INFLUENCE OF ONLINE TAX FILING ON TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES. A CASE STUDY OF NAIROBI CENTRAL BUSINESS DISTRICT.

CLAUDIAH DAISY WAMBONGO

RESEARCH PROJECT SUBMITTED TO THE DEPARTMENT OF ECONOMICS, ACCOUNTING AND FINANCE, SCHOOL OF BUSINESS IN PARTIAL FULFILLMENT OF THE REQUIREMENT FOR THE AWARD OF POST GRADUATE DIPLOMA IN TAX ADMINISTRATION AT JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY.

2019

DECLARATION

Declaration by the student

This research project is my original work and has not been presented to any other examination body.

Name Claudhiah Daisy WambongoSign _____ Date _____

HDB336-C016- 5137/2017

Declaration by the supervisor

This research projecthas been submitted with my consent.

NameDr. Marion Nekesa PhD Sign Date _____ _____

DEDICATION

This proposal is dedicated to my family for their support.

ACKNOWLEDGEMENT

Special thanks to my supervisor, Dr. Marion Nekesawhose professional guidance and advice enabled me to successfully undertake and complete my study.

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LIST OF ACRONYMS AND ABRAVIATIONS

CBD	Central Business District
ETR	Electronic Tax Register
ICT	Information and Communication Technology
IMF	International Monetary Fund
KRA	Kenya Revenue Authority
PC	Personal Computer
SMEs	Small and Medium Enterprises
VAT	Value Added Tax
GDP	Gross Domestic Product
KRA	Kenya Revenue Authority
MST	Medium and Small Taxpayers
PIN	Personal Identification Number
SPSS	Statistical Package of Social Sciences
VAT	Value Added Tax

DEFINITION OF TERMS

SMEs- These are enterprises with a turnover of between 5M and 8M

Tax: A compulsory financial contribution imposed by a government to raise revenue, levied on the income or property of persons or organizations, on the production costs or sales prices of goods and services, etc.

ABSTRACT

The study aims to influence of online tax filing on tax compliance among small and medium enterprises. A case study of Nairobi Central Business District. The study was guided by the following specific objectives:-To determine the effect of Small and Medium Enterprises computer literacy level on tax compliance among Small and Medium Enterprises in Nairobi Central Business District, to evaluate the effect of online tax system stability on tax compliance among Small and medium enterprises in Nairobi Central Business District, to assess the effect perceived security risks concerns on tax compliance among Small Medium Enterprises in Nairobi Central Business District and to find out the effect of availability of online systems on tax compliance among Small and Medium Enterprises in Nairobi Central Business District. Thestudy adopted descriptive research design. The study target population was20500 Small and Medium taxpayers in Central Business District, Nairobi.

The study sample size was 100. This study used primary data collected through questionnaires. A pre-test on a different sample was carried out to give a Cronbach's alpha greater than 0.7 for all the variables as a rule of thumb. Data analysis was done by use of descriptive statistics and inferential statistics using Standard statistical techniques including Pearson correlation coefficient and regression analysis employed in the analysis. All the analysis done using the statistical package for social sciences (SPSS Version.24). Analysis of variance (ANOVA) was establish if there is a statistical significance between the observed and expected values with the Pearson Chi square giving the degree significance of the relations, hence establishing the hypotheses.Thestudy foundthatcomputer literacy levels, online tax system stability, perceived opportunity security risks and availability of security risks have significantlyinfluences tax compliance.

Basedonstudyfinding, the study recommends that computer literacy levels should be emphasized by KRA in order to improve on tax compliance levels. This was due to high levels of significant between computer literacy levels and tax compliance levels. The study recommends further that examination on the factors that affects tax compliance levels. The study found that the c on how KRA can deal with the issue with a view of improving tax compliance.

CHAPTER ONE

INTRODUCTION OF THE STUDY

1.1 Background to the Study

Governments are adopting Information and Communications Technologies (ICT) to improve on service delivery, enhance convenience among citizenry and increase accessibility to government information is on the rise (Azmi&Kamarulzaman, 2010). Introduction of the electronic tax filing is a major form of electronic government services (Lai &Choong, 2010). The various governments in the world are also introducing electronic tax filing in order to achieve greater tax administrative and compliance efficiency (Mandola, 2013). Governments around the world are introducing electronic filing of the tax returns due to the various advantages associated with it (Young, 2012). Among these advantages, include convenience of the taxpayers as they are able to file tax returns at home or cybercafés, and eliminates or reduces errors associated with manual filing as the system auto checks the application (Osebe, 2013). Other advantages include reduced workload and cost for the tax collector among amongst others (Simiyu, 2013). However, there are challenges associated with the online filing including taxpayer's perception, challenges associated with learning the electronic filing system from service provider, limited accessibility of internet infrastructure and electronic filing system down times (Azmi& Bee, 2011). Several countries have had different experiences in regards to the electronic filing of tax returns.

Electronic filling of tax returns was first done in the Unites States of America in 1986 (Lai &Choong, 2010). Several countries in both the developing and developed countries have

since adopted the electronic filing system. For example, Uganda through the Uganda Revenue Authority (URA) introduced Electronic filling of tax in 2009 (Auyat, 2013). In South Africa, the services were introduced in 2003 by the South African Revenue.

Taxation inarguably remains a veritable and inexhaustible source of revenue to the government (Ngwu, 2012). Gideon and Alouis (2013) noted that for effective fiscal policy administration, revenue collection is an integral component. It enables governments to finance their budgets from domestic taxes thereby, limiting situations of seeking credit from outside institutions like IMF and Wold Bank (Zhou &Madhikeni, 2013). Mutisya (2014) observed that taxation is the main source of public funding for nations socio-economic and political development. This has made various nations across the world (including Kenya) to increase their tax compliance level by individuals and organisations through the process of computerisation and automation of taxation services.

However, tracer studies conducted in various countries show mixed response on the impact of computerisation on revenue collection by businesses and individuals. In Malaysia, Azmi and Kamarulzaman (2010) noted that despite rapid adoption of e-filing in the country, the system has not been reliable due to high perception of risk that members of the public have towards it. In Developing countries, Nisar (2013) observed that most tax authorities were facing significant challenges in tax compliances despite adoption and implementation of computerisation systems.

Ndayisenga and Shukla (2016) found out that in Rwanda, revenue collection was low and tax administration weak and this was believed to be due to manual system of tax administration characterized by low tax collection, delays and poor record keeping. To rectify the situation and improve compliance, Rwanda Revenue Authority decided to automate tax collection and

management systems to address the loopholes identified. Ndayisenga and Shukla further indicated that computerised systems provides many aspects of convenience to tax payers for example tax filing can be conducted at any time, filing can be done in any location, easy use of the system, information search and other online transactions that is not available in the traditional channels. E-filing and e-taxation payment was introduced by Rwanda in 2012 with functioning e-filing system in place such as Mobile declaration, Electronic Single for domestic taxpayers Window (ESW) and Authorized Economic Operator (AEO) for importers and exporters.

Muita (2011) explains that tax authorities needed to embrace modern technologies in tax administration to increase efficiency and reduce wastage through computerisation process. Mutisya (2014) informs that this process involves tax authorities investing in modern technologies like ICT to improve tax effectiveness and efficiency. Computerised revenue collection in developing countries has gained increasing prominence in the policy debate recently. In Gambia, the government saw the need to invest in computerisation systems infrastructure as a need to catapult an efficient revenue collections system in order to ideate better fiscal mechanisms and tactics of addressing the issues of fiscal corruptions, frauds, tax evasion and avoidance that result to loss of public revenues (Jallow, 2016). On the other hand, Gidisu (2012) found out that the automation is a powerful monitoring tool for Ghana Revenue Authority.

In Tanzania, ICT was introduced into the department in 2001 to facilitate maintenance and timely access of records and fast processing of return to remove postal delays; minimize operational costs; curb cheating and plug revenue loss (Yuda, 2013). Furthermore, Seelmann, Lerche, Kiefer and Lucante (2011) argued that computerisation of tax and revenue enable authorities reach the goal of good (financial) governance. It improves accountability and transparency of the revenue authorities.

Services (SARS) with significant developments in 2006 while in Malaysia, the services was implemented by the Inland Revenue Authority (Ferreira, 2008; Razak, 2009).

In South Africa, there are three ways of tax returns including the manual returns, electronic filling (e filing) of tax returns and electronic based form filing of tax returns (Ferreira, 2008). The manual tax returns include filing the manual tax return forms from the South African Revenue Services (SARS) and returning the completed forms to the authority. The electronic form filing involves filling the manual equivalent of the form electronically and printing the form for submission to the authority(Ibrahim, 2012). The E filling of the tax returns in South Africa involves the electronic filling and submission of the tax returns. There are several benefits that have been realized in the South African context in regards to online tax returns. These includes extended time for taxpayers to submit their returns that is up to January of the preceding year as opposed to October of a current year for the tax returns (Ferreira, 2008). The major challenges with the e filing of the tax returns in South Africa included software requirements of the SARS program that utilized adobe acrobat 8 software. This software required at least a Pentium 11 computer to run which was not widely available in South Africa at the time of e filing introduction. The issue of comprehensive online help menus was a challenge as well as the navigation of the e filing site (Lai &Choong, 2010). In Malaysia, the Inland Revenue Board (IRB) introduced the electronic filling of the returns (e filing) (Razak, 2009). The E filling in Malaysia involved four basic steps that is enrollment and verification of the digital signature, the entering of the gross earnings, relief and deductions before the system automatically calculates the tax amount due.

The IRB receives the submission electronically and the verified tax form returned emailed back to the taxpayer (Razak, 2009). Razak (2009) notes that the challenges encountered in the use of the e filing in Malaysia included technological challenges such as standards, data integration, legacy maintenance, privacy and security.

In Kenya, the earliest form of the online filing of tax returns was through the implementation of the Integrated Tax Management System (ITMS) in 2013.

This was to facilitate the online payments of Value Added Tax (VAT), Cooperate Tax amongst others (Lukorito, 2012). The ITMS also connected the Electronic Tax Registers (ETR) devices (registers) to enable simplification of the Value Added Tax declarations. The ITMS enabled the taxpayers to undertake electronic filling. In the context of the system requirements, the IntergratedTax Management System required internet explorer 7 or higher of Mozilla Firefox 3.0.3 (Mandola, 2013). Kenya Revenue Authority (KRA) was to later phase out the ITMS and replaced it with the iTax system. The iTax enabled the taxpayer to undertake internet based registration, filing, paying and status inquiries with real time monitoring of the accounts (Mandola, 2013). The electronic filing or online filing of tax returns is a general term for electronic filing or electronic lodgment or electronic declaration of tax returns through submission of tax data to a taxing authority in a computer file format through an internet connection (Ibrahim, 2012). On the other hand, Mandola (2013) defines electronic filing as an internet based system that enables the taxpayers to register and submit their tax returns over the internet. The platform or system could have an 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 (Mandola, 2013). The e-filing incorporates the process of registration, tax preparation, tax filing and tax payment (Lukorito, 2012). The taxpayer requires access to a computer, the tax software, a reliable internet connection and the knowledge to utilize the electronic filing (Hussein, Mohamed, Ahlan, Mahmud, &Aditiawarman, 2010). Ada (2009) classifies the tax administration into either the British or American Model. The British model assumes the incompetence of the taxpayers, hence audits, and independently verifies the supplied data on tax returns (Nakiwala, 2010).

On the other hand, the American model runs on a voluntary compliance system which assumes the competence of the taxpayer and hence only independently verifies about 5% of the tax returns (Auyat, 2013). There are however heavy penalties for non-compliance (Auyat, 2013).

There are several advantages associated with the online tax filing including convenience as the filing can be done any time (day and night) and within one owns comfort e.g. at home (Geetha&Sekar, 2012). There is also an element of the certainty of delivery and quick confirmation of the delivery as the online tax system confirms successful receipt of the taxpayers' submission. The online tax returns also eliminates data entry errors as the system automatically ensures that the data has been filled in the correct places(Hussein et al., 2010). Finally, document handling and storage is easier (Lukwata, 2011).

According to Ada (2009) taxation is the enforced proportional contributions from persons and property, levied by the state, by the virtue of its sovereignty, for the support of government and for all public needs. On the other hand Muhangi (2012) defines tax as a compulsory level imposed by government (central or local) on the profit, income, wealth or consumption (e.g. sales or VAT) of an individual or estate through trustee or executor and corporate organization. Auyat (2013) further defines tax as a financial charge or other levy imposed upon a taxpayer (an individual or non-individuals) by a state or functional equivalent of a state, such that failure to pay is punishable by law. Auyat (2013) further defines tax as compulsory contribution from the person to government to defray the expenses incurred uncommon interest of all without reference to special *Influence of Online Tax Filing on Tax Compliance among Small and Medium Enterprises inNakuru.*

In summary, tax can be defined as the compulsory contribution levied by a sovereign power on the incomes, profits, goods, services or properties of individuals or corporate persons, trusts and settlements, which when collected, are used for carrying out government functions (Ada, 2009; Auyat, 2013; Muhangi, 2012). There are several element of tax including the tax base, tax rate and tax yield (Ofori, 2009).

