate the extent to which access to internet as well as the cost of accessing the same influences the adoption and use of the e-filing system put in place by K.R.A.

2.6 Technical skills of filing returns

To date, there has been little research exploring the possession of technical skills of filling in and filing tax returns as a factor that affects the adoption of e-filing system by citizens, especially in developing countries. According to Kahan, empirical study provided the insights that that an e-filing system can only work effectively with the assistance and cooperation of tax preparers/professionals (Kahan, 1999). In their research with an objective to determine the motivators, barriers and concerns in the adoption of e-filing system, Lai and Choong purport that to be accepted, an e-filing system needs to be perceived by tax professionals as possessing sufficient usability for supporting or enhancing their core competency, productivity and business performance in providing tax service to clients, suggesting that the major users of an e-filing system are tax professionals (Choong, 2010). This researcher disagrees with this as in developing countries, and particularly Kenya, hiring tax professionals is an added cost to the SME's and they therefore resort to doing their own tax returns, though they may not be well versed with taxation and the concept of filing returns.

Che Azmi and Kamarulzaman in their study of the Malaysian e-filing system (Kamarulzaman, 2010) also point out the technical aspect of the filing process as a challenge facing taxpayers with regard to its adoption and use. Their research aimed to study the relationship of perceived risk and its facets within the Technology Acceptance model (TAM) within the tax e-filing context and proposed a conceptual model to further understand the role of perceived risk in influencing consumer behavior throughout the adoption process. The study confirmed the hypothesis that taxpayers' perceived risk of e-filing adoption will be affected by financial risk which measures monetary loss due to the use of e-filing such as keying-in incorrect information in tax returns that could lead to the wrong calculation of tax payable. This research therefore sought to study the technical skill of filing returns as a factor affecting the adoption and use of the e-filing system among Medium and Small Taxpayers in Kenya.

2.7 Conceptual Framework

The conceptual framework of this study is represented by Figure 1.

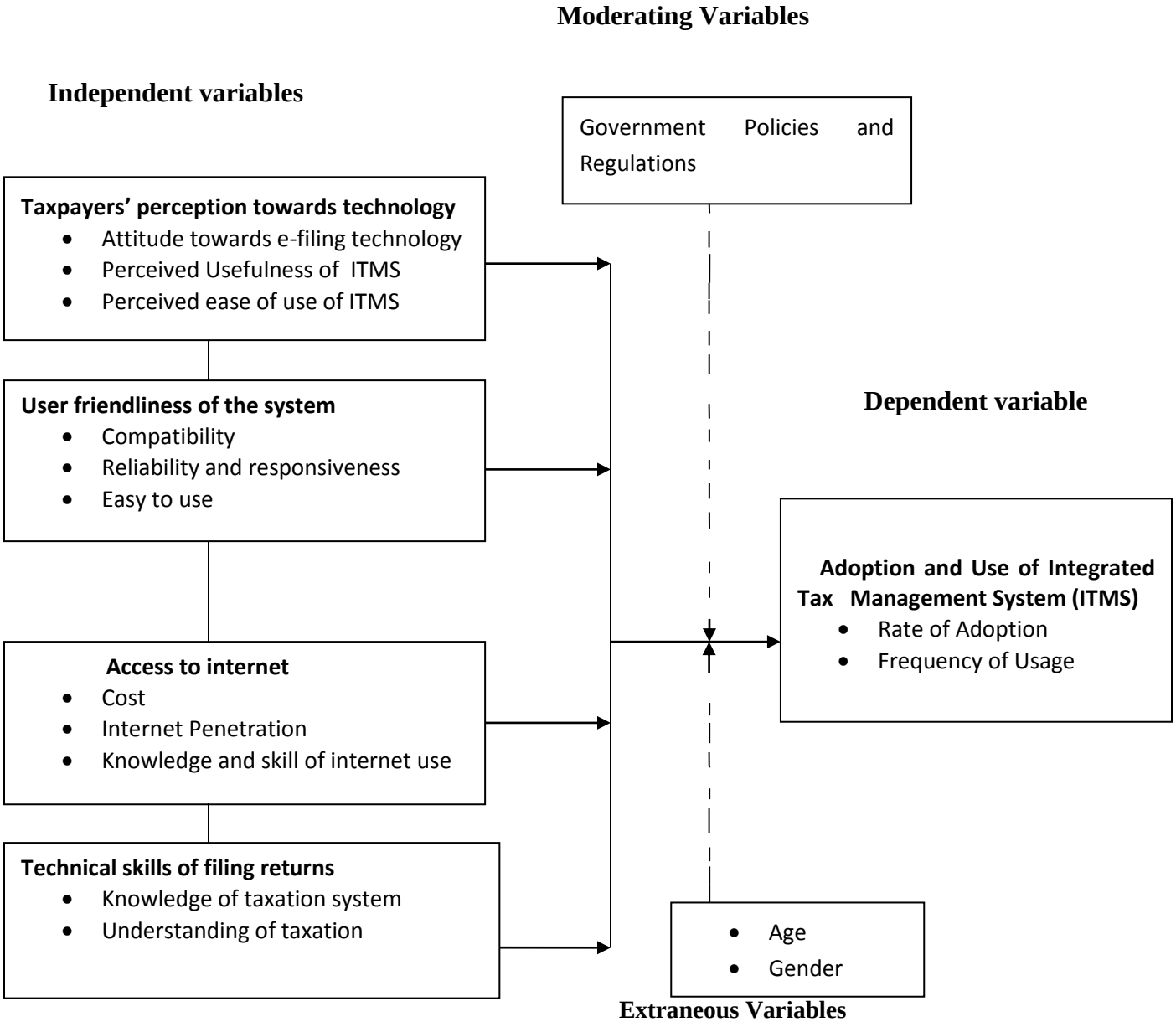


Figure 1: Conceptual Framework

The conceptual framework as illustrated in figure one, is a diagrammatic representation of the variables that influence the adoption and use of ITMS as were discussed in this study. There are four independent variables. Taxpayers' perception towards technology is characterized by

attitude towards e-filing technology, perceived use as well as perceived ease of use of ITMS. User friendliness of the ITMS as a variable is characterized by its compatibility, reliability, responsiveness and whether or not the system is easy to use. Access to internet with regard to cost of internet access and internet penetration in the country to people is another independent variable of the study. Taxpayers' technical skill of filing returns as an independent variable is with regard to their knowledge of taxation and consequent understanding of taxation. The dependent variable for this research is the adoption and use of ITMS as an e-filing system in Kenya. Government policies and regulations have been singled out as moderating variables while age and gender have been identified as extraneous variables.

2.8 Summary of literature review

To date, there has been little research exploring factors that influence the adoption of e-filing systems by citizens in developing countries, especially in East African countries. The existing studies reviewed in this research provide a useful starting point for assessing factors that affect adoption and satisfaction with state e-file systems. The two main TAM variables, ease of use and perceived use, have shown to be highly related to adoption of e-file systems in many countries and have formed the basis for several researches conducted with regard to e-filing systems. Other factors such as performance expectancy, computer anxiety and computer self efficacy have been identified in relation to attitude towards adoption of technology.

The service provider, in this case, the tax authority providing the e-filing system, has to ensure that the e-filing system can handle the heavy processing of data during the month(s) of tax submission, ensuring that the system runs smoothly and efficiently during the tax filing period each year (Kamarulzaman, 2010). Compatibility of a system, another important factor to consider, greatly determines the extent to which users adopt a system (Mahadeo, 2009).

Computer access, type of access and level of compatibility have been identified as factors influencing the adoption of e-filing. Individuals with high speed internet connections are equally likely to file their returns online. A fact that cannot be overlooked, however, is that if internet

services remain expensive and majority of the public do not have access to computers or even basic computer or internet skills, the rate of adoption and use of e-filing systems will remain low. The technical skills of filing tax returns makes majority of taxpayers shy away from the e-filing systems. This forces them to resort to hiring specialists such as tax practitioners. If taxpayers have basic knowledge and understand the concepts of taxation, it becomes easier for them to adopt the e-filing technology.

Despite the fact that the researchers have investigated factors that determine the adoption of e-filing services by adapting various theories of technology adoption such as Diffusion of Innovation Theory, technology Acceptance Model, Theory of Reasoned Action, the Unified Theory of Acceptance and Use of Technology (UTAUT) model there has been little research that has explored other factors that might influence the take-up of e-filing services in developing countries, such as Kenya, and particularly among Medium and Small Taxpayers who contribute to a substantive part of the economy.

The research outlined in this paper aims to address this gap. The specific aim of the research was to gain insight into the factors that influence the adoption and consequent use of e-filing system, better known as ITMS, by in Kenya by medium and small taxpayers, focusing on those operating within Nairobi's Central Business District. It is expected that the findings will help decision makers and particularly K.R.A gain a better understanding of user acceptance and adoption of e-filing services enabling them to plan and design services more effectively.

CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology as the mode of achieving the purpose of the study. It specifically highlights the research methods to be used in carrying out the study in an attempt to answer the research questions. In addition, various methodological issues discussed include population, sampling technique(s), sampling frame, sampling size, data collection and analysis of the methods adopted in conducting the study. It also gives the data validity and reliability statement.

3.2 Research design

A descriptive survey design was adopted for this study. A descriptive survey design was best for this study as it describes characteristics associated with the subject population, and in particular factors that make them behave the way they do. According to Cooper and Schindler (Cooper, 2003) descriptive design discovers and measures the cause and effect of relationships between variables. Mugenda and Mugenda (Mugenda, 2003) state that a descriptive research determines and reports the way things are and attempt to describe possible behavior, attitude, values and characteristics of such things. The study used a descriptive design because it enables the researcher to collect a large quantity of in-depth information about the population being studied. A survey design was appropriate as the data required for analysis needed to be collected from a large population, that is Medium and Small taxpayers operating within Nairobi Central Business District, and it would have been hard to observe characteristics of each and every small or medium taxpayer. The unit of analysis for the study is every individual taxpayer that has used the e-filing system and hoping to re-use it again.

3.3 Target population

The focus of the study was on Medium and Small Taxpayers operating in Nairobi Central Business District. The population of interest for this study comprised of 660 registered Medium and Small Taxpayers operating in Nairobi CBD. Cooper and Schindler (Cooper, 2003) define a population element as the subject on which the measurement is being taken and is the unit of study. Nairobi Central Business district was of particular focus for this study due to its large concentration of business entities and diversity of business entities who are potential users of ITMS.