The tax base is the legal description of an object on which tax is imposed or charged which can be the income of the taxpayer, gain from certain activities he engaged in, property or asset owned or some services received (Simiyu, 2013). On the other hand, the tax rate is the proportion of tax base that is payable as tax while tax yield is the total amount of revenue generated from tax (Ramoo, 2006). There are two tax classifications that is the direct versus indirect taxes and the proportional versus progressive loans (Odongo, 2014). The direct taxes are those that affect the individual directly through a deduction from earnings. On the other hand, the indirect taxes are those that are paid to the government by an intermediary and then passed on to the final user by including the tax in the final price (Nakiwala, 2010). Examples of direct taxes include income tax, property tax etc. On the other hand, the examples of indirect taxes include export and import duties, excise and local production, value added tax (VAT) and others (Ofori, 2009). The tax is said to be progressive if when with increasing income the tax liability not only increases in absolute terms but also proportionate to income (Simiyu, 2013). On the other hand, Ada (2009) defines proportional tax as form of tax that assesses a taxpayer to tax at flat rate on his total assessable income and as such the tax is payable proportional to the taxpayer's income.

The progressive tax is a form of tax that is graduated as it applies to higher rates of tax as income increases (Ferreira, 2008). According to Ssetuba (2012), tax compliance is the ability to pay taxes on time and timely reporting of the correct tax information. Other definitions of tax compliance concentrate on the accuracy of the information contained in the tax returns and the cost of making the tax returns. For example, Auyat (2013) defines tax compliance as the supply of accurate and timely lodgment of income tax return together with the required payments whenever due. There are two types of tax compliance; voluntary and involuntary tax compliance (Mandola, 2013). The voluntary tax compliance requires no state enforcement for the taxpayers to comply with the tax requirements in contrast to the involuntary tax compliance (Hussein et al., 2010).

Tax compliance is concerned on the timely and accurate submission of tax remittance information to the revenue authority.

The online filing system has a direct impact on the tax compliance levels (Nakiwala, 2010). The system ensures that the taxpayer has filled all the required mandatory fields before allowing him to proceed to the next level. This has the effect of ensuring that the revenue authority receives relatively high quality data compared to the manual returns of the data (Nakiwala, 2010). The online filing of the tax returns ensures that there is lack of inconsistencies, missing information and unintentional errors (Mandola, 2013). SMEs are faced with numerous challenges in the context of taxation. For example, Odongo (2014) found tax compliance levels among the SMEs in Uganda to be very low. There are several factors that led to low tax compliance levels in Uganda including poor bookkeeping, low sales turnovers, and frequent ownership changes of SMEs (Nakiwala, 2010). Other challenges include large proportion of SMEs who are ignorant of taxation processes and computations, and lack of comprehensive sensitization programmes by the Uganda Revenue Authority (URA) (Odongo, 2014).

There are challenges associated with the tax compliance levels among the SMEs in Kenya due to the nature of the firms (Simiyu, 2013). The turnover tax in Kenya introduced through the Finance Act of 2007 specifically targets the SMEs especially those with less than 5 million annual gross income (Osebe, 2013). Some of the challenges facing the taxation of the SMEs in Kenya include the fact that small businesses are normally owned by the owners who are also in charge of the accounting book (Muhangi, 2012). There is thus less incentive to comply with tax requirements

The development and utilization of modern technology in revenue mobilization has become a critical feature of every country particularly developing countries. There are numerous usefulness modern technology offers in the development of municipalities.

Wasilewski (2000) studied the economic development and taxation system by comparing the case of Braziland Japan. Japans experience demonstrated that a country does not need to postpone a real change in the tax structure until it achieves a high stage of development. Rather, a modern system can stimulate economic growth and enhance the domestic market. According to a study conducted in Ghana by Gidisu (2012) on the automation system procedure adopted the UNCTAD developed Automated System for Customs Data and Management, which is fully integrated and covers the complete tax clearance process. The system handles customs declarations, accounting procedures, transit and other suspense procedures, generation of trade data that can be used for statistical and economic analysis.

According to Zhou &Madhikeni, (2013), the adoption of technology on online receipting process in Zimbabwe has showed a positive impact on organization performance in developed countries. Compared to the traditional receipting process, an online receipting is a value-added service that allows a reliable online communication between the sender and the recipients.

A certified receipting process has to guarantee the following aspects. First, the validity of the origin and the receipt exchange must not be denied and both the sender and Impeding Mechanisms for Adopting a New Technology the recipient receive a confirmation in case the receipt is delivered successfully or if the delivery fails (Zhou &Madhikeni, 2013).

Experiences from Ghana, Philippines and morocco as cited by the World Bank in a report done in 2004 (Customs modernization) initiatives have shown that the automated customs procedures have ensured that data required by different bodies are centralized and easily accessible by all the relevant bodies. The systems implemented in these countries in mid-1990 yielded substantial gain in the effectiveness of the customs procedures (International Monetary Fund, 2003).

The systems provided adequate data for customs officers to make speedy and informed decisions, a network linking all users of the system and simplification of the customs procedures.

Technology adoption is key in improving the efficiency and effectiveness in revenue mobilization. No doubt, the traditional kinds of paper forms always will be an essential part of the tax administration system (UNCTAD, 2008). Through technology adoption, a tax collection agency will be able to meet their revenue collection targets, as there will be less tax avoidance and evasions. Technology in the tax framework falls under the Public Administration part and its target is to enhance the productivity and viability both at national and local level. For instance Nisar (2013) argued that recent trends in public taxation stress the need of developing a system of tax assessment and collection.

Automation of revenue collection system involves investing in modern technologies for example: ICT in order to upgrade the revenue system to achieve integration and information sharing so as to enhance efficiency and effectiveness of the system. All Sectors of the County should put in place an effective and efficient revenue collection system in monitoring framework that ensures adequate supervision of the budgeted programs and project activities to enhance accountability and absorption of resources (Amin, 2013).

Automation of revenue collection systems and structures is instrumental in improving and simplifying administration of taxation through utilizing modern technologies for example ICT. In view of the above, Panday (2006) carried out an empirical study whose main goal was to establish the influence of adoption of technology on revenue mobilization in India. He used regression analysis among a random sample of 20 local governments in the country. The results of the study revealed that for government to compare in execution with the development and desires of its constituents, it should significantly build its financial profundity without causing expensive repeating overheads.

Panday (2006), in his study on use of technology on revenue in Malaysia collections using 120 questionnaires distributed to employees of the country revenue. He further noted that technology adoption through systems automation, have been seen to be fit for acquainting bigger efficiencies with accumulation of street parking fees that can enhance

Turner et al, 2004). However, the purpose of the tax strategy in Turkey is to simplify tax laws and regulations and to harmonize tax law with European Union law. The development and utilization of modern technology in revenue mobilization has become a critical feature of every country particularly developing countries.

This is as a result of the numerous usefulness modern technology offers in the development of municipalities. Wasilewski (2000) studied the economic development and taxation system by comparing the case of Brazil and Japan. Japans experience demonstrated that a country does not need to postpone a real change in the tax structure until it achieves a high stage of development. Rather, a modern system can stimulate economic growth and enhance the domestic market. According to a study conducted in Ghana by Gidisu (2012) on the automation system procedure . Authority (GRA) adopted the UNCTAD developed Automated System for Customs Data and Management, which is fully integrated and covers the complete tax clearance process. The system handles customs declarations, accounting procedures, transit and other suspense procedures, generation of trade data that can be used for statistical and economic analysis.

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Automation which inculcates usually technological enhancement in terms of upgraded hardware and software so as to curb inherent risks relating to revenue reductions or the vice versa for expenditures (Ireland P. N., 1994) In Addition, automation of process at revenue collection points has a positive impact on the tax clearance time (Haughton &Desmeules, 2001). Conversely, The automation of Tax system rather than just affecting the revenue collection, expenditure and clearance time as highlighted above, will also impact the overall staffing, confirming that the right measure of tax assessment has been undertaken so as to deter underpayments and tax evasions, and proper ways of accountability and audit trails instigated so as to curb embezzlements.

This usually attained successfully by synchronizations of various systems in various systems towards a common repository mapping which is a fundamental tool in automation (Dramod K, 2004). Such Automation in enfranchised not only in the revenue collection administration but many other governmental and non-governmental institutions so as to not only obtain maxim on the key objectives but also smooth run other operations as well as deter any risks from (De Wulf&Sokol, 2005).

Automation of tax collection allows tax data entry, automated processing, computation and analysis as well as automatic production of tax reports and feedback required for control and risk management purposes (Holniker,2005). According to Holniker (2005), automation of tax collection includes developing powered computer program to carry out tax assessments and computations; and to determine tax dues at high levels of speed and accuracy hence ensuring quick response to the recipient (Guido, 2007).

Automation argues Katsuya-Takii (2003) is a catalyst and stimulus for customs modernization. Baurer (2005) argues that in carrying out their responsibilities, tax administrations can also create problems for the business community when they impose burdensome reporting and record keeping requirements; conduct excessive inspections and audits; fail to deal with corrupt tax administration employees; and fail to provide transparency in tax administration operations.

This type of environment harms individual businesses and the overall economy. As a result, many in the business community react by taking steps which adversely affect the tax base. This typically includes underreporting profits and turnover; underreporting employee wages and by creating phantom employees. A significant number of businesses also fail to register or file tax declarations. This only increases the burden on those tax payers who try to comply with the tax law and discourages their future compliance. The result is a vicious cycle which tends to preserve the status quo Customs automation is usually part of an overall tax administration reform (Rao, 2000) and modernization program. Online response of automation tax collection is the processing of customs documents by the computer assisted treatment of electronically transmitted information. Swindle (2007) adds payment and accounting, to register and account for payments by importers and exporters; and risk management, to select those consignments bearing higher risks, concealing duty and tax noncompliance, illegal importation of drugs or materials aimed for terrorist activities. Notwithstanding the foregoing benefits, Ward and Dietmar (2007) noted that automating customs administration has cost implications, which vary from country to country and according to the initial situation of the customs administration in terms of available ICT, human expertise and the structure of tax administration (Peled, 2008).

Tax is an economic obligation imposed by the government on natural and legal persons (Tauy&Guvenc, 2007) .These tax obligations are contained in tax laws. Tax compliance refers to fulfilling all tax obligations as required by the tax laws. It is the act of reporting all incomes and paying of all taxes by fulfilling the provisions of laws, regulations and court judgements within the stipulated period without having to wait for follow-up actions from the authority. Non- compliance is the intentional failure by citizens to declare their taxable activities. It takes several forms like concealing some taxable activities, falsifying returns and failing to stick to the laid regulations concerning declarations and submission of the returns. On-compliance is closely linked to tax evasion except that it incorporates, apart from evading taxes the aspect of complying with other income tax rules and regulations such as deadline for submission of tax returns .Tax avoidance is legal while tax evasion is not, although tax evasion and tax avoidance have similar effect on revenue collection, however from legal point of view tax avoidance doesn't amount to non-compliance (Myles,1995)

Sreekantaradhya (2000) notes that taxation plays a vital role in the process of development of any country. It enables resource mobilisation, allocation, distribution and stabilisation. Revenue Authorities across the world are mandated to assess, collect and enforce laws relating to a country's tax revenues. "Governments around the world are increasing the use of information and communications technologies to improve the delivery of public services and the dissemination of public adminstration information to the public"(Azmi&Kamarulzaman, 2010, p. 599). A common feature of these reforms is the use of automated systems in collecting, accounting and facilitating tax payments. This facilitates timely access to information from reliable databases, it also unifies procedures and standardizes the payments processes.

One of the earliest adopters of online filing was the United States of America (USA), through its Internal Revenue Service (IRS).

The IRS, in recognition of the need to effectively and efficiently collect taxes with minimum disruption to taxpayers employed the use of modernized Information Technology infrastructure (IRS,2007). According to eFile LLC (2016), online filing of tax returns in the USA began as early as 1986. Initially, efiling in the USA began as a small test program with only 25,000 tax returns being filed electronically. The system also allowed a tax refund to be wired directly to the taxpayers bank account. It was seen to greatly reduce the chances of making an error while filing the tax return. The test program's success led to its rollout to other cities initially not covered. Four years later 4.2 million tax returns were filed in the year 1990. As at 2013, the method had become widely popular with a record of 1 billion tax returns having been filed throughout its history.

The transition from manual to online tax systems in countries such as Singapore began in early 1990s. In other countries such as Mexico, its revenue authority began implementing online filing systems in 1998. As at 2004, the online system supported online tax payments and other tax transactions (Bhatnagar, 2004).

Electronic tax filing was first coined in United States, where the Internal Revenue Service's (IRS) began offering e-filing for tax refunds only. This has now grown to the level that currently approximately one out of every five individual taxpayers is now filing electronically. This however, has been as a result of numerous enhancements and features being added to the program over the years. Online tax filing (Electronic tax filing or e-filing) is a process where tax documents or tax returns are submitted through the internet; usually without the need to submit any paper return (Wasao, 2014).

The e-filing system encompasses the use of internet technology, the Worldwide Web and Software for a wide range of tax administration and compliance purposes.

Countries have given different names to online tax filing system, for instance (Gellis, 1991), electronic declaration is named electronic tax filing.

Before 1990, organizations in most countries across the world used information technology (IT) in a very restricted manner (Bryson & Daniels, 2007). At the time, the use of information and communication technologies (ICT's) for business operations was considered to be costly rather than a way of presenting organizations with a new approach to business. As a result of increased technological advancements, however, things took a different turn and the use of ICT's became an important consideration for most organizations (Al-Adaileh, 2009). A number of factors including increased global activities and the evolution of a digital environment have greatly contributed to the increased use of ICT's by organizations.

As a result of the above changes, many organizations are compelled to spend heavily on ICT's in order to improve performance and increase efficiency (Rao, 2006; May et al., 2007).

However, the initial excitement quickly disappears when it becomes almost impossible to determine the role and exact benefits associated with the use of ICT's. Consequently, it is critical for any organization to assess the contribution of ICT systems to performance. Considering that the use of ICT's is aimed at enhancing the users' ability to work better and produce more, it is imperative to measure and assess the success of ICT's from the users' perspective. Arguably, the success of ICT's depends more on users than on technology (Akman et al., 2005). Tax compliance is the timely filing and reporting of required tax information, the correct self-assessment of taxes owed, and the timely payment of those taxes without enforcement action (Jones, 2009).

In Africa, Nigeria for instance modernised its tax administration services in the period between 2004 and 2013. The online system was known as Integrated Tax Administration System (ITAS). The system was launched in 2013, its main aim was to use technology to enhance tax compliance with automation of all core processes of tax administration (PwC, 2015).

The East Africa region was not left behind; Uganda and Tanzania were early reformers of their revenue administration systems in the Eastern Africa Region (KRA, 2010). Muwonge (2011) notes that in Uganda, the Uganda Revenue Authority (URA) in 2005 developed an online tax system dubbed 'e-Tax'. Muwonge (2011) further comments that the purpose of the online tax system was to enable efficiency in the tax administration process as well as reduce the taxpayer's expenses in tax compliance. In Tanzania on the other hand, electronic filing of VAT returns was introduced in October 2012 significantly reducing the time taken to file the tax returns. Additionally, in 2013 the Tanzania Revenue Authority (TRA) launched a Revenue Gateway System, an interface between the TRA and commercial banks enabling seamless payments of taxes.

Automation of revenue collection is whereby, the manual system of revenue collection is replaced by modern technological machines which are used to collect revenue. In the Nakuru county government, the application of modern technological machines would enhance efficiency, convenience, and give a higher degree / level of transparency in revenue collections (Amin, 2013) found that automation of revenue collection improved accountability and ease in the supervision of revenue collection officers. According to Lymer and Oats (2010) definition, revenue is the amount of money that the county government receives from various sources namely, proceeds from issuance of debts, sale of investments .financial transactions through private agencies.

The amount of revenues collected by counties is related to historical and current political decisions regarding the goods and services governments provide and the way that they are produced (OECD, 2009). All governments raise revenues to finance public spending, from highways, hospitals to schools and social security among other government budgetary needs. Revenue is measured over the full fiscal year of the government. Wasilewski (2000) compared the tax collections methods between Japan and Brazil.

The study found that in Japan revenue collections is highly automated compared to Brazil. The high revenue collection in Japan has stimulated economic growth. Fjeldstad and Heggstad (2012) found that political and administrative limitations as the major constraints facing local revenue mobilization in Anglophone Africa countries. According to Chitembo (2009). In Botswana he observed that level of intergovernmental transfers varies widely amongst countries and between rural and urban council's lack of automation of revenue collections resulted to higher financial dependency from the central government. The study found that rural councils and urban councils receive 92 per cent and 62 per cent respectively ©Author(s) Licensed under Creative Common Page 232 from the Botswana Central Government (Chitembo, 2009). Lymer and Oats (2010) in South Africa observed that the high revenue collection by local authorities in South Africa, was estimated at 89 per cent of revenues collections was as a result of automation of revenue collection system. Gidisu (2012) in Nigeria, found that due to the introduction of automation revenue collection system the cost of tax administration reduced leading to effective revenue collection. Abiola and Asiweh (2012) conducted a study aimed at determining the impact of automation of government revenue collection of Nigeria. But lack of enforcement machineries, adequate manpower, computers and postal communication system in Nigeria had some negative effects in total revenue collection.

The study findings indicated that with automation in revenue collection, more diversification of automated revenue collections resulted in positive economic development which was realized, thus improving the lives of Nigerian citizens. Nkote and Luwugge (2010) looked into automation of revenue collection and computerization of customs tax administration in Uganda. It was observed that for automation to be efficient and effective, the computerization of custom tax administration requires trained adequate man power capable of addressing challenges related to automation such as delays in clearance time.

1.2 Kenya Perspective

Automation can bereferred to as the creation and application of information technology to monitor and control the production of goods and services in efficient way with an aim of increasing the productivity. Automation also involves the use of expert systems to support the production of goods and services. There are various scholars who have tried to define the Automation but in simple terms it is the use of machinery to produce goods and services. The collection of taxes used to be done in a manual way using the forms and submitting them to KRA but this has changed according to the changes of modern society and a system is used to collect and file taxes in Kenya. The SMEs use the computers to control and monitor their processes.(Kenya Revenue Authority, 2005)

The revenue collection in Kenya is a mandate which is administered by the government of Kenya and Kenya Revenue Authority has been appointed and assigned that duty by an act of parliament. The Kenya Revenue Authority was formed in July 1st 1995 by an Act of parliament as the government agency responsible for administration and collection of taxes on behalf of the Government of Kenya. The Kenya Revenue Authority receives the revenue and channel it to the Treasury allocates the revenue to different sectors of the economy after

the National budget is approved by Parliament and also the parliamentary budget committee.(Kenya Revenue Authority, 2015)

KRA collects taxes which includes; Income tax for individuals and body corporates, Monthly rental income tax, capital gains tax, advance tax, Value Added Tax, Excise duty, petroleum levies, custom duties and other taxes for other government bodies like the ministry of lands which include the land rent, capital gains tax. When Kenya Revenue Authority receives the revenue it is then transferred to the treasury for the allocation.(ICPAK, 2016) The KRA currently uses the itax system for the filing and payment of revenue which is efficient reliable and accurate.

The itax system has replaced the manual system which was used in earlier days for filing and payment of revenue this was a good example of automation of tax processes on revenue collection by both large tax payers and SMEs. The SMEs uses the KRA system to file their returns and pay the revenue which is received by the appointed Kenyan banks which include commercial banks and other financial institutions which collects revenue on behalf of KRA.(Kenya Revenue Authority, 2017)

The KRA conducted a research on how to improve the revenue collection through automation and they developed the Itax system which is one of the modern technology which is used in other countries using experts system to collect revenue and improve the budgetary decisions. The Small and Medium Enterprises have not been left behind with the technology since they also need to improve the revenue payment responsibility for the citizens to enjoy the goods and services provided by the government. The Small and Medium Enterprises have adopted the automation of tax processes in Kenya and the purpose of this study is to know if there are factors influencing the automation of tax processes on revenue collection in Kenya.

The Small and Medium Enterprises uses the computer technology to make sales and update their records using inventory system, they also keeps records using electronic devices the payment of taxes or revenue to the government is through Itax system and our study involves the influence of this automation of tax processes on revenue collection.(Kenya Revenue Authority, 2012)

The responsibility of the GOK in collection of revenue lies with KRA and stringent measures have been put in place to ensure revenue is collected promptly and is not lost. Applying criteria of efficiency, fairness, and transparency to tax systems and the spending of government resources creates a continuous cycle of improving fiscal performance, good governance and fair distribution of public goods and services and It promotes compliance with Kenya's tax, trade, and border legislation and regulation by promoting the standards set out in the Taxpayers Charter and responsible enforcement by highly motivated and professional staff thereby maximizing revenue collection at a lower collection cost for the socio-economic well-being of Kenyans.(ICPAK, 2016)

The Government of Kenya has taken the growth of revenue measure to control its borrowing from international donors a serious measure since the national budget is funded by both internal revenue and external borrowing and in simple terms the government is not borrowing more compared to early days. One of the stringent measures taken by the government is issuing strict deadlines in collection of revenue by KRA and ensuring all the revenue collected is banked to the National Exchequer account of the government.Kenya has over the years undertaken various revenue administration reforms aimed at enhancing revenue collection(Karanja, 2014). The purpose of the KRA itax system was to increase voluntary compliance, reduce KRA’s burden of assessing returns and increase collection efficiency.

Despite this reform, the compliance level has remained low. The levels of tax compliance have remained low even with the use of sanctions like penalties, routine audits, fines and so on but not much improvement in tax revenue collections particularly in the real estate. Kenya is therefore ranked among the countries with low compliance as far as tax revenue collection is concerned(KIPPRA, 2016)

Numerous studies have been conducted to provide an in depth understanding on key motivators to revenue collection and tax evasion. Despite these studies from the famous scholars, the economy of Kenya continues to face a challenge since there is lack of a proper tax policy, low compliance, low revenue collections, poor tax administration are linked to elevated levels of tax evasion and avoidance in developing countries(KIPPRA, 2016) The contribution of the Small and Medium Enterprises has been very low despite all the efforts by the government taxing all Kenyans to support the development of the economy by paying fair share of taxes.

The revenue from the Small and Medium Enterprises has not been collected fully since some of them are not registered with Kenya Revenue Authority as revenue paying taxpayers and this has led to the conduct of this research proposal. (Karanja, 2014).

The Budget policy statement for the year 2016 showed there was a shortfall in revenue collection and this led the National Treasury to enhance and improve the new procedures to collect the revenue by Kenya Revenue Authority. The National Treasury needed more revenue collections to improve the growth of the government infrastructure. There are many areas of revenue collection points which are improved by KRA and one of them includes the collection of revenue from SMEs. The SMEs are growing day by day since the population of Kenya is still growing but the Revenue from SMEs is not growing and this has led to the conduct of this study(ICPAK, 2016).

According to (Atika, 2012) the organisational structure of the firm is very important to define so that the organisation can attain its objective. The organisational structure shows the hierarchy of the responsibilities from the top management to the lower level management. The Kenya Revenue Authority is a government corporation which was formed by an act of Parliament and is supposed to ensure all the taxpayers are treated fairly including the SMES and in terms of fighting corruption the organisation is corruption free since what the SMEs has declared in the return it is the correct amount which is received by KRA and sent to the National Treasury. There are other agents in the government which assist the KRA to ensure it's free from corruption in collecting the revenue from the SMEs which include EACC and other non-governmental organisations (KRA, 2017)

The tax compliance is the degree to which the tax payer pays the required taxes by the government and has certified all the rules and regulations are followed. KRA currently issues the tax compliance certificate through online method after the taxpayer has applied for it. There are cases where the tax compliance is not issued where the taxpayer has not complied with the tax system or is in arrears. The tax payer is required to file the individual income tax yearly and in case one fails to do so the Tax procedures Act of 2015 is very clear there is a penalty of Kshs.20,000. The body corporate if they fail to file the income tax return yearly the penalty is Ksh.10,000. There are other penalties for VAT which are listed by Tax procedures Act of 2015 and also in the amendment of the Tax procedures which all Kenyans should adhere to and SMEs are not left behind since their businesses could include individuals trading in business name or body corporate like companies and partnerships (Lumumba, Migwi, & Obara, 2010)

1.2Statement of the Problem

Tax compliance is concerned on the timely and accurate submission of tax remittance information to the revenue authority. The online filing system has a direct impact on the tax compliance levels (Nakiwala, 2010). The system ensures that the taxpayer has filled all the required mandatory fields before allowing him to proceed to the next level. This has the effect of ensuring that the revenue authority receives relatively high quality data compared to the manual returns of the data (Nakiwala, 2010). The online filing of the tax returns ensures that there is lack of inconsistencies, missing information and unintentional errors (Mandola, 2013). SMEs are faced with numerous challenges in the context of taxation. For example, Odongo (2014) found tax compliance levels among the SMEs in Uganda to be very low. There are several factors that led to low tax compliance levels in Uganda including poor book keeping, low sales turn overs , and frequent ownership changes of SMEs (Nakiwala, 2010). Other challenges include large proportion of SMEs who are ignorant of taxation processes and computations, and lack of comprehensive sensitization programmes by the Uganda Revenue Authority (URA) (Odongo, 2014). There are challenges associated with the tax compliance levels among the SMEs in Kenya due to the nature of the firms (Simiyu, 2013). The turnover tax in Kenya introduced through the Finance Act of 2007 specifically targets the SMEs especially those with less than 5 million annual gross income (Osebe, 2013). Some of the challenges facing the taxation of the SMEs in Kenya include the fact that small businesses are normally owned by the owners who are also in charge of the accounting book (Muhangi, 2012). There is thus less incentive to comply with tax requirements.

1.3 Research Objectives

1.3.1 General Objective

To investigate theinfluence of online tax filing on tax compliance among Small and Medium Enterprises in Nairobi Central Business District

1.3.2 Specific Objective

i. To determine the effect of computer literacy level on tax compliance among Small and Medium Enterprises in Nairobi Central Business District.
ii. To evaluate the effect of online tax system stability on tax compliance among Small and medium enterprises inNairobi Central Business District.
iii. To assess the effect perceived security risks concerns on tax compliance among Small and Medium Enterprises in Nairobi Central Business District.
iv. To find out the effect of availability of online systems on tax compliance among Small and Medium Enterprises in Nairobi Central Business District.