3.4 Sampling size and procedures

Sampling is a means of selecting a part of a group from a population to represent the characteristics of the entire group or the population of interest. An advantage of sampling is that it reduces the length of time needed to complete the study and cuts costs. The use of samples enabled a higher overall accuracy than a census. In addition, collecting data from fewer cases means that one can collect more detailed information. According to Cooper and Schindler (Cooper, 2003), a sampling frame is a list of elements from which the sample is actually drawn and is closely related to the population. The population of interest was created from information received from the K.R.A records of registered taxpayers, the Companies Registry and the Yellow Pages. By adopting this approach, the researcher ensured that the sampling frame was current, complete and relevant for the attainment of the study objectives.

The study adopted both probability and non probability sampling techniques. Stratified random sampling increases a sample's statistical efficiency and provides adequate data for analyzing the various sub-populations. This method provides a more representative sample than strictly random sampling does (Cooper, 2003). The study therefore adopted stratified sampling, a probability sampling technique, to ensure that different and diverse types of entities were included in the survey. The study population comprising of registered taxpayers were stratified into three mutually exclusive subgroups as tabulated in Table 3.1. The subgroups were composed

of sectors of our economy under which majority of businesses fall, that is, wholesale and retail trade, service provision activities and manufacturing activities.

The Krejcer and Morgan table was used to determine the ideal sample size for this study. Systematic random sampling was applied to select the 245 taxpayers who formed the sample for this study. Random sampling technique ensures that every business in each stratum has an equal chance of being selected and that the selected sample is varied and representative (Mugenda, 2003). For the population of 660 taxpayers, 245 would be an ideal sample size given the time and resources available and also considering the large population.

Table 3.1: Sampling Frame

Strata	**Number**	**Sample Size**
Wholesale and Retail Trade	260	100
Service Related Activities	290	100
Agriculture and Manufacturing Activities	110	45
Totals	**660**	**245**

3.5 Data collection methods

The study employed primary data collection. Primary data was collected through a self-made questionnaire as well as in depth interview method. The questionnaire adopted structured open ended as well as closed questions. The responses in the questionnaires helped in gaining an in-depth understanding of the factors influencing the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi Central Business District. The questionnaire was structured based on the research questions. It was divided into two major sections: the first section sought to ask personal information about the respondents and their businesses. The second section sought information relating to the factors influencing the adoption and use of ITMS by taxpayers, with particular reference to the variables of this research.

For the interviews, the researcher had predetermined questions grouped together to address particular objectives of the study. Majority of the questions were unstructured, so as to enable the researcher gather as much information as possible in regards to the factors influencing the use of ITMS by the taxpayers. Using interview method of data collection ensured that the questions were understood thus minimizing the risk of collecting incomplete and wrong information as it is with questionnaires particularly when people are unable to understand the questions properly. This data collection method was considered by the researcher as appropriate in providing safe basis for generalization and high accuracy.

3.5.1 Validity of Research Instrument

According to Kothari (Kothari, 2004), validity is the degree to which an instrument measures what it is supposed to measure. Therefore, the term refers to the extent to which an instrument asks the right questions in terms of accuracy. The content validity of the research instrument for this study was determined through piloting, where the responses of the subjects were checked against the research objectives. For a research instrument to be considered valid, the content selected and included in the questionnaire must be relevant to the variable being investigated (Kothari, 2004). The researcher performed the pilot test with a randomly selected sample of ten MSTs who were not included in the final study. Content validity of the instrument was also tested using a research expert's opinion, who was the research supervisor. The research expert independently judged the validity of the items in the questionnaire in relation to research objectives.

3.5.2 Reliability of Research Instrument

Reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Cooper, 2003). To test the reliability of the questionnaire as a research instrument, a test-retest technique was employed in which questionnaires were administering to a group of medium and small taxpayers with similar characteristics as the actual sample size but not included in the final study. The test was repeated after two weeks. This was to establish the extent to which the questionnaire elicited the same

responses every time it is administered. The findings were found to be consistent and therefore the questionnaire proved to be a reliable research instrument.

3.6 Data collection procedure

Data collection procedures began upon approval of the proposal after its defense. An introduction letter was issued to the sampled entities for consent to collect data from the respondents. The questionnaires were administered to the respondents directly by the researcher because most businesses in the study area are in close proximity to each other. For those respondents who were not available for a sit-in filling of the questionnaire, it was e-mailed to them. The interviews were conducted by the researcher personally at a time and place convenient to the respondents to provide an environment in which the respondents would feel free to participate.

3.7 Data Analysis

A careful analysis of the completed questionnaires was done to ensure that the collected data was accurate and consistent with other information gathered. Pre-processing of collected data was done through editing to detect errors and omissions and making of corrections where necessary. Data was analyzed by coding according to variables in the study for efficiency so as to reduce the replies given by respondents to a small number of classes. After completion of coding, the data was classified on the basis of common characteristics and attributes. The raw data was then assembled and tabulated in form of statistical tables to allow for further analysis. The Statistical Package for Social Sciences (SPSS) was used to aid in the statistical analysis of the data.

3.8 Ethical issues

This research endeavored to obtain an informed consent from the respondents 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 or questionnaires was maintained

3.9 Operationalization of variables

The measurement of variables in the study and relationship between the variables and the survey questions are illustrated in table 3.2.

Table 3.2: Operationalization of variables

Objective	Variable	Indicator	Tools of Analysis	Type of Analysis
To identify the taxpayers' perceptions towards technology in the adoption and use of ITMS.	Independent	Attitude and perceived usefulness of ITMS	Percentages Frequencies	Descriptive statistics Inferential Statistics
To assess user friendliness of the system and the taxpayers' experiences while using it.	Independent	Compatibility and reliability	Percentages Frequencies	Descriptive Statistics Inferential Statistics
To establish how taxpayers' access to internet influences their adoption and use of the e-filing system.	Independent	Cost of Internet access Internet penetration	Percentages Frequencies	Descriptive statistics Inferential Statistics
To determine the taxpayers' technical skills of filing tax returns as a factor influencing the adoption and use of the e-filing system.	Independent	Technical skills of filing tax returns	Percentages Frequencies	Descriptive Statistics

CHAPTER FOUR
DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter presents the data analysis, presentation and interpretation of findings on the data collected from registered taxpayers in Nairobi's Central Business District, based on the factors influencing their adoption and use of ITMS. The main objective of the study was to evaluate the factors that influence the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi Central Business District, Kenya. The study sought to answer the research questions: How do Medium and Small Taxpayers' perceptions towards e-filing technology influence their adoption and use of ITMS? How does user friendliness influence the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi Central Business District? To what extent does taxpayers' access to internet influence their adoption and use of ITMS as an e-filing system? Does the taxpayers' technical skill of filing returns influence their adoption and use of the ITMS? The study sampled 245 registered taxpayers operating within Nairobi's Central Business District. The data was interpreted as per the research questions.

4.2 Response Rate

The study targeted 245 respondents in collecting data with regard to the factors that influence the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi's Central Business District. Out of the 245 questionnaires issued, 198 were returned, giving an 81% response rate, as shown in Table 4.1. According to Mugenda and Mugenda (2003) a 50% response rate is adequate, 60% good and above 70% is rated very good. This also concurs with Kothari (2004) assertion that a response rate of 50% is adequate, while a response rate greater than 70% is very good. This implies that based on these assertions; the response rate for this study, 81% is very good.

Table 4.1: Response Rate

Respondents	Questionnaires Administered	Questionnaires Filled and Returned	Percentage
Total	**245**	**198**	**81**

4.3 Demographic information

The study found it of paramount importance to establish the demographic information in order to evaluate the factors that influence the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi's Central Business District.The demographic information of the respondents included gender, age, and their level of education, business activity, annual turnover and PIN registration.

4.3.1 Gender Distribution

The researcher sought to determine the gender distribution of the respondents and the findings are shown in table 4.2.

Table 4.2: Gender

Gender	Frequency	Percentage
Male	116	58.6
Female	82	41.4
Total	**198**	**100**

The findings of the study indicated that the dominant group, the majority of the respondents who participated in the study, are the male who accounted for 58.6% while their female counterparts accounted for 41.4%.

4.3.2 Age Category

The researcher sought to determine the age category under which the respondents fall and the findings are shown in table 4.3.

Table 4.3: Age

Age Category	Frequency	Percentage
18-30	78	39.4
31-40	88	44.4
41-50	23	11.6
Above 50	9	4.5
Total	**198**	**100**

The findings reveal that most participants are in the age bracket of between 31-40 representing 44.4 % followed by 39.4% who are aged between 18-30 years. The study further reveals that 11.6% of the respondents were aged between 41-50 years and 6.6% were above 50 years. It can therefore be observed from the findings of the study that most of respondents were aged between 31-40 years.

4.3.3 Level of Education

The study also found it of importance to determine the participants' level of education which is crucial for this study as the respondents' level of education eliminates the bias of uneducated respondents.

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Table 4.4: Level of education attained

Level of education	Frequency	Percentage
Secondary	10	5.1
Technical/Vocational	42	21.2
Undergraduate	86	43.4
Postgraduate	60	30.3
Total	**198**	**100**

The results of the findings reveal that most respondents are undergraduates accounting for 43.4% while 30.3% are postgraduates. 21.2% of the respondents were educated up to technical level and

5.1% up to secondary level. The findings of the study show that the respondents had reasonable education to execute the roles assigned to them effectively and efficiently and make prudent decisions.

4.3.4 Type of business activity

The respondents were asked to indicate their main business activity and the findings are presented in table 4.5.

Table 4.5: Composition of business activity type

Type of business activity	Frequency	Percentage
Wholesale and Retail Trade	80	40.4
Service Related Activities	91	46.0
Agriculture and Manufacturing Activities	27	13.6
Total	**198**	**100**

As shown in table 4.5, the majority of respondents, 46%, engage in service related activities. This was closely followed by those engaging in business activities relating to wholesale and retail trade at 40.4%. Medium and Small Taxpayers in Nairobi's Central Business District engaging in agriculture and manufacturing activities was found to be 13.6%.

4.3.5 Annual turnover

The researcher found it of importance to ask the respondents to indicate their business' average annual turnover, as this is the major factor that identifies the category under which a taxpayer falls consequently determining whether the respondents can be classified as Medium and Small Taxpayers. Table 4.6 shows the results of the findings.