1.4 Research Questions

i. How doescomputer literacyaffect Taxcomplianceamong Small and Medium Enterprises in Nairobi Central Business District?
ii. To what extent doesonline tax system stability affectTaxcomplianceamong Small and Medium Enterprises in Nairobi Central Business District?
iii. To what extent doesperceived security risks concerns affect Taxcompliance amongSmall and Medium Enterprises in Nairobi Central Business District?
iv. How availability of online systems affect Taxcompliance amongSmall and Medium Enterprises in Nairobi Central Business District?

1.5Significance of the Study

1.5.1 The Government of Kenya

Kenya Revenue Authority will be able to use the findings from this study to critically assess the influence of the systems and take any corrective measures to counter any weaknesses identified. This will help in promotion of VAT registered traders in the country as well as ensuring adequate financial resources for the government.

1.5.2 Small and Medium Enterprises

Businesspeople will also use the findings to understand the financial benefits associated with electronic processing of transactions. This will help them in addressing record keeping challenges that influence their growth in Kenya.

1.5.3 Other Researchers

Other researchers will benefit from the findings in that the study will provide information to all future researchers interested in doing research onVAT.

1.6 Scope of the Study

The area of study will be Small and Medium Enterprises in Central Business District withinNairobi, Kenya.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter presented review of literature on VAT collection. It first discussed three theories that provide the theoretical background of the study. These theories areprospect theory, deterrence theory andthe ability to pay theory of taxation. The chapter also discussed other studies conducted that are relevant to this study. Furthermore, it developed a conceptual framework for the research variables and showed the gaps that the study sought to fill.

2.2 Theoretical Literature Review

2.2.1 Unified theory of Acceptance and use of Technology

This theory was formulated by Venkatesh.et al (2003), and aims to explain user intentions while using an information system and the subsequent usage behavior. The theory claims that there are four main factors that will influence usage of a new information system and they include: performance expectancy, effort expectancy, social influence and facilitating conditions. The four factors are moderated by gender, age, experience and voluntariness of the targeted user. For example, for a user who is young and with an IT background, they are more likely to find a new system highly useful in performing their duty, easy to use as they are already technical and will most likely influence their peers in using the same information system.

The theory was developed by reviewing and consolidating the principles of eight earlier models which include the one above i.e Technology Acceptance Model and others.

The model has been used by various researchers in their studies but has also received criticism from various quarters as many compare it with the theory of technology acceptance model (Venkatesh, & Zhang, 2010).

The Unified theory of acceptance and use of technology involves the economic environment of the firm, the structures of the industry and the internal structure of the firm is one of the most important components for the growth and development of the firm. The unified theory involves the change from manual to use of computerised technology which makes work easier and faster. The information system is introduced to the firm by the management according to the various tasks they need to be performed successfully in an automated way. Most of the organisations have changed from the use of manual system to the Modern information system which is a good example of automation.(Venkatesh, 2016).

The growth of the firm involves the stages which are followed in the cycle of the growth and include the introduction stage the growth, peak and decline stage, these stages are also used in the introduction of information technology to perform the various tasks. The capital increases in the growth stage but in the peak stage it remains constant then it starts going down in the decline stage and at this stage of decline most firms are forced close down. The expenditure increases as the capital and the output increases at the same rate. Some of the information systems used in modern technology include the business systems which processes the data and produces the output(Venkatesh, 2016)

The theory of acceptance and use of technology was earlier demonstrated by other scholars who performed more research work to support their work and shows how the small firms starts and grows to big firms with more growth in output, capital and expenditure as a result of the use of advanced technology by the use of computerised systems.

The business continues to expand its market it produces more products and increases the labour costs and those are indicators for the growth of the firm in the industry. The firm acts as one union to attain the goals of the organisation by using different processes to attain the objectives(Gupta A. , 2008)

The entrepreneurs of the business start with the idea of the business and organises the idea and put it into working and the business starts and there is growth in the development of the business idea which was the main aim of the entrepreneur is successful. The entrepreneur is the inventor of the business idea and the processes of business development and should take the feedback. The introduction of information system affects the organisation but mostly the positive effects (Gupta B. , 2011)

2.2.2 Deterrence Theory

The primary theoretical framework in economics for the study of noncompliance has been deterrence theory. This framework assumes that taxpayers rationally perform a cost- benefit analysis of noncompliance taking into consideration the value of the marginal tax dollar and the risks of sanctions (Carroll, 1992). Since deterrence theory emphasizes cost-benefits that are based on expected outcomes of choices, it can be considered an outcome- processing theory (Carroll, 1992). Consequently, taxpayers make compliance maximize their utility.

Within this classical view of decision making, choices are considered to be motivated bySelf-interest (Hodgson, 1998). That is, individuals are thought topromote their own interests instead of the interests of others. Ethical values are seen as interfering with rational behaviour and utility maximization (Etzioni, 1998). Sociological research, however, has broadened the notion of utility to include concern for social duty as well as self -interested goals.

Thus, in classical deterrence theory, taxpayers choose a compliance level that maximizes utility (What is best for the taxpayer), and in sociological models, this choice considers the social obligations and self-image of the taxpayers as well (Scholz, 1995).

2.2.3 Theory of Technology Acceptance Model

This theory was initially proposed by Davis (1989) and tries to explain the model of how users accept technology when it is imposed on them. The model describes two major factors that influence the uptake of the technology by the users including;

Perceived usefulness- this is interpreted as the degree to which the user of the new technology believes that using that particular technology will help them enhance their job performance. If the user believes that the technology will help them to a great extent in enhancing their performance, then they are more likely to use that technology and adopt it in a shorter span of time. However, if the user feels the technology won't help enhance their performance, they will tend to avoid it unless forced to do so, may be in their workplaces.

Perceived ease of use – this is the degree to which a potential user of a new technology believes it would require minimal effort to use it. If the user thinks the technology will be easy to use at minimal effort, then they are more likely to adopt technology as opposed to a user who believes that it would require a lot of effort to use the technology.The theory was later theorized further and extended to different models such as "An extension of the Technology Acceptance Model in hospital in the home units" but the new models still borrowed heavily from the principles of the original model.

KRA has targeted to make their systems to be user friendly (KRA ICT Strategy 2014) endeavouring to entice taxpayers.

This is by making it easier for taxpayers to interact with KRA more easily (online wherever they are and therefore avoiding long queues at KRA premises) and also making the systems such as iTax as simple as possible to use for most of the Kenyans. The two main issues being: ease of use and usefulness.

2.3 Conceptual Framework

This conceptual framework shows the relationship between the dependent variables and the independent variables. The independent variables are computer literacy level, computer online tax system stability, perceived security stability and availability of the online system and the dependent variable is tax compliance as illustrated in the conceptual framework presented in figure 2.1

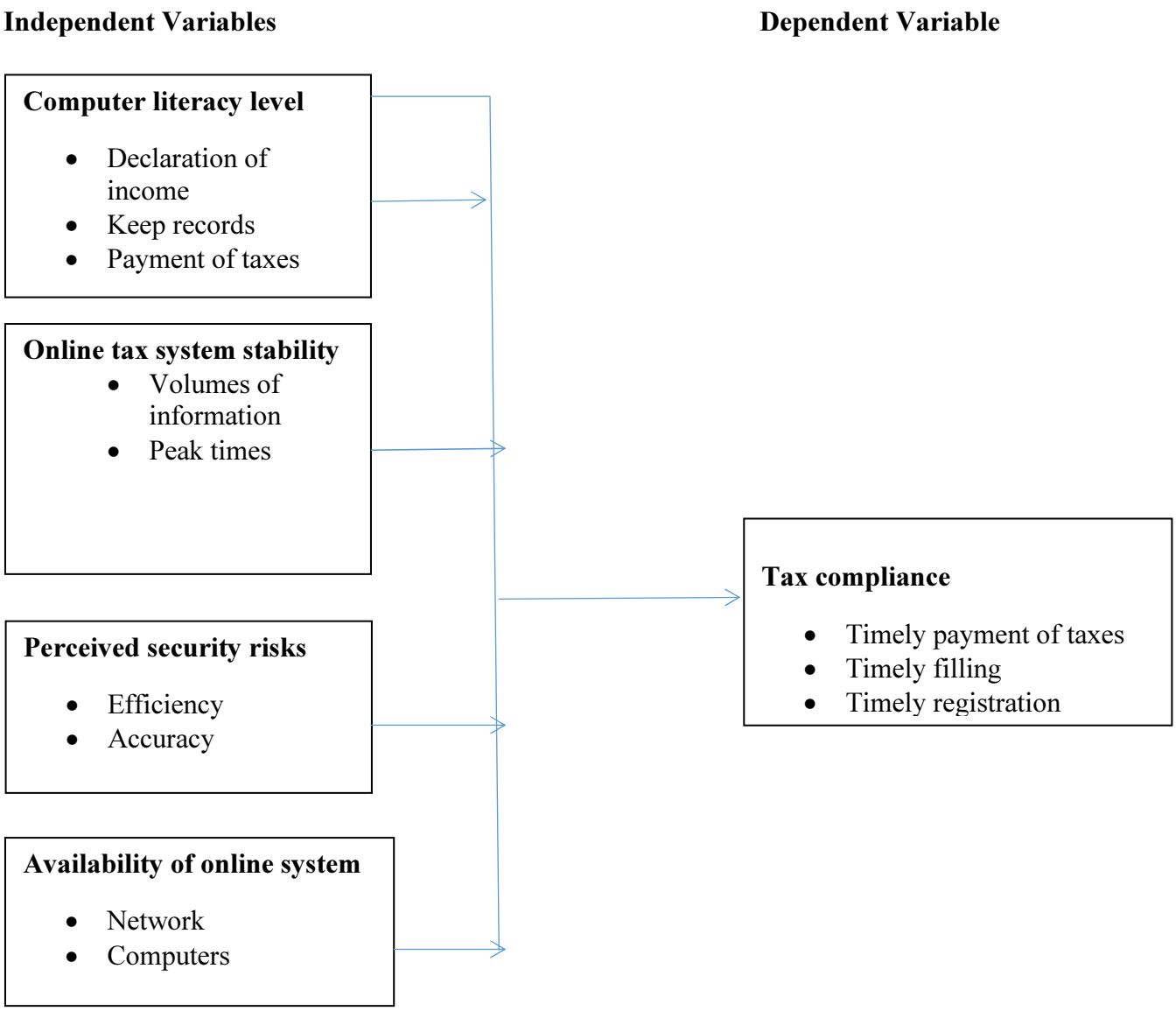

Figure 2.1 Conceptual Framework

2.4 Empirical Literature

Various research studies have been conducted to determine the relationship between computerised systems and revenue collection across different countries of the world. Kuznetsova (2010) investigated which factors affect diffusion of tax return filing online (e-return) in Finland.

It was found that diffusion of tax return filling online was affected by; tax payers perceived attributes of the e-return system, interpersonal communication channels used by the tax authority, performance of tax administration services and extent through which tax awareness efforts were conducted. The study was conducted in Finland to determine how respondents filled returns while this research was done in Kenya.

Pippin and Tosun (2014) study in United States analysed the demographic, socio-economic and geographic factors affecting electronic tax filing (e-filing). Research results indicated that there was significant variation in e-filing rates across and within different states. E-filing rates were found to be more common in rural areas that had low population size, states that had a lower share of female population and areas with higher population of Hispanics, afro-Americans and Asians. Considering that Pipin and Tosun (2014) study was done in United States involving several states, this research determined the e-filing rates among SMEs in Trans-Nzoia County by focusing on both rural and urban SMEs.

Ann et al (2015) research investigated the level of awareness of Batangas city Small-Medium Enterprise owners on Bureau of Internal Revenue (BIR) E-Filing and tax Payment System. Findings revealed that most SME owners are aware about filing and paying their taxes electronically. Respondents agree with the perceived benefits on using the computerised systems and respondents' intention to use the system is usually affected by their perceived risks and problems. This research determined the level of awareness that SMEs have towards computerised systems by KRA.

Amitabh et al. (2009) did a study on antecedents of paperless income tax fillings. The focus was on how young Indian professionals adapted and behaved towards online filing of tax returns with the purpose of increasing compliance rate. the results showed that compliance by the young professionals was dependent on the following factors; perceived ease of the online

tax systems, personal innovativeness in IT, relative advantage of IT, performance of e-filling services and compatibility of computerised systems. This research determined whether any of the above-mentioned antecedents influence compliance by SMEs in Trans-Nzoia County, Kenya considering the above-mentioned study targeted young professionals.

In another research, Yusniza (2009) focused on the perceived risks and its facets on Technology Acceptance Model (TAM) while using e filling of taxes in Malaysia content. Yusniza observed that various significant factors influenced adoption of e filling by Malysian businesses. The risks identified to influence compliance by business were; performance risks, time risk, privacy risk and psychological risk. Still in Malaysia, Azmi, Kamarulzaman and Haida (2012) analysed data from 249 taxpayers. The researchers established that perceived risks of e filling had a significant effect on compliance level. The regression model in the research showed that different risks facets could influence adoption of e-tax filing systems and perceived usefulness of the systems differently. While Yusniza and Azmi et al. studies was on perceived risk, this research will determine the degree to which SMEs have complied with computerised tax administration systems in Kenya with the aim of raisin revenues by KRA. Furthermore, Ling and Nawawi (2010) survey on integration of ICT skills and tax software education found out that taxpayers needed three skills: spreadsheet software, word processing software and email. Their acquaintance with the above-mentioned skills would assist them interact well with the computerised tax systems hence raising compliance level.

Coming to Sub Saharan Africa, Seelman et al. (2011) found out that majority of developing countries in Sub Saharan Africa lacked effective tax administration structures and processes. Technological innovations have not filtered through to the daily working reality of tax officials. Ngwu (2012) study sought to determine whether absence of infrastructures is responsible for the poor revenue from taxation in Nigeria.

The research observed that poor funding, lack of staff training and absence of infrastructures impact greatly on tax administration in the State. Ayodeji (2014) looked at the impact of electronic tax systems on Tax Administration in Nigeria. The research concluded that electronic tax systems play an important role in the increase of internally generated revenue in Nigeria by ensuring compliance thereby boosting productivity and economic activities in the country. Olaoye and Kehinde (2017) study examined the impact of information technology on tax administration in South West, Nigeria. The study concluded that information technology enhance the level of tax productivity and administration.

Gidisu (2012) examined the automation system procedures of the Ghana Revenue Authority on the effectiveness of revenue collection. The evidence suggested a positive impact of automation system usage and the cost of tax administration, automation and effectiveness of revenue collection. Additionally, automation was significantly related with tax clearance time. In Gambia, Jallow (2016) examined the nature and prospects of computerisation in tax and customs administration from The Gambia's tax system perspectives. The study found out that some challenges were yet to be resolved in the area of the payment, registration and audit modules that were not interrelating seamlessly. The results of the study revealed significant positive relationships between automation and tax, and customs administration.

Ndayisenga and Shukla (2016) examined the effects of electronic tax management system on revenue collection by the Rwanda Revenue Authority (RRA). It was established that both electronic tax management system that consist of Tax Payment System, Mobile Tax Payment System and electronic Billing Machine System contributed to timely tax payment and reduced operational cost for both RRA staffs and clients. The system has also made clients pay tax from any business location, eased communication collaboration between taxpayers easier, made tax auditing / accountability easier and lastly has increased revenue collection.

Kato (2016) study looked at the implementation of tax policy reforms (with computerisation being one of them) by Uganda Revenue Authority. Kato found out that URA staff had adequate knowledge on the goals and objectives of implementing reform agenda compared to the year 2005. This was successful because URA provided continuous training to its staff. However, one of the major challenges identified was low literacy level of tax compliance by taxpayers in Uganda. The study by Kato was in Uganda which appears to be wide (tax policy reforms) while this research investigated the degree to which computerised tax reforms have impacted on revenue payments to KRA by SMEs in Trans-Nzoia County, Kenya.

In Tanzania, a study was done by Yuda (2013) to examine how utilisation of ICT had modernised tax administration procedures and improved revenue collection by the tax authority. The respondents for the study were large taxpayer department staff who all (100%) agreed that use of ICT had shortened the period of processing and responding to tax queries. Yuda observed that tax collection had increased because of better use of ICT in tax administration procedures. Elsewhere, Seelmann, Lerche, Kiefer and Lucante (2011) did a study on the importance of computerised integrated system for taxation in Tanzania and found out that taxation was often the most important source of state revenue but the compliance level was low.

Still in Tanzania, an assessment was done by Sanga (2015) to establish whether electronic revenue collection systems brought any difference in organization performance. Sanga results showed that two traditional methods of revenue collection systems (cash and cheque) were still in use to some extent. However, My Park (electronic payment system) was found to be the dominant method of revenue collection instrument amounting to 53%.

This shows the importance of computerised revenue collection systems on performance of organisations.

Gekonge and Atambo (2016) investigated the effect of the electronic tax system on revenue collection efficiency by KRA in UasinGishu County. Results showed that majority of respondents indicated that the Authority had good electronic tax payment systems. They found out that most of respondents were conversant with the system and had received training in it (KRA staff). Nevertheless, taxpayers complained of difficulties in using the electronic system. This was due to inadequate computer knowledge, frequent power interruptions and unreliable internet network. Gekonde and Atambo research was done in UasinGishu while this research was stationed in Trans-Nzoia County. In Machakos County, Mutisya (2014) study sought to establish effects of revenue collection automation and implementation challenges faced by the county government. Mutisya established that implementation of integrated revenue collection system influenced revenue collection positively. Mutisya research was done by looking at county government level while this researcher looks at KRA that operates countrywide. Okiro (2015) study sought to address level of compliance to budget estimates, and absorption of the e-payment by the payers, resulting from the e-payments system as factor influencing performance of revenue collection by the County Government. It was found that 92.20% of variation in revenue collection performance in Nairobi City County government is explained by the adoption of e-payment. In Homabay County a study by Odoyo et al (2013) examined the impact of IS on revenue collection by the local authority. They found that a strong positive relationship existed between information systems use, efficiency, and effectiveness in revenue collection.

In another research conducted in Western Kenya by Sagas, Nelimalyani and Kimaiyo (2015) on the impact of electronic tax register on revenue collection by KRA showed that 75% of the respondents appeared to agree that ETR machines assisted in curbing tax evasion. Further, 86% of the respondents were of the opinion that ETRs have helped increase revenue collection due to their efficient nature. Muita (2010) studied on factors that influenced adoption and use of e-filing system among large taxpayers in Kenya. The study found out that the skills required by the users of e-filing, the technology required and the tax authority's preparedness in enhancing the adoption of tax compliance based technology were the main actors.

In another study, Muthama (2013) determined the relationship between system modernization and revenue collection at KRA with regard to the Simba System. The study findings established that the number of transactions and the revenue collected increased after the implementation compared to the years before the implementation. Karori, Muturi and Mogwambo (2016) focused on the influence of revenue collection efficiency on the operational performance of Kisii County Government. The study revealed that benchmarking strategy through proper planning and budgeting influences revenue collection that affects operational performance, the supervisory systems influence revenue collection and in turn influences operational performance.

Mwangi and Kiarie (2015) study sought to establish the effects of online tax system on revenue collection among small taxpayers in Meru County, Kenya. The findings revealed that online tax system does affect tax compliance level among small taxpayers in Meru County. Wawira, Nambuswa and Namusonge (2017) investigated the effects of the electronic tax system on tax collection efficiency in Domestic Taxes Department of KRA in Rift Valley region.

Results showed that majority of the respondents were not sure of handling *i*-Tax issues raised by taxpayers. Wafula, Kamau, Gekonge, Makori and Mwaura (2015) study sought to address the concerns of these taxpayers and understand whether an electronic tax filing of returns was appropriate for them. Most of respondents had access to electronic systems with 50% as majority using laptops. In conclusion, to their research, majority of respondents had average knowledge on electronic tax filing.

Cheruiyot (2015) study sought to review *i*-Tax system and service delivery by Kenya Revenue Authority, Nairobi stations. The study found that employees' perception towards technology (*i*-Tax) has a statistically significant influence on customer service delivery. Kiptoo and Omondi (2017) examined the contribution of i- Tax system as a strategy for revenue collection at KRA, Rift Valley Region, Kenya. The study concluded that when all these i-Tax components were embraced, revenue collection, accounting for taxes paid, monitoring of taxpayers, service delivery to taxpayers and compliance improved. These findings were in harmony with Njoki and Kwasira (2017) study that sought to analyze the tax compliance in the informal economy in Nakuru Town, and analysed how use of i-tax platform had influenced compliance. The results were then presented by means of tables and charts for ease of understanding. The study revealed that the use of i-tax significantly improved income tax compliance among informal sector workers in Nakuru.

2.4.1 Computer Literacy Levels on Tax Compliance

The computer literacy level and accessibility to internet infrastructure has a direct impact towards the use of the online tax returns (Auyat, 2013). The online tax services are often internet based platforms and basic knowledge of the usage of the internet is required (Azmi& Bee, 2010).

In this context, the user must be able to self-navigate on the web-based platform with minimal difficulties if any and use the self-help menus available in the website (Hussein et al., 2010). Mandola (2013) noted that half the sampled respondents in her study on the adoption of ITMS system indicated that any online e government services needs to be easy to use to enable even those with little internet experience to effectively use the service. In this context, she found a correlation between an individual's internet experience, the availability and access to internet facilities, and the ease in which the potential user can learn and use e government services such as online filing. The lack of the appropriate computer literacy levels therefore makes online tax filing expensive (Osebe, 2013). Lack of the ability to use the e filing system quickly and efficiently or lack of understanding the type of information required by the online tax filing system forces taxpayers to engage third parties (Mandola, 2013). These third parties could be the cybercafé attendants and would charge premium for such services (Odongo, 2014). The net effect is that it becomes expensive to use online tax filing in contexts where the taxpayer is computer illiterate hence a preference for the manual filing (Ofori, 2009). The taxpayer may also opt to execute the electronic filling on their own despite the challenges in navigating the online system (Muhangi, 2012). The difficulties in the ability to navigate the online filing system quickly and efficiently without constantly referring to the help menus or consulting third parties results in prolonged time taken to complete the online filing (Ramoo, 2006). The taxpayer may therefore be burdened by the time and effort spent learning the system and hence influence the adoption of the system (Lukwata, 2011).

2.4.2 Perceived Security Risks Concerns on Tax Compliance

The dependent on the third parties to assist a taxpayer undertake online tax returns has the effect of the taxpayer losing data privacy (Lai &Choong, 2010).

The taxpayer need to reveal personal financial details about his business such as the income derived from the business (Lukwata, 2011). A majority of the taxpayers may not be comfortable divulging such information to third parties who are not connected to their business (Ramoo, 2006). This is because it exposes them to security risk of being robbed. In this context, the taxpayer may opt to fill the manual tax returns in a bid to protect the privacy of his data (Ssetuba, 2012). The lack of the computer literacy in general and the lack of confidence around the online filing system may lead to psychological predispositions that may influence the adoption of electronic filing (Muhangi, 2012). For example, Mandola (2013) argues that 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 customer being inclined to adopt the e filing system. Concerns over security issues or perceived risks on the usage of the online filing services inhabit its adoption. Ramoo (2006) argues that perceived risk influences the adoption and usage of the online filing.

The perceived risk is defined as the taxpayers' perception on the reliability of the system's usefulness/functionality and the control of their personal data information in an online environment (Ramoo, 2006). In this context, taxpayers using the online could be concerned on whether third parties can access their personal tax information without their knowledge or permission (Geetha&Sekar, 2012). The failure of the system to deliver on its objectives due to either technical issues or other reasons affects the potential users' adoption of the system. In this context, Kamarulzaman&Azmi (2010) argues that the risk factor that taxpayers' perceived to have towards the system, which promise to complete their transaction securely and to maintain the privacy of their personal information, will affect their voluntary adoption of the e-filing system.

2.4.3 Online Tax System Stability on Tax Compliance

The online tax filing system must be stable to handle the high traffic during the peak times. In this context, Kamarulzaman&Azmi (2010) argue that the online system must run smoothly and efficient during the *Influence of Online Tax Filing on Tax Compliance among Small and Medium Enterprises in Nakuru*.

The inability of the system to handle huge information during the peak hours and may change the perception of the users that the system in unreliable (Nakiwala, 2010). Customers in this context may thus opt to utilize the manual filing due to the perception that the system is always unreliable (Mugo, 2013). According to Azmi& Bee (2010), improvement on the e filing systems that will enhance the tax payer's perceived ease of use, usefulness and reduced riskiness of the system are essential in the adoption of the e filing system. Mugo (2013) notes that reducing taxpayer's perception of risk in electronic filing not only increases their perception on the usefulness of the electronic filing but also leads them to adoption of the system. Ramoo (2006) argues that computer anxiety affects the adoption of the electronic filing of tax returns.

The computer anxiety is defined as the fear and the apprehension felt by an individual when considering the utilization of the computer technology or when actually using it (Nakiwala, 2010). There are two components of computer anxiety that is the cognitive and the emotive components. The cognitive component underlies the negative expectancies and the emotional expectancy leads to negative physiological reactions (Ramoo, 2006). The computer anxiety has been shown to impact on the perceived ease of use, computer use and computing skills which leads to the low adoption of the electronic filing system. The computer anxiety is most likely to be an issue among the illiterate, semi illiterate and the elderly taxpayers (Hussein et al., 2010). Some of the traders in the Small and Medium Enterprises sector have relatively low education levels, which may reduce their confidence around computer technologies such as the online filing system.

2.5 Critiques of the study

Ann et al (2015) research investigated the level of awareness of Batangas city Small-Medium Enterprise owners on Bureau of Internal Revenue (BIR) E-Filing and tax Payment System. Findings revealed that most Small- Medium Enterprises owners are aware about filing and paying their taxes electronically.