Table 4.6: Annual turnover

Annual turnover	Frequency	Percentage
Below Ksh500,000	33	16.7
Between Ksh500,000 and Ksh1 million	29	14.6
Between Ksh1 million and Ksh2 million	25	12.6
Between Ksh2 million and Ksh3 million	23	11.6
Over Ksh3 million but less than Ksh 300 million	88	44.4
Total	**198**	**100**

Respondents with an annual turnover of over Ksh3 million accounted for 44.4%, followed in a distance by 16.7% who revealed they had annual turnover of below Ksh500, 000 while 14.6% indicated that their annual turnover is between Ksh500, 000 and Ksh1 million , and 12.6% said their turnover ranged between Ksh1 million and Ksh2 million. The study further revealed that 11.6% had an annual turnover of between Ksh2 million and Ksh3 million. It can therefore be deduced that most respondents had an annual turnover of over Ksh3 million but less than Ksh 300 million and thus can correctly be categorized as Medium and Small Taxpayers..

4.3.6 Personal Identification Number

The researcher inquired as to whether the respondents' business had a PIN. This was to determine that the businesses are registered for tax purposes as the PIN is a mandatory requirement for all operating businesses. The findings are presented in table 4.7.

Table 4.7: Number of respondents with Pin

Respondents with PIN	Frequency	Percentage
Yes	191	96.5
No	7	3.5
Total	**198**	**100**

As shown in table 4.7, 96.5% of the businesses have a personal identification number while only 3.5% did not. Majority of the respondents have a PIN according to the results of the findings and are therefore duly registered for tax purposes.

4.3.7 PIN Registration

The respondents were requested to indicate on how they registered for their business' personal identification number, either online or manually. The results of the findings are tabulated in the table 4.8.

Table 4.8: Mode of PIN registration

Mode of PIN registration	Frequency	Percentage
Online	127	66.5
Manually, at a K.R.A office	64	33.5
Total	**191**	**100**

The results reveal that out of the 191 respondents who have a PIN, 66.5% registered online while 33.5% registered for their PINs manually at KRA office. According to the results of the findings, majority of the respondents registered for their respectful PINS online.

4.4 Perceptions towards e-filing technology

With regard to perceived ease of use, the more that an individual feels that a particular filing method (between the e-filing and manual method) is easier to use, the more likely they are to use that particular filing method to file their state tax return. In retrospect, the more useful individuals perceive their chosen filing method, the more likely they are to use that method to file their return (Boone, 2012). The researcher sought to find out how taxpayers' perception towards the e-filing technology influences their adoption and use of ITMS.

4.4.1 Development of ITMS

The researcher enquired as to whether the taxpayers found the development of ITMS in a bid to modernize and automate tax collection a wise idea. The findings are presented in table 4.9.

Table 4.9: Perception of ITMS

Perception of ITMS	Frequency	Percentage
It is a wise idea.	176	88.9
It is not a wise idea.	22	11.1
Total	**198**	**100**

88.9% of the respondents think that the development of ITMS is a wise idea while those who do not think that it is a wise idea were in a distance and accounted for 11.1%. It can therefore be deduced that to the majority of taxpayers, the development of ITMS is a good idea.

4.4.2 Assessment of E-filing system as a beneficial idea.

The study sought to determine whether the respondents believe the e-filing system is a beneficial idea. The findings are presented in table 4.10.

Table 4.10: Extent of agreement that E-filing system is a beneficial idea.

Opinion	Frequency	Percentage
Strongly agree	112	56.6
Agree	75	37.9
Not Sure	2	1
Disagree	4	2
Strongly Disagree	5	2.5
Total	**198**	**100**

The results of the findings reveals that majority of the respondents who strongly agreed that indeed e-filing is a beneficial idea accounted for 56.6% followed by 37.9% who also agreed, 2% who disagreed and 2.5% strongly disagreed. The study further revealed that 1% of the respondents were not sure if whether the e-filing is a beneficial idea.

4.4.3 Assessment of the e-filing system in motivating taxpayers to comply with tax obligations.

The researcher found it of paramount importance to enquire as to whether the e-filing system motivates the taxpayers to comply with tax obligations. This was in a bid to assess the perceived use of ITMS. Table 4.11 shows the findings.

Table 4.11: Extent of agreement with the idea that e-filing system motivates one to comply with tax obligations

Opinion	Frequency	Percentage
Strongly agree	36	18.2
Agree	87	43.9
Not Sure	29	14.6
Disagree	32	16.2
Strongly Disagree	14	7.1
Total	**198**	**100**

It can be observed that most of the people agreed who were 43.9% followed in a distance by 18.2% who strongly agreed. 16.2% of the respondents disagreed and 7.1% strongly disagreed. The study further revealed that 14.6% were not sure whether or not the e-filing system motivated them to comply with their tax obligations. It can therefore be deduced that majority of the taxpayers agree that the e-filing system motivates them to comply with their tax obligations, which is a major reason that led to the inception of the system.

4.4.4 Comparison of the manual system to online system of tax registration and submission of returns

In comparison to the manual system of tax registration and submission of tax returns, the researcher tried to find out if taxpayers found the online service is inefficient. This was in a bid to assess the perceived ease of use of the system. The findings are presented in table 4.12.

Table 4.12: Extent of agreement with the opinion that the online service is inefficient

Opinion	Frequency	Percentage
Strongly agree	13	6.6
Agree	27	13.6
Not Sure	23	11.6
Disagree	80	40.4
Strongly Disagree	55	27.8
Total	**198**	**100**

The results of the findings as shown in table 4.12, revealed that most (40.4%) of the respondents disagreed with the statement, followed by 27.8% who strongly disagreed. The respondents who were not sure accounted for 11.6% of the respondents. 13.6% of the respondents agreed with the statement and 6.6% strongly agreed. It can be therefore concluded that majority of the taxpayers find the online system of tax registration and submission of returns efficient as compared to the manual system.

4.4.5 The comfort of submitting tax return online.

The study sought to establish from the taxpayers whether the idea of submitting their tax returns online made them feel uncomfortable. The findings are presented in table 4.13.

Table 4.13: Extent of agreement with the opinion that the idea of submitting tax returns online makes one uncomfortable

Opinion	Frequency	Percentage
Strongly agree	11	5.6
Agree	21	10.6
Not Sure	14	7.1
Disagree	92	46.5
Strongly Disagree	60	30.3
Total	**198**	**100**

The analysis of the findings showed that the respondents who disagreed with the statement constituted 46.5%, closely followed by 30.3% who strongly disagreed. 10.6% of the respondents agreed with the statement and 5.6% strongly agreed. The findings of the study further show that

7.1% were not sure. It can be deduced therefore that majority of the respondents feel that the idea of submitting their returns online does not make them uncomfortable.

4.4 6 E-filing system eases of the work of preparation of tax returns and payment

The respondents were asked to rate the statement: I feel that the online system does not ease the work of preparation of tax returns and payment. Table 4.14 shows the study findings.

Table 4.14: Extent of agreement with the opinion that the online system does not ease the work of preparation of tax returns and payment.

Opinion	Frequency	Percentage
Strongly agree	15	7.6
Agree	25	12.6
Not Sure	24	12.1
Disagree	68	34.3
Strongly Disagree	66	33.3
Total	**198**	**100**

From the results of the findings 34.3% of the respondents disagreed with the statement followed closely by 33.3% who strongly disagreed. A further 12.6% agreed with the statement, 7.6% strongly agreed and 12.1% were not sure whether or not the online system makes work easier in terms preparation of tax returns. It can therefore be observed that most of respondents feel that the online system does ease the work of preparation of tax returns and payment.

4.4.7 Filling online return without assistance

The respondents were asked to rate the statement: I feel that I can fill in my tax return online even if no one is around to assist me. Table 4.15 shows the analysis of the study findings.

Table 4.15: Extent of agreement with the opinion that one can fill in their tax return online without assistance.

Opinion	Frequency	Percentage
Strongly agree	50	25.3
Agree	56	28.3
Not Sure	6	3.0
Disagree	47	23.7
Strongly Disagree	39	19.7
Total	**198**	**100**

From the findings, 28.3% agree with the statement while 25.3% strongly agree. A further 23.7% disagree with the statement while 19.7% strongly disagree. The findings of the study also revealed that 3% were not sure. It can be deduced that while majority of the respondents feel they can submit their returns online without assistance, there is still a large percentage who feel that they cannot do the same without assistance.

4.4.8 Measures put in place by KRA

The study sought to determine whether taxpayers felt that KRA has not yet put in place enough measurers to ensure that taxpayers know how to file their returns online by asking them to rate the extent to which they agree with that statement.

Table 4.16: Extent of agreement with the opinion that KRA has not put in place enough measures to ensure taxpayers know how to do e-filing

Opinion	Frequency	Percentage
Strongly agree	73	36.9
Agree	50	25.3
Not Sure	27	13.6
Disagree	32	16.2
Strongly Disagree	16	8.1
Total	**198**	**100**

From the results as tabulated in table 4.16, most participants who strongly agreed with the statement were 36.9% followed by 25.3% who agreed. The study further indicated that 16.2% of the respondents disagreed while 8.1% strongly disagreed and 13.6% were not sure. It can therefore be concluded that majority of the respondents feel that K.R.A has not put in place enough measures to ensure taxpayers know how to file their returns online.

4.4.9 Correlation Matrix

Correlation between perception towards e-filing technology and ITMS Usage

		Perception of ITMS as a beneficial idea.	Perception that the e-filing system motivates the voluntary compliance with tax obligations.	ITMS Usage.
Perception of ITMS as a beneficial idea.	Pearson Correlation	1	.647**	.791**
	Sig. (2-tailed)		.000	.000
	N	198	198	198
Perception that the e-filing system motivates the voluntary compliance with tax obligations.	Pearson Correlation	.647**	1	.738**
	Sig. (2-tailed)	.000		.000
	N	198	198	198
ITMS Usage.	Pearson Correlation	.791**	.738**	1
	Sig. (2-tailed)	.000	.000	
	N	198	198	198

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

Analysis of correlation shows that the perception that the e-filing system motivates a taxpayer to voluntarily comply with their tax obligations is positively related to the perception that the development of ITMS as a beneficial idea with a correlation coefficient of 0.647. The perception of ITMS as a beneficial idea is positively related to the ITMS usage with a correlation coefficient

of 0.791. The correlation coefficients are within the acceptable range of between -1 and 1.It can therefore be deduced with confidence that there is a genuine relationship between a positive perception of ITMS and ITMS usage; the more positive taxpayers' perception of ITMS as a beneficial idea, the more likely taxpayers are to use the system.