Respondents agree with the perceived benefits on using the computerised systems and respondents' intention to use the system is usually affected by their perceived risks and problems. This research determined the level of awareness that Small-Medium Enterprises have towards computerised systems by Kenya Revenue Authority.

Amitabh et al. (2009) did a study on antecedents of paperless income tax fillings. The focus was on how young Indian professionals adapted and behaved towards online filing of tax returns with the purpose of increasing compliance rate. the results showed that compliance by the young professionals was dependent on the following factors; perceived ease of the online tax systems, personal innovativeness in IT, relative advantage of IT, performance of e-filling services and compatibility of computerised systems. This research determined whether any of the above-mentioned antecedents influence compliance by Small-Medium Enterprises in Trans-Nzoia County, Kenya considering the above-mentioned study targeted young professionals.

In another research, Yusniza (2009) focused on the perceived risks and its facets on Technology Acceptance Model (TAM) while using e filling of taxes in Malaysia content.

Yusniza observed that various significant factors influenced adoption of e filling by Malysian businesses.

The risks identified to influence compliance by business were; performance risks, time risk, privacy risk and psychological risk. Still in Malaysia, Azmi, Kamarulzaman and Haida (2012) analysed data from 249 taxpayers. The researchers established that perceived risks of e filling had a significant effect on compliance level.

The regression model in the research showed that different risks facets could influence adoption of e-tax filing systems and perceived usefulness of the systems differently. While Yusniza and Azmi et al. studies was on perceived risk, this research will determine the degree to which SMEs have complied with computerised tax administration systems in Kenya with the aim of raisin revenues by Kenya Revenue Authority. Furthermore, Ling and Nawawi (2010) survey on integration of ICT skills and tax software education found out that taxpayers needed three skills: spreadsheet software, word processing software and email. Their acquaintance with the above-mentioned skills would assist them interact well with the computerised tax systems hence raising compliance level.

Coming to Sub Saharan Africa, Seelman et al. (2011) found out that majority of developing countries in Sub Saharan Africa lacked effective tax administration structures and processes. Technological innovations have not filtered through to the daily working reality of tax officials. Ngwu (2012) study sought to determine whether absence of infrastructures is responsible for the poor revenue from taxation in Nigeria. The research observed that poor funding, lack of staff training and absence of infrastructures impact greatly on tax administration in the State. Ayodeji (2014) looked at the impact of electronic tax systems on Tax Administration in Nigeria.

The research concluded that electronic tax systems play an important role in the increase of internally generated revenue in Nigeria by ensuring compliance thereby boosting productivity and economic activities in the country. Olaoye and Kehinde (2017) study examined the impact of information technology on tax administration in South West, Nigeria. The study concluded that information technology enhance the level of tax productivity and administration.

Gidisu (2012) examined the automation system procedures of the Ghana Revenue Authority on the effectiveness of revenue collection.

The evidence suggested a positive impact of automation system usage and the cost of tax administration, automation and effectiveness of revenue collection. Additionally, automation was significantly related with tax clearance time. In Gambia, Jallow (2016) examined the nature and prospects of computerisation in tax and customs administration from The Gambia's tax system perspectives. The study found out that some challenges were yet to be resolved in the area of the payment, registration and audit modules that were not interrelating seamlessly. The results of the study revealed significant positive relationships between automation and tax, and customs administration.

Ndayisenga and Shukla (2016) examined the effects of electronic tax management system on revenue collection by the Rwanda Revenue Authority (RRA). It was established that both electronic tax management system that consist of Tax Payment System, Mobile Tax Payment System and electronic Billing Machine System contributed to timely tax payment and reduced operational cost for both RRA staffs and clients. The system has also made clients pay tax from any business location, eased communication collaboration between taxpayers easier, made tax auditing / accountability easier and lastly has increased revenue collection.

Kato (2016) study looked at the implementation of tax policy reforms (with computerisation being one of them) by Uganda Revenue Authority. Kato found out that URA staff had adequate knowledge on the goals and objectives of implementing reform agenda compared to the year 2005. This was successful because Uganda Revenue Authority provided continuous training to its staff.

However, one of the major challenges identified was low literacy level of tax compliance by taxpayers in Uganda. The study by Kato was in Uganda which appears to be wide (tax policy reforms) while this research investigated the degree to which computerised tax reforms have impacted on revenue payments to KRA by SMEs in Trans-Nzoia County, Kenya.

In Tanzania, a study was done by Yuda (2013) to examine how utilisation of ICT had modernised tax administration procedures and improved revenue collection by the tax authority. The respondents for the study were large taxpayer department staff who all (100%) agreed that use of ICT had shortened the period of processing and responding to tax queries. Yuda observed that tax collection had increased because of better use of ICT in tax administration procedures. Elsewhere, Seelmann, Lerche, Kiefer and Lucante (2011) did a study on the importance of computerised integrated system for taxation in Tanzania and found out that taxation was often the most important source of state revenue but the compliance level was low.

Still in Tanzania, an assessment was done by Sanga (2015) to establish whether electronic revenue collection systems brought any difference in organization performance. Sanga results showed that two traditional methods of revenue collection systems (cash and cheque) were still in use to some extent. However, My Park (electronic payment system) was found to be the dominant method of revenue collection instrument amounting to 53%. This shows the importance of computerised revenue collection systems on performance of organisations.

Gekonge and Atambo (2016) investigated the effect of the electronic tax system on revenue collection efficiency by KRA in UasinGishu County. Results showed that majority of respondents indicated that the Authority had good electronic tax payment systems. They found out that most of respondents were conversant with the system and had received training in it (KRA staff). Nevertheless, taxpayers complained of difficulties in using the electronic system. This was due to inadequate computer knowledge, frequent power interruptions and unreliable internet network. Gekonde and Atambo research was done in UasinGishu while this research was stationed in Trans-Nzoia County. In Machakos County, Mutisya (2014) study sought to establish effects of revenue collection automation and implementation challenges faced by the county government. Mutisya established that implementation of integrated revenue collection system influenced revenue collection positively. Mutisya research was done by looking at county government level while this researcher looks at KRA that operates countrywide. Okiro (2015) study sought to address level of compliance to budget estimates, and absorption of the e-payment by the payers, resulting from the e-payments system as factor influencing performance of revenue collection by the County Government. It was found that 92.20% of variation in revenue collection performance in Nairobi City County government is explained by the adoption of e-payment. In Homabay County a study by Odoyo et al (2013) examined the impact of IS on revenue collection by the local authority. They found that a strong positive relationship existed between information systems use, efficiency, and effectiveness in revenue collection.

In another research conducted in Western Kenya by Sagas, Nelimalyani and Kimaiyo (2015) on the impact of electronic tax register on revenue collection by KRA showed that 75% of the respondents appeared to agree that ETR machines assisted in curbing tax evasion. Further, 86% of the respondents were of the opinion that ETRs have helped increase revenue

collection due to their efficient nature. Muita (2010) studied on factors that influenced adoption and use of e-filing system among large taxpayers in Kenya. The study found out that the skills required by the users of e-filing, the technology required and the tax authority's preparedness in enhancing the adoption of tax compliance based technology were the main actors.

In another study, Muthama (2013) determined the relationship between system modernization and revenue collection at KRA with regard to the Simba System. The study findings established that the number of transactions and the revenue collected increased after the implementation compared to the years before the implementation.

Karori, Muturi and Mogwambo (2016) focused on the influence of revenue collection efficiency on the operational performance of Kisii County Government. The study revealed that benchmarking strategy through proper planning and budgeting influences revenue collection that affects operational performance, the supervisory systems influence revenue collection and in turn influences operational performance.

Mwangi and Kiarie (2015) study sought to establish the effects of online tax system on revenue collection among small taxpayers in Meru County, Kenya. The findings revealed that online tax system does affect tax compliance level among small taxpayers in Meru County. Wawira, Nambuswa and Namusonge (2017) investigated the effects of the electronic tax system on tax collection efficiency in Domestic Taxes Department of KRA in Rift Valley region. Results showed that majority of the respondents were not sure of handling *i*-Tax issues raised by taxpayers. Wafula, Kamau, Gekonge, Makori and Mwaura (2015) study sought to address the concerns of these taxpayers and understand whether an electronic tax filing of returns was appropriate for them. Most of respondents had access to electronic

systems with 50% as majority using laptops. In conclusion, to their research, majority of respondents had average knowledge on electronic tax filing.

Cheruiyot (2015) study sought to review *i*-Tax system and service delivery by Kenya Revenue Authority, Nairobi stations. The study found that employees' perception towards technology (*i*-Tax) has a statistically significant influence on customer service delivery. Kiptoo and Omondi (2017) examined the contribution of i- Tax system as a strategy for revenue collection at Kenya Revenue Authority, Rift Valley Region, Kenya. The study concluded that when all these i-Tax components were embraced, revenue collection, accounting for taxes paid, monitoring of taxpayers, service delivery to taxpayers and compliance improved.

These findings were in harmony with Njoki and Kwasira (2017) study that sought to analyze the tax compliance in the informal economy in Nakuru Town, and analysed how use of i-tax platform had influenced compliance. The results were then presented by means of tables and charts for ease of understanding. The study revealed that the use of i-tax significantly improved income tax compliance among informal sector workers in Nakuru.

2.6Research Gap

The study found that employees' perception towards technology (*i*-Tax) has a statistically significant influence on customer service delivery.

Kiptoo and Omondi (2017) examined the contribution of i- Tax system as a strategy for revenue collection at KRA, Rift Valley Region, Kenya. The study concluded that when all these i-Tax components were embraced, revenue collection, accounting for taxes paid, monitoring of taxpayers, service delivery to taxpayers and compliance improved. These findings were in harmony with Njoki and Kwasira (2017) study that sought to analyze the tax

compliance in the informal economy in Nakuru Town, and analysed how use of i-tax platform had influenced compliance.

2.6 Summary

Chapter one gave an introduction and background to the study and outlined the problem statement and the purpose of the study, it also clearly stated the research questions that the study aims to achieve. The significance alongside beneficiaries of the study has been outlined. The scope both geographical and conceptual is covered. The chapter concludes by defining the key terminologies used. Chapter two elucidates the findings from the literature with the emphasis on the tax compliance and non-compliance. It will therefore serve to clarify how relationship between tax compliance and tax evasion and tax avoidance. Chapter three comprise of the research methodology used in the study.

The chapter defines the research design, population targeted, sample design, procedures of data collection and analysis of data techniques. Also discussed are characteristics of the study design and why the research deemed it appropriate for this study. The chapter also provides information on the population, sample frame and size, sample selection. Data collection method and data collection tool used in the study is also provided. Presentation the findings and results of the study is covered in chapter four. Presentations of the findings and results

were presented in table forms. Percentages were used for easy interpretation and understanding.

CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This section provided a systematic description of the research methodology that were used to answer the research questions in chapter one of the research project. The methodology in this research study entail research design, target population, sampling design, data collection and analysis methods.

3.2 Research Design

The study adopteddescriptive research technique was used in the study. According to Simiyu (2013) a descriptive study enables the current description of the phenomena being studied. On the other hand, Chepkangor (2012) argues that descriptive case studies are used to describe an event/process in its natural ambit and the main objectives is to answer how, who

and what questions. This research technique is ideal in the context that the researcher was interested in examining the factors influencing the adoption of the online tax filing among the SMEs in Nairobi, CBD.

3.4 Sampling Frame

According to Thompson (2012), a sampling frame comprises of a list of people from which the researcher uses to obtain information about the study. The sampling frame defines a set of elements from which a researcher can select a sample of the target population. Because a researcher rarely has direct access to the entire population of interest in social science research, a researcher must rely upon a sampling frame to represent all of the elements of the population of interest. Generally, sampling frames can be divided into two types, list and non-list.

Examples of list frames include a list of registered voters in a town, residents listed in a local telephone directory, or a roster of students enrolled in a course. A set of information used to identify a sample population for statistical treatment. A sampling frame includes a numerical identifier for each individual, plus other identifying information about characteristics of the individuals, to aid in analysis and allow for division into further frames for more in-depth analysis. The researcher used a list sampling frame. This consisted of segmented taxpayers from the Small and Medium Enterprises in Nairobi CBD, Kenya.

3.3 Target Population

Cooper & Schindler (2003) define target population as the entire group of people events or objects that a study focused on as the subject of analysis. The target population of this study was20,500 registered SMEs operating business in Nairobi, CBD and registered for Value Added Tax within Nairobi, CBD. The study was interested in examining the tax behavior of these SMEs as shown in table 3.1

Table 3.1 Target Population

Type of Enterprises	Target population
Small Scale Enterprises	10,000
Medium Scale Enterprises	10,500
TOTAL	20,500

3.4 Sample and Sampling technique

3.4.1 Sample Size

Cooper and Schindler (2003) describe sample or sample size as a subject of a population that is studied through a research study and generalized into the entire populations. The study adopted a systematic sampling technique.

Sample size is important primarily because of its effect on statistical power. Statistical power is the probability that a statistical test indicated a significant difference when there truly is one. (Morgan, 2001)

There are about 20,500 registered SMEs within CBD Nairobi which was used as the target population for this study. This study employed Nassiuma's (2009) formula to calculate the size of the sample. The formula to scientifically derive the sample from the target population is illustrated hereunder.

Where n = sample size

N =size of target population

C = coefficient of variation (0.5)

e = error margin (0.05) Substituting these values in the equation, estimated sample size

(n) were:

n = 20,500(0.5)2 / (0.52+ (20,500-1)0.052))

n = 99.51 that is 100 respondents The study used 100 respondents as the sample size.

3.5 Data Collection Instruments

In data collection, the researcher should describe the major method(s) for collecting data from the subjects, Maxwell (2012).In this study the main data collection instruments will be questionnaires. Questionnairewaspreferred because they are effective data collection instruments that allow respondents to give much of their opinions pertaining to the researched problem. The questionnaire to be the five Likert scale (from strongly agree to strongly disagree).The questionnaires wasself-administered to the personnel who handle taxes in the sampled taxpayers. The questionnaires hadan introductory letter introducing the researcher to the respondents and explaining the purpose of the research.

3.6Data Collection Methods

Data collection instruments are tools or methods use to collect data from participants in a study (Cooper & Schindler, 2003). This studyrelied on both primary and secondary data. Primary data usedcollected by use of questionnaires which wasadministered to the sampled respondents.

3.5.1 Primary Data

This study usedprimary data collection through questionnaires. The questionnaires were used because of its economy, its ability to ensure anonymity and use of standardized questions. It also provides time for subjects to think about responses.The questionnaire used was closed structured ended questions in the form of likert scale.

3.6 Data Collection Procedures

The relevant data was collected from the field with the aid of a research assistant, as the questionnaires was distributed on a drop and pick later method to allow the respondents time to sufficiently go through them and give feedback.

3.7 Pilot Study

The study carried out a pilot test to pre-test the validity and reliability of data collected using the questionnaire. A pilot group of 8 individuals from the target population wasselected to test the reliability of the research instruments. The major purpose for pilot testing was tested whether the questionnaires could obtain the required results. The pilot study used to find out the clarity and objectivity of the selected questions.

3.7.1 Reliability of Research Instruments

Reliability is increased by including many similar items on a measure, by testing a diverse sample of individuals and by using uniform testing procedures. In order to test the reliability of the instruments, internal consistency techniques were carried using Cronbach's Alpha.

The alpha value ranges between 0 and 1 with reliability increasing with the increase in value. According to (Mugenda, 2008), a coefficient of 0.6-0.7 is a commonly accepted rule of thumb that indicates acceptable reliability and 0.8 or higher indicated good reliability.

3.7.2 Validity of Research Instruments

According to Berg and Gall (1989), validity is the degree by which the sample of test items represents the content of test is designed to measure.

3.8 Data Analysis and Presentation

Qualitative and quantitative approaches applied in this study as advocated for by Neuman (2000); and Babbie and Mouton (2001). These two main research approaches wasexamined with respect to their suitability to the current research.

3.8.1 The Qualitative Analysis

Qualitative data was collected through questionnaires and response rate calculated. The data was then then categorized into different themes according to research variable and descriptive statistics such as mean, standard deviation and frequency distribution which according to Kothari (2012) measures the point about which items have a tendency to cluster and describe the characteristics of the data collected was computed.

3.8.2 The Quantitative Analysis

Quantitative data from the questionnaire was coded and entered into the computer for statistical analysis. The Statistical Package for Social Sciences (SPSS version 20) was used for analysis. Frequencies, mean and standard deviation wasused to summarize the data.

Regression Analysis is a statistical modeling technique wasused to identify meaningful, stable relationships among sets of data. The application of analytical procedures is based on the premise that, in the absence of known conditions to the contrary, relationships among information may reasonably be expected to exist. Regression measures the causal relationship between one dependent and one independent variable. Multiple regression analysis measures the effects of multiple independent variables on one dependent variable.

The study adopteda multi regression model

$Y = \beta 0 + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X4 + \varepsilon$

Where:

Y = Tax compliance

β0 = Constant Term

β1 = Beta coefficients

X1 = computer literacy level

X2 = online tax system stability

X3= perceived security risks concerns

X4 = availability of online systems

ε = Error term

Table 3.2: Measurement of Variables

Variable	**Indicators**	**Likert scale**
Computer Literacy level	Declaration of income	**5 points**
	Keep records	
	Payment of taxes	
Online tax system stability	Efficient	**5 points**
	Accuracy	
Perceived security risks	Volumes of information	
	Peak times	
Tax compliance	Timely payment of taxes	
	Correct returns filled	**5 points**
	Timely filling	

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

This chapter represents the analysis, presentation and interpretation of the findings. In addition the findings are also discussed in relation to literature reviewed. It gives the empirical findings and results following the application of the variables using the techniques mentioned in chapter three in methodology. The general objectives of this study was toestablishthe influence of online tax filing on tax compliance among small and medium enterprises in Nairobi CBD, Kenya. In an attempt to address the specific objectives of the study, this chapter provides details description of descriptive and inferential statistics and research findings and discussions.

4.1 Response Rates

Research's data collection instruments (questionnaires) were administered within a period of three weeks. Out of 100 questionnaires administered the researcher ensured a 98% response rate by personally administering the questionnaires with the help of research assistant. A total of 98 questionnaires were successfully completed and returned. Bailery, (2000) asserts that a response rate of 50 is considered good, and response greater than 70% is considered very good, therefore the response was very good. The findings are presented in Table 4.1.

Table 4.1: Response Rate

Response Rate	Frequency	Percent
Returned	98	98%
Unreturned	2	2%
Total	100	100

4.2 Reliability test results

Reliability is measure of the degree to which a research instrument yields consistent result after repeated trials (Mugenda&Mugenda, 2003). The results are depicted in tale 4.2 below.

Table 4.2: Reliability tests results

Constructs	Reliability Comment Cronbach's alpha	
Computer literacy level	0.773	Accepted
Online tax system stability	0.831	Accepted
Perceived opportunity security risks	0.781	Accepted
Availability security risks	0.833	Accepted
Tax compliance	0.790	Accepted

The results of the reliability test produced an overall Cronbach Alpha correlation coefficient of 0.801 while specific findings indicated that, computation literacy level had a coefficient of 0.773, online tax system stability had a coefficient of 0.831, perceived security risks had a coefficient of 0.781, availability security risks had a coefficient of 0.833 and Tax compliance had a coefficient of 0.790. Table 4.2 shows that all the study variables yielded Cronbach alpha coefficients values of more than 0.7, which is the recommended value. This indicates that the instrument was reliable to obtain data on determinants of residential rental income tax compliance by property owners.

4.3 Test of Assumptions of the Study Variables

When the assumptions of the linear regression model are correct, ordinary least squares (OLS) provides efficient and unbiased estimates of the parameters (Long & Ervin, 1998). To ensure that there was no violation of the assumptions, this study tested for multicollinearity, autocorrelation and normality test.

a) Multicollinearity

To determine whether multicollinearity existed, collinearity test was conducted using, tolerance, and variance inflation factor (VIF). The collinearity results are presented in Table 4.3.

Table 4.3: Multicollinearity Test Results for the study of independent variables

Model	Collinearity Statistics Tolerance	VIF
Computer literacy level	.806	1.136
Online tax system stability	.830	1.161
Perceived opportunities security risks	.815	1.142
Availability security risks	.749	1.231
Tax compliance	.870	1.133

a. Dependent Variable: Tax compliance

Table 4.3 shows that the variables have a VIF that is less than 10 and tolerance value more than 0.1 ruling out the possibility of multicollinearity. Therefore, the results imply that there was no multicollinearity problem among the variables.

b) Autocorrelation test

Autocorrelation was tested using Durbin Watson test. This tested whether there is a (linear) correlation between the error term for one observation and the next. A Durbin Watson test value (d) takes on values between 0 and 4. A value of d = 2 means there is no autocorrelation.

Table 4.4: Autocorrelation test

Model	Durbin-Watson
1	2.021

a. Predictors: (Constant), Computer literacy level, online tax system stability, perceived security risks and availability security risks
b. Dependent Variable: Tax compliance

Autocorrelation was tested using Durbin Watson test in Table 4.4. This tested whether there is a (linear) correlation between the error term for one observation and the next. A Durbin Watson test value (d) takes on values between 0 and 4. A value of d = 2 means there is no autocorrelation.

d) Normality test)

Normality was tested by use of The Shapiro-Wilk Test to test whether the score of the samples were normally distributed with the same mean and standard deviation. If the test is significant (P<0.05) then the distribution is not significantly different from a normal distribution, but if the test is non – significant (P>0.05) then the distribution of the sample is significantly different from a normal distribution (Kilungu et al., 2015). The results were significant.

Table 4.5: Tests of Normality

	Shapiro-Wilk Statistic df	Sig.
Computer literacy level	.92198	.193
Online tax system stability	.93398	.233
Perceived security risks	.94298	.022
Availability security risk	.93498	.633
Tax compliance		

Normality was tested by use of Shapiro-Wilk test as shown in Table 4.5. The tests results showed that the p-values for the variables > 0.05 as shown in table above illustrating that the standardized residuals were significantly normally distributed.

4.4 Descriptive Statistics

4.4.1 Influence of computer literacy level ontax compliance

This section sought to evaluate several statements on computer literacy level to determine its influence on tax compliance among SMEs. Table 4.6 shows the results obtained.

Table 4.6Computer literacy level

Statement	Mean	Std. deviation
Computer literacy influence tax compliance.	2.22	1.172
Understanding of itax site navigation process	2.35	1.251
Ability to use self-help menus on itax platform	2.24	1.214
Ability to determine successful application depends on online filing	1.83	1.102

According to the results on table 4.6 show that, highest mean values were 2.35, 2.24 and 2.22, which correspond to the likert scale value of 2. This indicates that the respondents agree that computer literacy influence tax compliance, understanding of itax site navigation process, ability to use selfhelp menus on itax platform. The lowest mean value was 1.83, which indicates that the respondents strongly agreed that ability to determine successful application depends on online filing.The study findings are supported by a number of studies which includes Kiptoo and Omondi(2017).

4.4.2 Influence of online tax system stability on tax compliance

This section sought to evaluate several statements on online tax system stability to determine its influenceon tax compliance among Small and Medium Eenterprises

Table 4.7Online tax system stability

Statement	Mean	Std. deviation
System hang ups leads to inability to file without assistance	3.28	1.344
System hang ups leads to incurrence of costs to pay third parties to file on my behalf	2.61	1.468
System hang ups leads to compromise of information submitted	2.39	1.085
System hang ups leads to inability to file without assistance	2.11	1.080

According to the results on table 4.7 the highest mean values were 3.28 and 2.11 which corresponds to the scale value of 3. The results indicate that the respondents were indifferent System hang ups leads to inability to file without assistance. The results also established that the respondents agreed that System hang-ups leads to incurrence of costs to pay third parties to file on my behalf. The results also established that respondents strongly agreed thatSystem hang ups leads to compromise of information submitted. The study findings are supported by a number of studies, which includesNjoki and Kwasira (2017).

4.4.3 Influence of perceived security risks on tax compliance

This section sought to evaluate several statements on perceived security risks to determine its influenceon tax compliance among Small and Medium Enterprises.

Table 4.8Perceived security risks

	Mean	Std. deviation
Uncomfortable revealing business information to cyber attendants for assistance in tax filing	2.39	1.085
Information revealed to third parties e.g. cyber attendants during tax returns may place business	2.11	1.0801
Information revealed to third parties e.g. cyber attendants during tax returns may get to my competitors	3.20	1.344
Information revealed to third parties e.g. cyber attendants during tax returns may place my personal security at risk	2.61	1.468

According to the result in table 4.8 the highest mean values were 3.20 and 2.61.Meaning respondents were indifferent inUncomfortable revealing business information to cyber attendants for assistance in tax filing. Followed by Information revealed to third parties e.g. cyber attendants during tax returns may place business, Information revealed to third parties e.g. cyber attendants during tax returns may get to my competitors and lastly Information revealed to third parties e.g. cyber attendants during tax returns may place my personal security at risk in the mean.The study findings are supported by a number of studies which includesMwangi and Kiarie (2015).

4.4.4 Influence availability security risks on tax compliance

This section sought to evaluate several statements on availabilitysecurity risks to determine its influence on tax compliance among Small-Medium Enterprises

Table 4.9Availability security risks

	Mean	Std. deviation
Uncomfortable revealing business information to cyber attendants for assistance in tax filing	2.39	1.085
Information revealed to third parties e.g. cyber attendants during tax returns may place business	2.11	1.0801
Information revealed to third parties e.g. cyber attendants during tax returns may get to my competitors	3.20	1.344
Information revealed to third parties e.g. cyber attendants during tax returns may place my personal security at risk	2.61	1.468

According to the result in table 4.9 the highest mean values were 3.20 and 2.61.Meaning respondents were indifferent in Uncomfortable revealing business information to cyber attendants for assistance in tax filing. Followed by Information revealed to third parties e.g. cyber attendants during tax returns may place business, Information revealed to third parties e.g. cyber attendants during tax returns may get to my competitors and lastly Information revealed to third parties e.g. cyber attendants during tax returns may place my personal security at risk in the mean.The study findings are supported by a number of studies which includesMuthama, 2013.