4.5 User friendliness of the system

User friendliness of the system is a factor that greatly influences taxpayers' adoption and use of the system (Kamarulzaman, 2010). Therefore if the e-system is compatible with the user's working and lifestyle and meets his/her needs, that is, the taxpayer is able to file their tax return with minimum difficulty, in good time and with the resources at his/her disposal (for example type of machine, laptop, P.C, I pad etc), it is likely that they will adopt and use the system. This study sought to assess user friendliness of ITMS as a factor influencing taxpayers' adoption and consequent use of the system.

4.5.1 ITMS users

The survey sought to find out whether the respondents have used ITMS so as to determine the proportion that have used ITMS and are familiar with the system. It is important to note here that the answers to the questions pertaining to user friendliness as a factor influencing the adoption and use of ITMS was dependent on the taxpayer having used the system, at least once, hence the total number of respondents in this section will be less than the total number in the previous section. This is because out of the 198 respondents, 165 have used ITMS. The findings are presented in table 4.17.

Table 4.17: Number of ITMS users.

Number of ITMS Users	Frequency	Percentage
I have used ITMS.	165	83.3
I have not used ITMS.	33	16.7
Total	**198**	**100**

The findings indicate that out of the 198 respondents, 83.3% have used ITMS while 16.7% have not used ITMS at all. Majority of respondents have indeed used ITMS and the results of the subsequent questions in this section will be based on this finding.

4.5.2 Frequency of using ITMS

The researcher sought to determine the frequency of usage of ITMS. This is dependent on the number of those who attested to having used the system and the findings are shown as per the results in table 4.18.

Table 4.18: Average frequency of using ITMS

Frequency	Frequency	Percentage
I have used it once.	56	33.9
I use it daily.	22	13.3
I use it weekly	19	11.5
I use it monthly	68	41.2
Total	**165**	**100**

The study findings indicate that out of the 165 taxpayers who have used ITMS, 41.2% of respondents use ITMS on a monthly basis, followed closely by 33.9% who have used it once. A further 13.3% use it daily and 11.5% use it weekly. This implies that majority of the respondents who use ITMS do so on a monthly basis.

4.5.3 Purpose

The researcher enquired from the respondents who attested to having used ITMS at least once, their main reason for using the system, as shown in table 4.19.

Table 4.19: Purpose for using ITMS

Purpose	Frequency	Percentage
E-Registration	86	52.1
Filing tax returns	63	38.2
All the above	16	9.7
Total	**165**	**100**

The study findings from table 4.19 show that out of the 165 respondents who have used ITMS, the majority, 52.1%,have used it solely for e-registration (PIN Application) followed by 38.2% who have used it solely for filing tax returns and the remainder of 9.7% have used it for both e-registration and e-filing.

4.5.4 Online PIN registration

From the findings relating to the respondents' business PIN registration, 127 attested to having done their PIN registration online. Out of this figure, the researcher sought to determine the person responsible for doing the online registration of their business' PIN. This was in a bid to assess the comfort and ease with which taxpayers e-register using ITMS. Table 4.20 shows the findings.

Table 4.20: Person responsible for online registration of the business PIN

Person Responsible for online PIN registration	Frequency	Percentage
Cyber cafe attendant did it for me	66	52.0
I did it by myself on the KRA website	38	29.9
A friend/relative did it for me	23	18.1
Total	**127**	**100**

Of the 127 respondents who attested to having registered for their respectful PINs online, the analysis of the findings in table 4.20 shows that most of the participant had a cyber café attendant do the online registration for them. These accounted for 52% while 18.9% did it by themselves on the KRA website .The remainder, comprising 18.1% of the respondents said their relatives and friends assist them in registering. The findings indicate that most respondents had their PIN registered online with the help of cyber café attendants.

4.5.5 Challenges in e-registration

In a bid to assess user friendliness of the system as a factor influencing its adoption and use, the researcher sought to establish whether while using ITMS for e-registration, the taxpayers have faced any challenges. The findings are presented in table 4.21.

Table 4.21: Number of respondents who have faced challenges in e-registration

Respondents have faced challenges	Frequency	Percentage
I have faced some challenges.	120	77.4
I have not faced any challenges.	35	22.6
Total	**165**	**100**

From the analysis of the study findings, majority (77.4%) of the respondents have faced some challenges while using ITMS for e-registration whereas 22.6% have not faced any challenges. It can be therefore deduced that there are challenges faced while using ITMS for e-registration according to the analysis of the findings.

4.5.6 Rating of the challenges experienced

The researcher asked the respondents to rank the level of seriousness of several possible challenges that are experienced in using ITMS for e-registration. The findings are presented in table 4.22.

Table 4.22: Level of seriousness of challenges experienced in e-registration

Challenges			**Ranking**							
	Very Serious	**%**	**Serious**	**%**	**Average**	**%**	**Less Serious**	**%**	**Not Serious**	**%**
Lack of information that PIN is generated online	44	**26.6**	20	**12.7**	21	**12.9**	26	**29.9**	29	**17.7**
No instructions on KRA website on application	87	**52.7**	35	**21.2**	22	**13.3**	21	**12.4**	6	**3.9**

procedure										
System slow/not functioning	81	**48.7**	52	**24.1**	20	**12.2**	5	**2.9**	0	**0**
Long application form	22	**13.2**	27	**16.5**	38	**23.1**	41	**24.8**	37	**22.3**
Technical details on form that I didn't understand.	20	**12.1**	29	**17.3**	42	**25.4**	43	**26.2**	32	**19.1**
Delay in receiving email notification upon submission of form	52	**31.2**	46	**27.6**	38	**23.1**	26	**15.5**	5	**2.9**
Passwords not working	61	**36.9**	29	**17.2**	37	**22.1**	20	**12.3**	19	**11.5**
Blocked Password	46	**27.8**	22	**13.5**	37	**22.1**	37	**22.3**	24	**14.5**
Fees charged by cyber attendant	38	**23.0**	25	**14.8**	40	**23.8**	26	**15.6**	38	**23**

According to the data analyzed in Table 4.22 with regard to the various challenges experienced while using ITMS for e-registration, lack of instructions pertaining to the application procedure was ranked as the most serious challenge faced, at 73.9%, incorporating those who ranked it as a very serious challenge as well as those who ranked it as serious. This was followed closely by slowness of the system as a challenge at 72.8%. Technical details on the form were rated as the least serious challenge at 12.1% and long application form at 13.2%. It can therefore be deduced that to majority of the respondents, the lack of instructions on the website providing clear guidelines as to how to do the e-registration is the most serious challenge faced in using ITMS. This coupled with the other listed challenges consequently frustrates the taxpayers' efforts in adopting and using the system.

4.5.7 Additional challenges experienced in e-filing.

In an open-ended question, the researcher enquired from the respondents whether they had experienced additional challenges, other than those listed in the previous question and what those challenges were. The findings are presented in table 4.23.

Table 4.23: Additional challenges experienced in e-registration.

Challenge experienced	Frequency	Percentage
No timely data linking between relevant authorities and K.R.A	29	17.5
ID's beginning with zero's have to be updated at KRA office	13	7.8
System downtime especially on due dates	23	13.9
System not user friendly	16	9.6
Slow internet connectivity and slow system	20	12
Error messages that do not relate to the task at hand	7	4.2
Only one email can be indicated	18	10.8
Confusing unnecessary information at the bottom of the page	8	4.8
Tedious and time consuming	11	6.6
Computer illiterate people cannot use the system	21	12.7
Total	**165**	**100**

17.5% of the respondents felt that lack of timely data integration between K.R.A and relevant government authorities, such as Registrar of Persons and Company Registry made e-registration a challenge as the taxpayer has to go physically to a KRA office to have their data linked which is time consuming. This was followed closely by 13.9% of respondents who felt that system downtimes especially on due dates made the use of ITMS challenging. Other challenges listed by the respondents include the fact that only one email can be indicated and in the event that the indicated email is not active, one has to go to a K.R.A office after e-registration to be given the registration details, which is a cumbersome process altogether.

4.5.8 Recommendations for the challenges

The researcher sought to find out from the taxpayers the recommendations they felt should be put in place to address the challenges experienced. Table 4.24 shows the results of the findings.

Table 4.24: Recommendations on addressing the challenges experienced.

Recommendation	Frequency	Percentage
Timely data integration between relevant authorities and K.R.A	23	13.9
Development of user friendly system	26	15.7
More stable system with capacity to handle due dates	25	15.1
Instructions for e-registration procedure on the website	15	9
Better IT platform for speed	6	3.6
Appropriate error messages that can be understood	13	7.8
Give option for alternative email	6	3.6
Taxpayer education	11	6.6
Website enhancement and server upgrade to reduce downtimes	13	7.8
Social Media site to relay information to youth	12	7.2
Total	**165**	**100**

Most(15.7%) of the respondents felt that development of a more user friendly system would greatly address the challenges they experienced and consequently make their use of ITMS a more friendly experience. This was closely followed by 15.1% who felt that development of a more stable system particularly with capacity to handle due dates would address some of the challenges experienced in using ITMS.

4.5.9 Challenges experienced in e-filing

The researcher enquired from the respondents whether they had experienced any challenge while using ITMS to file a tax return (e-filing). Table 4.25 shows the results of the findings.

Table 4.25: Number of respondents who have faced challenges while using ITMS for e-filing.

Respondents who have faced challenges	Frequency	Percentage
I have faced challenges.	82	49.7
I have not faced any challenges.	32	19.4
I have not used ITMS to file a tax return	51	30.9
Total	**165**	**100**

Respondents who said that they surely experienced challenges while e-filing accounted for the majority, at 49.7%. 19.4% said no while 30.9% of the respondents had not used ITMS to file a tax return.

4.5.1.0 Rating the challenges experienced

The researcher asked the respondents to rank the level of seriousness of possible challenges that can be experienced by a taxpayer while using ITMS for e-filing. The findings are presented in table 4.26.

Table 4.26: Level of seriousness of challenges experienced in e-filing

Challenges			**Ranking**							
	Very Serious	**%**	**Serious**	**%**	**Average**	**%**	**Less Serious**	**%**	**Not Serious**	**%**
Lack of information that returns can be filed online	65	**39.3**	38	**22.6**	26	**15.5**	26	**15.5**	12	**7.1**
No instructions on KRA website on e-filing procedure	118	**71.1**	42	**25.6**	3	**2.1**	2	**1.1**	0	**0.1**
System slow/not functioning	91	**54.9**	66	**39.9**	7	**4.5**	1	**0.6**	0	**0.1**
Long form to be filled in.	38	**22.6**	67	**40.5**	28	**16.7**	20	**11.9**	14	**8.3**
Technical details on form that I didn't understand	56	**33.7**	27	**16.3**	33	**19.8**	46	**27.9**	4	**2.3**
System incompatibility with my browser	52	**31.6**	41	**24.5**	31	**18.7**	31	**18.8**	11	**6.4**
Passwords not working	43	**25.9**	18	**11.1**	33	**19.8**	51	**30.9**	20	**12.3**
Blocked Password	39	**23.5**	41	**24.7**	39	**23.5**	33	**19.8**	14	**8.6**

According to the data analyzed in Table 4.26 with regard to the various challenges experienced while using ITMS for e-filing, lack of instructions or step by step guidelines on e-filing procedure was ranked as the most serious challenge faced, at 71.1% followed closely by slow system at 54.9%. Long form to be filled in was rated as the least serious challenge at 22.6% and blocked passwords at 23.5%. It can therefore be deduced that to majority of the respondents, the

lack of instructions on the website providing clear guidelines as to how to file returns online is the most serious challenge faced in using ITMS.

4.5.1.1 Additional challenges experienced in e-filing.

In an open-ended question, the researcher asked the respondents to indicate any other challenges they may have experienced while using ITMS for e-filing that may not have been listed in the preceding question. The findings are presented in table 4.27.

Table 4.27: Additional challenges experienced while e-filing.

Challenge experienced	Frequency	Percentage
Errors leading to tax arrears	13	15.9
No option for uploading attachments when filing online	9	11.0
Payments may not reflect on K.R.A system leading to penalties	10	12.2
No automatic notification on upgrade of taxpayer software.	8	9.8
System congestion	24	29.3
Too complicated process	18	22
No option for uploading attachments when filing online	13	15.9
Payments may not reflect on K.R.A system leading to penalties	9	11.0
No automatic notification on upgrade of taxpayer software.	10	12.2
Total	**165**	**100**

Majority (29.3%) of the respondents felt that system congestion was a major challenge to the e-filing system. This was followed closely by 22% of the respondents who felt that the e-filing process and system was too complicated. This coupled with the other challenges the respondents indicated, greatly frustrate the taxpayers' efforts in using ITMS for e-filing.

4.6 Access to internet

Being a developing country, internet penetration in Kenya is largely limited to urban areas and the cost is yet to be termed as affordable by the majority. In addition, the knowledge and skill of using internet also remains limited to a few individuals who have access to internet. For this reason, the researcher chose to study access to internet and affordability of internet services as a factor influencing the use of ITMS by Medium and Small Taxpayers. As proposed by

Bandura,the greater an individual's access to computers at home or in the office, the more likely it is that the individual will file taxes online(Bandura, 1986).

4.6.1 Computer literacy

The researcher sought to establish whether the respondents are computer literate; this is a necessary skill for them to be able to use ITMS, a purely electronic system. The results are presented in table 4.28.

Table 4.28: Computer literate respondents

Computer literate Respondents	Frequency	Percentage
I am computer literate.	181	91.4
I am not sure.	2	1
I am not computer literate.	15	7.6
Total	**198**	**100**

According to the results of the findings, 91.4% are computer literate while 7.6% do not consider themselves computer literate and 1% of the respondents are not sure. It can therefore be deduced that majority of the respondents are computer literate and are therefore able to use ITMS.

4.6.2 Internet access

The study sought to determine how regularly the respondents access internet facilities. The use of ITMS is dependent on access to internet and therefore the researcher sought to determine whether the respondents do have access to internet and how regularly. Table 4.29 presents the findings.

Table 4.29: Regularity of internet access by respondents

How often	Frequency	Percentage
Daily	153	77.3
Weekly	30	15.2
Monthly	15	7.6
Total	**198**	**100**

Most of the respondents (77.3%) access the internet on a daily basis, followed by 15.2% who do so on a weekly basis. The remainder, 7.6% access the internet at least on monthly basis. It can therefore be deduced that the majority of taxpayers in Nairobi's central business district access internet on a daily basis and are therefore in a position to access ITMS, an online service, with ease.

4.6.3 Main mode of internet access

The researcher enquired from the respondents the main mode by which they access internet facilities as the greater an individual's access to computers and internet at home or in the office, the more likely it is that they would be willing to use the e-filing system as they do not have to go so much out of their way to do so. The findings are presented in table 4.30.

Table 4.30: Main mode of respondents' internet access

Mode	Frequency	Percentage
I have a computer and internet at my business premises	103	52
I have a computer and internet at home	24	12.1
I have to go a cyber cafe	70	35.4
I use my mobile phone	1	0.5
Total	**198**	**100**

As shown in table 4.30, 52% of the participants indicated that they have computer and internet connectivity at business premises/at work while 35.4% go to cyber café.12.1% of the respondents' access internet by means of a computer and internet connectivity at home while 0.5% use their mobile phone. It can therefore be deduced that majority of the taxpayers access internet by means of a computer and internet connectivity at their business premises and are therefore able to access ITMS at the comfort of their business premises.

4.6.4 Cost of internet access.

The respondents were requested to indicate whether they found the cost of internet affordable to determine whether the cost of internet access was a deterring factor to the use of ITMS. The findings are presented in table 4.31.

Table 4.31: Extent of agreement with the opinion that the cost of internet access is affordable.

Opinion	Frequency	Percentage
Strongly agree	39	19.7
Agree	97	49
Not Sure	15	7.6
Disagree	29	14.6
Strongly Disagree	18	9.1
Total	**198**	**100**

The results as shown in table 4.31 revealed that 49% agreed that it is affordable while 19.7% strongly agreed. The study further revealed that 14.6% disagreed with the statement, 9.1% strongly disagreed and 7.6% were not sure. It is therefore clear that for the majority of respondents, they feel that the cost of internet access is indeed affordable.

4.6.5 Correlation Matrix

Correlation Matrix between internet access and ITMS Usage

		Computer literacy.	Regularity of Internet access	ITMS Usage
Computer literacy	Pearson Correlation	1	.819**	.675**
	Sig. (2-tailed)		.000	.000
	N	198	198	198
Regularity of Internet access	Pearson Correlation	.819**	1	.855**
	Sig. (2-tailed)	.000		.000
	N	198	198	198
ITMS Usage	Pearson Correlation	.675**	.855**	1
	Sig. (2-tailed)	.000	.000	
	N	198	198	198

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

Analysis of correlation shows that the respondents' computer literacy is positively related to their regularity of internet access with a correlation coefficient of 0.819. Regularity of internet access is also positively related to ITMS Usage with a correlation coefficient of 0.855.The correlation coefficients are within the acceptable range of between -1 and 1.It can therefore be deduced with confidence that there is a genuine relationship between the respondents' computer literacy and the regularity with which they access internet. Computer literate respondents are more likely to access internet regularly and consequently are more likely to use ITMS.

4.7 Technical skills of filing tax returns.

In most developing countries, and particularly Kenya, hiring tax professionals is an added cost to the SME's (Group, 2010) and they therefore resort to doing their own tax returns, though they may not be well versed with taxation and the concept of filing returns. Che Azmi and Kamarulzaman in their study of the Malaysian e-filing system (Kamarulzaman, 2010) also point out the technical aspect of the filing process as a challenge facing taxpayers with regard to its adoption and use. It is in this regard that this research sought to study the technical skill of filing returns as a factor affecting the adoption and use of the e-filing system among Medium and Small Taxpayers in Nairobi.

4.7.1 Tax obligations.

The study sought to establish whether the taxpayers understand the various tax obligations under which their respective business is registered. This was in a bid to determine the level of knowledge of taxation and whether the taxpayers understand that filing returns is their obligation; hence the need for an e-filing system. Table 4.32 presents the findings.

Table 4.32: Respondents' understanding of the tax obligations of their business

Level of understanding	Frequency	Percentage
I understand my tax obligations.	169	85.4
I do not understand my tax obligations.	11	5.6
I am not sure.	18	9.1
Total	**198**	**100**

The results of the findings as shown in table 4.32 revealed that 85% do understand the tax obligations for which they are registered and thus comprised the majority. It can therefore be concluded that the majority of taxpayers do understand the tax obligations that they are registered for and that filing of tax returns is among their obligations.

4.7.2 Tax due dates that relate to the business

The respondents were asked to indicate whether they are aware of the tax due dates that relate to their business. In so doing, the researcher sought to determine the respondents' level of taxation knowledge. The findings are presented in table 4.33.

Table 4.33: Respondents' awareness of the tax due dates that relate to their business

Level of awareness	Frequency	Percentage
I am aware of the tax due dates.	164	82.8
I am not aware of the tax due dates.	23	11.6
I am not sure	11	5.6
Total	**198**	**100**

As per the findings, 82.8% of the respondents said yes, they are aware of the tax due dates that relate to their respective business, 11.6% said no and 5.6% were not sure. It can therefore be concluded that majority of medium and small taxpayers in Nairobi's Central Business District are indeed aware of the tax due dates that relate to their respective businesses.

4.7.3 Filing of tax return

The researcher sought to determine whether the respondents have ever filed a tax return for their respective business and therefore are in a position to understand the concept of e-filing. The findings are presented in table 4.34.

Table 4.34: Respondents' experience with filing of tax returns

Experience	Frequency	Percentage
I have ever filed a tax return.	165	83.3
I have never filed a tax return.	33	16.7
Total	**198**	**100**

Most respondents said they have ever filed a tax return. They accounted for 83.3% of the respondents and the remainder 16.7% have never filed a tax return for their business. The study can therefore conclude that majority of the respondents have an understanding of filing tax returns and can therefore understand the concept of e-filing.

4.7.4 Mode of filing

The respondents were asked to indicate the method by which they filed the tax return, whether online or manual. The findings are presented in table 4.35.

Table 4.35: Mode of filing the tax return

Filing mode	Frequency	Percentage
Online	76	38.4
Filled a manual form and took to KRA office	122	61.6
Total	**198**	**100**

Table 4.35 shows that 61.6% of the respondents filled a manual form and took to a K.R.A office; they comprise the majority while those who have done the return online accounted for 38.4%.

4.7.5 Responsibility for filing tax returns

The respondents were requested to indicate who is currently responsible for filing tax returns for their business. The findings are shown in table 4.36.

Table 4.36: Person responsible for filing tax returns

Person responsible	Frequency	Percentage
Myself	65	32.8
Tax Consultant	30	15.2
Accountant	40	20.2
Office Assistant	36	18.2
Friend/Relative	27	13.6
Total	**198**	**100**

Most of the respondents (32.8%) revealed that they themselves are responsible, closely followed by 20.2% who indicated that it was their accountants, for 18.2% it was their office assistant. 15.2% indicated that a tax consultant was responsible and 13.6% said a friend or relative did it for them. To majority of the respondents', hiring more competent person to do the filing of tax return is an additional cost which they do not wish to incur and therefore they prefer to do it themselves.

4.7.6 Correct calculation of the tax payable.

The researcher enquired as to whether the respondents feel that they are able to correctly calculate the tax that is payable. The findings are presented in table 4.37.

Table 4.37: Extent of agreement with the opinion that the respondent is able to correctly calculate the tax due and payable.

Opinion	Frequency	Percentage
Strongly agree	52	26.3
Agree	50	25.3
Not Sure	19	9.6
Disagree	70	35.4
Strongly Disagree	7	3.5
Total	**198**	**100**

Most respondents disagreed with the statement accounting for 35.4% of the respondents. As shown in table 4.37, 26.3% strongly agreed, 25.3% disagreed, 3.5% strongly disagree and 9.6% were not sure**.** It can therefore be deduced that majority of taxpayers in Nairobi's Central Business district feel that they are not able to correctly calculate their tax due and payable and hence feel that with manual filing, they are able to go to a K.R.A office where a K.R.A officer will assist them in the correct calculation as opposed to online filing.

4.4.7 Correlation Matrix

Correlation between technical skills of filing tax return and ITMS Usage.

		Ability to correctly calculate the tax due and payable.	Mode of filing tax return.	ITMS Usage
Ability to correctly calculate the tax due and payable.	Pearson Correlation	1	.730**	.648**
	Sig. (2-tailed)		.000	.000
	N	198	198	198
Mode of filing tax return.	Pearson Correlation	.730**	1	.353**
	Sig. (2-tailed)	.000		.000
	N	198	198	198
ITMS Usage.	Pearson Correlation	.648**	.353**	1
	Sig. (2-tailed)	.000	.000	
	N	198	198	198

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

Analysis of correlation shows that the respondents' ability to correctly calculate the tax due and payable is positively related to the mode of filing tax return with a correlation coefficient of 0.730. The correlation coefficients is within the acceptable range of between -1 and 1.It can therefore be deduced with confidence that there is a genuine relationship between the ability to correctly calculate tax due and the mode of filing tax return; the more a taxpayer is able to correctly calculate the tax due, the more likely it is that they will use the online filing system.

4.8 Government policies and regulations

The researcher sought to determine the extent to which various aspects of government policies and regulations have affected or contributed to the taxpayers' use of ITMS. The findings are presented in table 4.38.

Table 4.38: Extent to which government policies have affected or contributed to use of ITMS

Extent	Mandatory Requirement	Government Regulation	Tax compliance	Punitive Measures
Most Likely	80.8	38.9	30.3	33.3
Likely	15.7	42.9	43.4	48.5
Least Likely	3.5	18.2	26.3	18.2
Total	**100**	**100**	**100**	**100**

The findings as shown in table 4.38 indicate that to 80.8% of the respondents, the mandatory requirement to have a PIN for particular transactions has most likely contributed to their use of ITMS. To 48.5% of the respondents, punitive measures for failing to declare and file tax returns are likely to have contributed to their use of ITMS. To 26.3% of the respondents, the requirement by law to be tax compliant has least likely contributed to their use of ITMS. It can therefore be deduced that the most likely aspect that has contributed to their use of ITMS is the mandatory requirement to have a PIN for particular transactions.

4.9 Adoption and use of ITMS

The researcher enquired from the respondents, in an open ended question, their opinion as to what was the greatest factor that has contributed to their use of ITMS. The findings are presented in table 4.39.

Table 4.39: Greatest factor that has influenced respondents' use of ITMS

Factor	Frequency	Percentage
Accessibility and availability of e-registration and e-filing system	24	12.1
Appreciation for advancement in technology	35	17.7
Avoidance of long queues at K.R.A offices	22	11.1
Computer literacy and tax knowledge	16	8.1
Convenience and time saving	22	11.1
Desire to be compliant	9	4.5
Easy, efficient and effective	13	6.6
Government Regulations and Policies	7	3.5
I hate paper work	7	3.5
Mandatory for PIN application	43	21.7
Total	**198**	**100**

Most (21.7%) of the respondents said it was the fact that using ITMS was mandatory for PIN application. This was followed closely by 17.7% who attributed their use of ITMS to their appreciation for advancement in technology and a further 12.1% said it was due to the accessibility and availability of the e-filing system. It can therefore be deduced that majority of the Medium and Small Taxpayers consider the fact that for PIN application it is mandatory to use ITMS to be the greatest factor that has influenced their use of the same.

The researcher sought to enquire from the respondents the changes they felt KRA need to put in place to encourage taxpayers to adopt and use the e-filing system as opposed to manual filing of tax returns. The findings are as shown in table 4.40.

Table 4.40: Changes KRA should put in place to encourage taxpayers to adopt ITMS

Changes	Frequency	Percentage
Face out the manual filing completely	28	14.1
Increased taxpayer sensitization and public awareness	18	9.1
Ease the processes and enhance user friendliness	39	19.7
Taxpayer education and training seminars	40	20.2
Make it compulsory to make returns online	38	19.2
System upgrade and server improvement	18	9.1
Instructions and guidelines on website	8	4.0
Use of social media to relay information	9	4.5
Total	**198**	**100**

20.2% of the respondents felt that taxpayer education and training seminars offered by KRA would greatly encourage taxpayers to adopt the system. They formed the majority. This was closely followed by 19.7% who felt K.R.A should ease the e-filing process and enhance its user friendliness. A further 19.2% felt that making online filing of tax returns compulsory would encourage taxpayers to adopt the system.

4.10 Summary

From the study findings, male respondents are the dominant group than their female counterparts and many of them aged between 31-40 years and educated up to undergraduate level. Majority of respondents, 46%, are engaged in service related activities as their business type and 44.4% of the respondents have an annual turnover of over three million. 96.5% of the respondents do have a PIN for their respective business and for 66.5% of the respondents; they registered for the PIN online.

Majority of the respondents think that development of ITMS as an e-filing system in a bid to modernize and automate tax collection is a wise idea and strongly believe that the e-filing system is a beneficial idea. 83.3% of the respondents have used ITMS and77.4% attest that they have faced challenges in using ITMS; the major challenge experienced the lack of instructions on the K.R.A website. 91.4% of the respondents are computer literate and most of the respondents access the internet on a daily basis with a computer and internet connectivity at their business premises. 85.4% of the respondents understand the tax obligations that their business is registered for and majority are aware of the tax due dates that relate to their business having ever filed a tax return for their business. For the mode of filing, majority of the respondents filled a manual form and took it to a K.R.A office.

For 80.8% of the respondents, the mandatory requirement to have a PIN for particular transactions is the most likely to have affected or contributed to their use of ITMS.

For most of the respondents, the fact that using ITMS is mandatory for PIN application is the greatest factor that has influenced their use of the system and they feel intensive taxpayer education and training seminars conducted by K.R.A would further encourage taxpayers to adopt and use the e-filing system as opposed to manual filing of tax returns.

CHAPTER FIVE
SUMMARY OF THE FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this chapter the research findings are summarized, conclusion and recommendations to the study are drawn and research gaps are identified for future studies as the study aimed at determining factors influencing the adoption and use of ITMS by Medium and Small Taxpayers within Nairobi's Central Business District, Kenya.

5.2 Summary of findings

The researcher sampled 245 Medium and Small taxpayers operating within Nairobi Central Business District. 198 of the targeted respondents filled in and returned the questionnaires, giving an 81% response rate. Relying on the responses given by the respondents, the researcher came up with findings which were used to make conclusions and give recommendations.
From the study findings, male respondents are the dominant group than their female counterparts and many of them aged between 31-40 years and educated up to undergraduate level. Majority of respondents, 46%, are engaged in service related activities as their business type and 44.4% of the respondents have an annual turnover of over three million. 96.5% of the respondents do have a PIN for their respective business and for 66.5% of the respondents; they registered for the PIN online.

5.2.1 Perceptions towards e-filing technology

88.9% of the respondents think that development of ITMS as an e-filing system in a bid to modernize and automate tax collection is a wise idea and majority strongly believe that the e-filing system is a beneficial idea. In that regard, 43.9% agree that the e-filing system motivates them to comply with their tax obligations. In comparison to the manual system of tax registration and submission of tax returns, 40.4% of the respondents disagree that the online system is

inefficient and majority of the respondents agree that they can fill in their tax returns online even if no one is around to assist them. However, they strongly agree that K.R.A has not put in place enough measures to ensure that taxpayers know how to file their tax returns online.

5.2.2 User friendliness of the system

With regard to user friendliness of the system as a factor, the findings revealed that 83.3% of the respondents have used ITMS; most of them using it on average on a monthly basis, the most common purpose among the respondents being for e-registration. 77.4% attest that they have faced challenges in trying to register for a PIN online and 49.7% have faced challenges while using ITMS to file their tax return. The major challenge experienced in both e-registration and e-filing was the lack of instructions on the K.R.A website on the e-registration and e-filing procedure followed by system congestion. When asked to give recommendations of how the challenges faced can be addressed, majority of the respondents said that the development of a user friendly system would greatly address the challenges faced.

5.2.3 Access to internet

91.4% of the respondents are computer literate and most of the respondents access the internet on a daily basis by means of a computer and internet connectivity at their business premises. Majority of the respondents agree that the cost of internet access is affordable and can therefore easily access ITMS which is an online service.

5.2.4 Taxpayers' technical skills of filing tax returns

85.4% of the respondents understand the tax obligations that their business is registered for and 82.8% are aware of the tax due dates that relate to their business. Majority of the respondents have ever filed a tax return for their business and therefore can understand the concept of e-filing. For the mode of filing, majority of the respondents filled a manual form and took it to a K.R.A office. For 32.8% of the respondents, they themselves are currently responsible for filing tax returns for their business. Nevertheless, 35.4% of the respondents strongly disagree that they are able to correctly calculate the tax that they are due to pay.

5.2.5 Government policies and regulations

For 80.8% of the respondents, the mandatory requirement to have a PIN for particular transactions is the most likely to have affected or contributed to their use of ITMS. Most of the respondents feel that the fact that using ITMS is mandatory for PIN application is the greatest factor that has influenced their use of the system and they feel intensive taxpayer education and training seminars conducted by K.R.A would further encourage taxpayers to adopt and use the e-filing system as opposed to manual filing of tax returns.

5.3 Discussion of findings

This section gives a detailed discussion of the findings from this study as per the objectives that the study sought to achieve.

5.3.1 Perceptions towards e-filing technology

Despite the numerous benefits associated with an e-filing system such as reduced interaction between taxpayer and tax collection officials, reduced queues at tax authority offices, reduced tax collection cost, tax authorities face some major challenges towards the implementation of the e-filing system, one major challenge being the public perception of the e-filing system (Kamarulzaman, 2010). The intention to use an e-tax filing system is therefore largely influenced by its perceived use, perceived ease of use and positive attitude. The more useful individuals perceive their chosen filing method, the more likely they are to use that method to file (Boone, 2012).

The findings of this study agree with those of other authors as reviewed in chapter two by revealing that majority of the respondents think that development of ITMS as an e-filing system in a bid to modernize and automate tax collection is a wise idea which motivates them to comply with their tax obligations. This positive attitude coupled with the perception that in comparison to the manual system of tax registration and submission of tax returns, the online system is efficient indeed influences them to use ITMS.

Most of the respondents are comfortable with the idea of submitting their tax returns online and feel that the online system eases the work of preparation of tax returns and payment. They

therefore appreciate the system and are likely to use it. Majority, however, strongly agree that K.R.A has not put in place enough measures to ensure that taxpayers know how to file their tax returns online and consequently fully adopt the e-filing system. K.R.A should therefore put more effort in ensuring that taxpayers are fully equipped with the necessary knowhow of using the system so as to encourage its full adoption.

5.3.2 User friendliness of the system

With the introduction of an e-service, the public may be burdened by the time and effort spent learning the new system and accommodating any services failure (Sweeney et al., 1999).User friendliness of the system is a factor that greatly influences taxpayers' adoption and use of the system and consequently, the service provider has to ensure that the e-filing system is stable and reliable enough to handle the heavy processing of data during the month(s) of tax submission, ensuring that the system runs smoothly and efficiently during the tax filing period each year (Kamarulzaman, 2010). If an e-system is compatible with the user's working and lifestyle and meets his/her needs, that is, the taxpayer is able to file their tax return with minimum difficulty, minimal service time-outs and system down time, in good time and with the resources at his/her disposal, it is likely that they will adopt and use the system (Awadhi, 2009).

The findings of this study revealed that majority of the respondents have used or at least interacted with ITMS with most of the respondents using it on average on a monthly basis, the most common purpose being for e-registration. However, they attest that they have faced challenges in trying to register for a PIN or when using ITMS to file their tax return which is a burden and greatly frustrates their efforts in fully adopting the system. To majority of respondents, the lack of instructions on the K.R.A website on the e-registration and e-filing procedure was ranked as the most serious challenge experienced. Another highly rated challenge experienced is system downtime and congestion, especially on due dates.

To avoid the challenges experienced with the e-filing system, taxpayers consequently opt to do a manual return, which they are sure will be received and stamped as opposed to the online system whereby the system may suffer from timeout and congestion hence you may not be able to successfully submit your tax return. When asked to give recommendations of how the challenges

faced can be addressed in order to encourage their use of the system, most respondents gave their answer as the development of a user friendly system and the study can therefore deduce that the user friendliness of the e-filing system greatly influences its adoption and use by taxpayers.

5.3.3 Access to internet

Being a developing country, internet penetration in Kenya is largely limited to urban areas and the cost is yet to be termed as affordable by the majority. In addition, the knowledge and skill of using internet also remains limited to a few individuals who have access to internet (Group, 2010). For this reason, the researcher chose to study access to internet and affordability of internet services as a factor influencing the use of ITMS by Medium and Small Taxpayers. The greater an individual's access to computers at home or in the office, the more likely it is that the individual will file taxes online and the greater an individual's internet experience, their availability and access to internet facilities, the easier it would be for him/her to learn and use the e-filing system (Lemuria Carter, 2011).

The findings of this study revealed that majority of the respondents are computer literate and this skill greatly allows and enables them to appreciate and use the e-filing technology. Most of them access the internet on a daily basis and have a computer and internet connectivity at their business premises with which they can easily access the online system. It is important to point out that the study shows that majority of the respondents agree that to them, the cost of internet access is affordable. Being computer literate with daily access to a computer and internet connectivity, the taxpayers in Nairobi's central business district are able to easily access and use the e-filing system if they so wish.

5.3.4 Taxpayers' technical skills of filing returns

In several developing countries, of which Kenya is one, hiring tax professionals is an added cost to the SME's and they therefore resort to doing their own tax returns, though they may not be well versed with taxation and the concept of filing returns (Mwonge, 2011). The technical aspect of the filing tax returns can also be identified as a challenge facing taxpayers as many of them fear the notion and consequences of errors from e-filing such as keying-in incorrect information in tax returns that could lead to the wrong calculation of tax payable (J Fu, 2004).

As per the findings of this study, majority of the respondents do understand the tax obligations that their respective business is registered for, filing tax returns being one of them, and are indeed aware of the tax due dates that relate to their business. Majority of them have at least filed a tax return for their business but with regard to the mode of filing, most of the respondents filled a manual form and took it to a K.R.A office. For most of the respondents, they themselves are currently responsible for filing tax returns for their business as opposed to hiring a tax expert who is competent enough to do tax computations and consequently file the return. The cost of hiring an expert is additional expense which they would rather not incur. They however confess that they are not able to correctly calculate the tax that they are due to pay.

Despite their understanding of their tax obligations and awareness of the respective due dates, the taxpayers' lack of confidence in their ability to correctly calculate the tax payable causes them to prefer the manual mode of filing where they fill in the form and take it to a K.R.A office where they can be further guided and their figures can be confirmed. The study therefore deduces that the technical skill of filing tax returns is a factor that influences the adoption and use of ITMS as the inability to do correct tax computations deters taxpayers from using the online system as they have no confidence in the figures they are entering and they would rather confirm by filling in manual returns and taking them personally to K.R.A.

5.4 Conclusions

Findings from the study reveal that all the identified factors have a direct influence on the adoption of ITMS by taxpayers as well as the frequency of its usage. The perceptions of taxpayers towards the e-filing technology as well as its perceived ease of use and perceived usefulness greatly determine their adoption and usage of the system. Majority of the interviewed taxpayers consider the e-filing technology a beneficial idea and its availability motivates them to comply with their tax obligations, particularly because they find the online system efficient as compared to the manual system. However, they feel K.R.A has not put in place enough measures to ensure that taxpayers know how to use the system. This could also be a reason as to why those who do not feel the e-filing technology is a necessary or efficient system are yet to appreciate it and use it.

User friendliness of a system is a crucial factor in determining its adoption by targeted users. The study reveals that majority of the respondents have indeed used ITMS and mostly for e-registration. However, their use of the system has not been without challenges and this greatly frustrates their efforts in learning to use the system. Taxpayers feel the system is not easy to use and there are no instructions provided on K.R.A's website so as to guide them. Consequently, taxpayers use it for e-registration as for PIN application it is mandatory to use ITMS. When it comes to filing of tax returns, they prefer to do it manually so as to avoid the challenges experienced in using the system such as system downtime, tedious and long procedure as well as lack of step by step procedures indicated and moreover, e-filing is not mandatory.

Access to internet has a direct influence on adoption and use of the e-filing system especially with regard to cost of internet access, internet penetration and internet knowledge and skill. Taxpayers in Nairobi's Central Business District are computer literate and have the privilege of having a computer and internet connectivity at their business premises and daily access to internet. They are therefore able to easily access the online filing service from the comfort of their desks and coupled with their internet knowledge and skills and hence use the system.

For the Medium and Small taxpayers in Nairobi's Central Business district, the business owners are individually responsible for filing their business' tax return. They do understand the tax obligations and due dates that relate to their business. However, they are not confident in their ability to correctly determine and calculate the tax due and consequently prefer to fill in manual returns and submit to a K.R.A office where they can be further guided, as opposed to doing the return online when they are not sure of the figures they are declaring. From the findings of the study, it is evident that government policies and regulations do influence taxpayers' use of the system. The mandatory requirement to have a PIN for particular transactions is the most likely reason that causes taxpayers to use ITMS as PIN application can only be done on ITMS.

5.5 Recommendations of the study

Based on the findings of this study, the researcher came up with several recommendations to encourage the adoption and use of ITMS.

1. K.R.A should undertake intensive and increased sensitization of taxpayers to make them aware of the e-filing system, how it works and advantages of using it so that taxpayers can understand and appreciate it. The authority should also frequently hold training seminars countrywide on the e-filing process and also visit taxpayers in their business premises to give them any assistance they may need
2. K.R.A should undertake thorough taxpayer education from high school level so that taxpayers gain knowledge and understanding of the taxation system, appreciate it and are consequently able to comply with the tax obligations. Taxpayers should also equip themselves by gaining knowledge relating to tax by reading the Taxation Acts and guides provided on the K.R.A website so as to increase and improve their understanding and taxation knowledge which will enable them fully, correctly and easily comply with their tax obligations, particularly filing of tax returns.
3. To further increase the rate of adoption and ITMS usage, the option of manual filing should be faced out and completely abolished. However in so doing, the challenges experienced when using ITMS should be addressed and user friendliness of the system enhanced. The e-filing process should be simplified with clear instructions and guidelines provided on the website and the system server should be upgraded to reduce on the system downtimes experienced. There should be an interactive feedback portal on the website where taxpayers can provide their input on areas where the authority can improve and the challenges taxpayers experience can be addressed without them having to go to a K.R.A office.
4. Taxpayers should avail themselves for the training sessions provided by K.R.A so that they can equip themselves with the necessary knowhow for operating the system. They should also embrace the system and support the initiative K.R.A is putting by using the system and complying with their tax obligations.

5. Policies defining the online mode of filing of tax returns should be enacted so as to help K.R.A increase the number of taxpayers using ITMS. Other relevant government authorities such as Registrar of Persons, Immigration, and Company Registry should have their data integrated with K.R.A so as to ease the e-registration procedure for taxpayers and avoid them having to visit K.R.A offices for their data to be linked before they can use ITMS for e-registration.

5.6 Suggestions for further research

This study proposes the following areas for further study:

1. An investigation into the factors influencing the adoption and use of ITMS by Medium and Small Taxpayers in rural areas of Kenya.
2. An assessment of the impact of the e-filing system on tax compliance by Medium and Small Taxpayers in Nairobi.
3. Factors that motivate Medium and Small Taxpayers to use ITMS.

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APPENDICES

APPENDIX I: LETTER OF TRANSMITTAL

Vivian Mandola
P.O Box 3792-00100
Nairobi, Kenya.
vivienmandola@gmail.com

Dear Respondent,

I am a student of the University of Nairobi pursuing a Master of Arts Degree in Project Planning and Management. I am conducting academic research on the Factors influencing Adoption and Use of ITMS by Medium and Small Taxpayers in Nairobi. I'm writing to invite you to participate in the research by filling in the questionnaire.

My research project focuses on perception towards technology, user friendliness of the system, access to internet and technical skills of filing returns. The questionnaire should take about 30 minutes to complete. Your participation is entirely voluntary and the questionnaire is completely anonymous.

I wish to assure you that the information you will provide will be treated with utmost confidentiality. Your ability to answer all the questions comprehensively and to the best of your knowledge will be highly appreciated.

I look forward to your support.

Thank you.

Yours Sincerely,

Mandola Vivian.
Tel: 0770-052-921

APPENDIX II: QUESTIONNAIRE

Instructions

This questionnaire is designed to collect information on the factors influencing the adoption and use of ITMS by Medium and Small Taxpayers in Nairobi, Kenya. The information obtained will only be used for academic purposes and shall be treated in utmost confidence. You are requested to complete this questionnaire as honestly and objectively as possible. Note that you are not required to indicate your name anywhere on the questionnaire.

Please tick in the appropriate box and also fill in the blank spaces provided for those questions where elaborate answers are required. Use the space at the back of this questionnaire if you need more space for your responses.

SECTION A: GENERAL INFORMATION

1. Kindly indicate your gender: Male ☐ Female ☐

2. Kindly indicate your age category:

18 – 30 ☐ 31 - 40 ☐ 41 – 50 ☐

Above 50 ☐

3. Level of Education Attained:

None ☐ Technical / Vocational ☐

Primary ☐ Undergraduate ☐

Secondary ☐ Postgraduate ☐

4. What is your main business activity?

……

……

……

5. On average, what is your business' annual turnover?

Below Ksh 500, 000 ☐

Between Ksh 500,000 and Ksh 1million ☐

Between Ksh 1 million and Ksh 2million ☐

Between Ksh 2million and Ksh 3 million ☐

Over Ksh3 million but less than 3million ☐

6. Does your business have a Personal Identification Number (PIN)?

Yes ☐ No ☐

7. If yes, how did you register for the PIN?

Online ☐

Manually, at a K.R.A office ☐

Other (specify)…….

SECTION B: FACTORS INFLUENCING ADOPTION AND USE OF ITMS

A. Perception towards Technology

1. Do you think the development of ITMS as an e-filing system in a bid to modernize and automate collection of taxes is a wise idea?

Yes ☐ No ☐

2. Please rate the following statements on a scale of 1-5 where 1= Strongly Agree and 5= Strongly Disagree

		1 Strongly Agree	**2 Agree**	**3 Not Sure**	**4 Disagree**	**5 Strongly Disagree**
a)	I believe the e-filing system is a beneficial idea.					
b)	The e-filing system motivates me to voluntarily comply with my tax obligations.					
c)	In comparison to the manual system of tax registration and submission of tax returns, I find the online service inefficient.					
d)	The idea of submitting my tax return online makes me uncomfortable.					
e)	I feel that the online system does not ease the work of preparation of tax returns and payment.					
f)	I feel that I can fill in my tax return online even if no one is around to assist me.					
g)	K.R.A has not put in place enough measures to ensure that taxpayers know how to file their tax returns online.					

B. User Friendliness

1. Have you used ITMS?

Yes ☐ No ☐

2. If Yes, on average, how many times do you use ITMS?

I have used it once ☐ Weekly ☐

Daily ☐ Monthly ☐

Other (specify) …….

3. If Yes, for what purpose?

E- Registration (PIN application) ☐

Filing tax Returns ☐

Downloading Taxpayer Software ☐

Making tax payment ☐

Other (specify)……

4. If you registered for the PIN online:

A cyber café attendant did it for me ☐

I did it myself on the K.R.A website ☐

A friend / relative did it for me ☐

Other (specify) …….

5. Did you face any challenges in trying to register for the PIN online?

Yes ☐ No ☐

6. If yes, how would you rate the challenges experienced?

Tick your opinion on a scale of 1-5; where 1= 'Very Serious' and 5 for 'Not Serious '

Problem/ Hindrance	**1**	**2**	**3**	**4**	**5**
Lack of Information that PIN is generated online					
No instructions on KRA website on application procedure					
System slow / not functioning					
Long application form					
Technical details on application form that I didn't understand					
Delay in receiving email notification upon submission of form					
Passwords not working					
Blocked Password					
Fees charged by cyber attendant					

7. What additional challenges not listed above have you experienced while using ITMS to do e-registration?

……

……

……

8. Please give recommendations of how these challenges can be addressed.

……

……

……

9. Have you faced any challenge while using ITMS to file your tax return?

Yes ☐ No ☐

I have not used ITMS to file any tax return ☐

10. If your answer in 9 above was Yes, please tick your opinion on a scale of 1-5; where 1= 'Very Serious' and 5 for 'Not Serious '

Problem/ Hindrance	**1**	**2**	**3**	**4**	**5**
Lack of Information that returns can be filed online					
No instructions/step by step procedure on filing return on KRA website					
System slow / not functioning					
Long form to be filled in					
Technical details on form that I didn't understand					
The system not compatible with my browser					
Passwords not working					
Blocked Password					

11. What additional challenges not listed above have you experienced while using ITMS to file your tax returns online?

……

……

……

C. Access to Internet

1. Are you computer literate?

Yes ☐ Not Sure ☐ No ☐

2. How regularly do you access internet?

Daily ☐ Weekly ☐ Monthly ☐ Never ☐

Other (specify) ……

3. How do you access internet?

I have a computer and internet connectivity at my business premises/at work ☐

I have a computer and internet connectivity at home ☐

I have to go to a cyber café ☐

I use my mobile phone ☐

I borrow a friend/ relative's computer and / or modem ☐

I don't need access to internet ☐

Other (specify) ……

4. I find the cost of internet access affordable.

Strongly Agree ☐ Agree ☐

Not Sure ☐ Disagree ☐

Strongly Disagree ☐

D. Technical Skills of Filing Tax Returns

1. Do you understand the tax obligations that your business is registered for?

Yes ☐ No ☐ Not Sure ☐

2. I am aware of the tax due dates that relate to my business.

Yes ☐ No ☐ Not Sure ☐

3. Have you ever filed a tax return for your business?

Yes ☐ No ☐ Not Sure ☐

4. If yes, how did you file the return?

Online ☐

Filled a manual form and took it to a K.R.A office ☐

Other (specify) ……

5. Currently, who is responsible for filing tax returns for your business?

Myself ☐ Tax Consultant ☐

Accountant ☐ Office Assistant ☐

Friend/ Relative ☐

Other (specify) ……

6. I am able to correctly calculate the tax that I am due to pay.

Strongly Agree ☐ Strongly Disagree ☐

Agree ☐ Disagree ☐

Not Sure ☐

E. Government Policies and Regulations

1. In your opinion, to what extent do you think the following aspects have affected or contributed to your use of ITMS?

Factor	**Most Likely**	**Likely**	**Least Likely**
Mandatory requirement to have a PIN for a particular transaction(s).			
Government regulation for declaring and filing tax returns.			
Requirement by law to be tax compliant.			
Punitive measures for failing to declare and file tax returns.			
Other (specify)……			

F. Adoption and Use of ITMS

1. In your opinion, what would you say is the greatest factor that has influenced your use of ITMS?

……

……

……

……

2. What changes do you feel K.R.A need to put in place to encourage taxpayers to adopt and use the e-filing system as opposed to manual filing of tax returns?

……

……

APPENDIX III: INDEPTH INTERVIEW GUIDE

A. Perception towards Technology

i) Do you believe that the concept of an e-filing system is a beneficial idea?

ii) In comparison to the manual system of registration and filing of tax return, would you say that the online system is efficient?

B. User Friendliness

iii) Would you describe ITMS as a system that is user friendly and reliable?

iv) In your opinion, what is the major challenge encountered in using ITMS?

v) What measures do you think K.R.A should incorporate to improve the user friendliness of the system?

C. Access to Internet

vi) Does your ability to access internet influence your adoption of ITMS?

D. Technical Skills of Filing Tax Returns

vi) Are you aware of the tax obligations that you should be registered for?

vii) Do you understand the obligations that you are registered for and their due dates?

viii) Are you able to correctly calculate the tax you are due to pay and consequently file your tax return?

ix) Does the technical aspect of filing tax returns influence your adoption of ITMS?

E. Government Policies and Regulations

x) Are there any government policies and regulations that influence your use of ITMS?

F. Adoption and Use of ITMS

xi) What measures do you think K.R.A should put in place to enable taxpayers fully adopt ITMS?

APPENDIX IV: KREJCIE AND MORGAN TABLE FOR DETERMINING THE SAMPLE SIZE

N	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377

75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Note: "N" is population size

"S" is sample size.

Source: (Krejcie, 1970)