4.4.5 Online tax filing returns on tax compliance

This section sought to evaluate several statements on online tax filing returns to determine its influence on tax compliance among Small and Medium Enterprises.

Table 4.10Availability security risks

Statement	Mean	Std. deviation
Uncomfortable revealing business information to cyber attendance	3.43	1.322
Information revealed to third parties e.g cyber attendance during tax returns to get to the competitors	2.54	1.442
Information revealed to third parties e.g cyber attendants during tax returns may place personal security risks	2.33	1.033
Information revealed to third parties e.g cyber attendants may be not professional	2.12	1.033

According to the results on table 4.7 the highest mean values were 3.43 and 2.12 which corresponds to the scale value of 3. The results indicate that the respondents were indifferent Uncomfortable revealing business information to cyber attendance, Information revealed to third parties e.g cyber attendance during tax returns to get to the competitors, Information revealed to third parties e.g cyber attendants during tax returns may place personal security risks. The results also established that the respondents agreed that Information revealed to third parties e.g cyber attendants may be not professional.The results also established that respondents strongly agreed that Information revealed to third parties e.g cyber attendants during tax returns may place personal security risks' tax compliance. The study findings are supported by a number of studies which includesNjoki and Kwasira (2017)

4.5 Correlation Analysis

4.5.1 Correlation results on independent variables

Correlation shows the relationship existing between variables in the study. The study's dependent variable is Tax compliance and the independent variables consist of computer literacy level, online tax system stability, perceived opportunity security risks and availability security risks.

The results depicted in table 4.9 below

Table 4.9: Correlation between independent variable and dependent variable

Variables		**Tax compliance**	**Computer literacy level**	**Online tax system stability**	**Perceived opportunity security risks**	**Availability security risks**
Tax Compliance	Pearson Correlation	**1**				
	Sig. (2-tailed)					
Computer literacy level	Pearson Correlation	0.456	1			
	Sig. (2-tailed)	0.002				
Online tax system stability	Pearson Correlation	0.422	.3421	1		
	Sig. (2-tailed)	0.001	.0014			
Perceived opportunity security risks	Pearson Correlation	0.454	.1240	.0621	1	
	Sig. (2-tailed)	0.003	.0120	.0043		
Availability security risks	Pearson Correlation	0.444,	.3120	.0000	.1310	1
	Sig. (2-tailed)	0.000	.0031	1.000	.0031	

In an attempt to show the relationship between the study variables and their findings the study used the Karl Pearson's coefficient of correlation (r). According to the findings as indicated in table 4.9, it was clear that there was a positive correlationbetweentax complianceand computer literacy levels as depicted by a correlation value of 0.456.This implies that computer literacy levels was linearly related to tax compliance. The study also depicted that there is a positive correlation between online tax system stability andtax compliance with a correlation value of 0.422. Another positive correlation was between perceived opportunity security risks andtax compliance with a correlation value of 0.454and a positive correlation between availability security risks and tax compliance with a correlation value of 0.444. This shows that there was a positive correlation betweencomputer literacy levels, online tax system stability perceived opportunity security risks and availability security risksand tax compliance. The findings of this study agreed with the study conducted by Njoki and Kwasira (2017).

4.6 Regression Analysis

A multiple regression analysis was conducted to investigate the joint causal relationship between the independent variables and dependent variable rental revenue collection. This is represented by the overall model $Y = \beta_0 + \beta_1 x_1^z + \beta_2 x_{2z} + \beta_3 x_{3z} + \beta_2 x_{2z} \square \ldots$

The coefficient of multiple determinants denoted by R Squares is a measure of proportion of the variation of the regress and explained and by the corresponding explanatory variables. The values of R squared lies between zero and unity, $0 < R^2 >_1$. A value of unity implies that 100% of the variation of Y has been explained by the explanatory variables.

a) Computer literacy levels

To evaluate the effect Computer literacy levelsand tax compliance in Kenya.

Table 4.10: Model Summary of Computer literacy levels

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.437[a]	.197	.186	.87526	1.987

a. Predictors: (Constant), Computer literacy levels
b. Dependent Variable: Tax compliance

The R square value in table 4.10 in this case is 0.197which clearly suggests that there is a strong relationship between computer literacy levels and tax compliance as indicated in table above. This indicates that computer literacy levels share a variation of 19.7% of tax compliance.

Table 4.11: ANOVA of Computer literacy levels

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.892	2	10.892	12.162	.000[b]
	Residual	42.767	98	.767		
	Total	54.648	100			

a. Dependent Variable: Tax compliance
b. Predictors: (Constant), Computer literacy levels

The ANOVA result in Table 4.11 showed that the overall model was a good fit since (F-value =12.162 and p-value=0.000<0.05).

Table 4.12: Coefficients of Computer literacy levels

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.258	.115	-	2.257	.028
	Computer literacy levels	.403	.107	.446	3.765	.000

a. Dependent Variable tax compliance

Table 4.12 indicates that the regression weight for computer literacy levels was positive and significant (β= 0.403, t= 3.765, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that computer literacy levels has a significant relationship with tax compliance. The regression estimate for computer literacy levels was 0.403; this indicates that a unit increase in computer literacy levels would result in 40.3% increase in tax compliance

b) Online tax system stability

To find out the influence of online tax system stability on tax compliancein Kenya.

Table 4.13: Model Summary of online tax system stability

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.478[a]	.217	.207	.85515	2.006

a. Predictors: (Constant), Online tax system stability
b. Dependent Variable: Tax compliance

The R square value in Table 4.13 was 0.217 which clearly suggested that there is a strong relationship between online tax system stability and tax compliance. This indicates that online tax system stability share a variation of 21.7% of tax compliance.

Table 4.14: ANOVA of online tax system stability

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.886	1	11.987	16.033	.000[b]
	Residual	42.643	154	.749		
	Total	54.648	155			

a. Dependent Variable: Tax compliance

b. Predictors: (Constant), Online tax system stability

The ANOVA Table in 4.14 indicates that the overall model was a good fit since (F-value=16.033 and p-value=0.000<0.05).

Table 4.15: Coefficients of online tax system stability

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.221	.104	-	2.041	.047
	Online tax system stability	.451	.114	.468	4.001	.000

a. Dependent Variable: Tax compliance

Table 4.15 indicates that the regression weight for online tax system stability was positive and significant (β= 0.451, t= 4.001, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that online tax system stability has a significant relationship with tax compliance. The regression estimate for online tax system stability was 0.451; this indicates that a unit increase in online tax system stability would result in 45.2% increase in tax compliance in Kenya.

c) Perceived opportunity security risks

To investigate the influence of perceived opportunity security risks on tax compliance in Kenya.

Table 4.16: Model Summary of Perceived opportunity security risks

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.421[a]	.174	.170	.87898	1.995

a. Predictors: (Constant), Perceived opportunity security risks
b. Dependent Variable: Tax compliance

The R square value in Table 4.16 is 0.174 which clearly suggests that there is a strong relationship between perceived opportunity security risks and tax compliance as indicated in table above. This indicates that perceived opportunity security risks share a variation of 17.4% of tax compliance.

Table 4.17: ANOVA of Perceived opportunity security risks

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.617	1	10.608	11.732	. 00[b]
	Residual	44.035	154	.754		
	Total	54.647	155			

a. Dependent Variable: Tax compliance
b. Predictors: (Constant), Perceived opportunity security risks

The ANOVA able in 4.17 indicates that the overall model was a good fit since (F-value=11.732 and p-value=0.000<0.05).

Table 4.18: Coefficients of perceived opportunity security risks

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.258	.115	-	2.235	.028
	Tax rate	.408	.108	.442	3.708	.000

a. Dependent Variable: Tax compliance

Table 4.18 indicates that the regression weight for perceived opportunity security risks was positive and significant (β= 0.408, t= 3.708, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that perceived opportunity security risks has a significant relationship with tax compliance in Kenya. The regression estimate for perceived opportunity security risks was 0.408 this indicates that a unit increase in perceived opportunity security risks would result in 40.5% increase in tax compliance in Kenya. .

d) Availability of security risks

To evaluate influence of availability of security risk and tax compliance in Kenya.

Table 4.10: Model Summary of availability of security risks

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.447[a]	.199	.187	.89526	1.977

a. Predictors: (Constant), Availability of security risks
b. Dependent Variable: Tax compliance

The R square value in table 4.10 in this case is 0.199which clearly suggests that there is a strong relationship between availability of security risks and tax compliance as indicated in table above. This indicates that availability of security risk share a variation of 19.9% of tax compliance.

Table 4.11: ANOVA of Availability of security risks

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	11.892	1	11.892	12.162	.000[b]
	Residual	40.767	154	.867		
	Total	52.648	155			

a. Dependent Variable: Tax compliance

b. Predictors: (Constant), Availability of security risks

The ANOVA result in Table 4.11 showed that the overall model was a good fit since (F-value =12.162 and p-value=0.000<0.05).

Table 4.12: Coefficients of Availability of security risks

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.268	.114	-	2.259	.027
	Availability of security risks	.404	.108	.444	3.865	.000

a. Dependent Variable: Tax compliance

Table 4.12 indicates that the regression weight for availability of security riskswas positive and significant (β= 0.404, t= 3.865, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that availability of security risks has a significant relationship with tax compliance. The regression estimate for availability of security risks was 0.403; this indicates that a unit increase in availability of security risks would result in 40.4% increase in tax compliance.

Table 4.19: Model Summary for independent and dependent variables

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.707[a]	.505	.453	.71722	2.001

a. Predictors: (Constant), Computer literacy levels, online tax system stability, perceived opportunity security risks and availability security risks

b. Dependent Variable: Tax compliance

From the model summary The R square value in Table 4.19 is 0.502 which clearly suggests that there is a strong relationship between computer literacy levels, online tax system stability, perceived opportunity security risks, availability of security risks and compliance as indicated in table above. This indicates computer literacy levels, online tax system stability, perceived opportunity security risks and availability security risks share a variation of 50.5% of tax compliance in Kenya.

The overall goodness of fit was obtained through regressing the goodness of fit for all the independent variables. The results of the multiple regression indicate R^2= .505 and adjusted R=.453 as shown in Table 4.19. This is an indication that there is a strong relationship between independent variables and tax compliance.

Table 4.19: ANOVA for independent and dependent variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	28.376	2	5.466	11.338	.000[b]
	Residual	28.262	98	.513		
	Total	45.629	100			

a. Dependent Variable: Tax compliance

b. Predictors: (Constant), Computer literacy levels, online tax system stability, perceived opportunity security risks and availability security risks

The overall model significance was presented using the ANOVA test table. The results in Table 4.19 shows that the overall model was a good fit since (F-value=11.338 and p-value=0.000<0.05) for all independent variables meaning that null hypothesis is rejected and concludes that there is a relationship between different independent and dependent variables. The findings there imply that all independent variables were statistically significant in explaining tax compliance in Kenya. ANOVA was used to test whether the regression analysis model used is fit or the relationship of the variable just occurred by chance.

Significance of F ratio is used to determine whether model used was fit or not. If the F ratio is significant the model used is considered fit and vice versa. A P - value of less than 0.05 indicates that the F statistics is high and that the null hypothesis of independent needs to be rejected since it's not true. In this case the F ratio (F=11.338, P=.000[b]) was found to be significant hence the model used for analysis was fit.

Table 4.20: Coefficients of Overall Regression Model

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.195	.096	-	2.054	.044
	Computer literacy levels	.312	.096	.234	2.266	.016
	Online tax system stability	.241	.098	.355	3.560	.043
	Perceived opportunity security risks	.296	.096	.314	3.061	.022
	Availability of security risks	.315	.096	.244	2.366	.014

a. Dependent Variable: Tax compliance

$Y=\beta_0+\beta_1 x_1+\beta_2 x_2+\beta_3 x_{3+\beta_4 x_4}+\square\ldots\ldots\ldots$

$Y = 0.195 +0.312X_1 +0.241X_2 +0.296X_3+ 0.315$ were significant with p- values of 0.044, 0.0.16, 0.043 + 0.014, respectively.

The regression equation above has established that taking all factors into account (Computer literacy risks, online tax system stability, perceived opportunity security risks and availability of security risks) the findings reveals that assuming other variables are at zero a unit change (increase) in computer literacy levels will lead to a 0.312 increases tax compliance; a unit increase in online tax system stabilitywill lead to a 0.241 increases tax compliance; a unit increase in perceived opportunity security risks will lead to a 0.296 increases tax compliance and a unit increase in availability of security risks will lead to a 0.315 increasestax compliance as shown in table 4.20.

The regression coefficient results indicate a positive significant effect between computer literacy levels, online tax system stability, perceived opportunity security risks and availability security risks and tax compliance.

4.7 Discussion of key Findings

The key findings of the study are discussed in this section as per study objectives.

4.7.1 Computer literacy levelsand tax compliance

Computer literacy levels was assessed using five measures and the overall mean score or responses regarding computer literacy levels were 2.2 on a 5-point scale which indicates that majority of the respondents agreed that tax compliance cost on tax compliance in Kenya. The average overall standard deviation of 0.7 infers that 68% of the response was spread within one standard deviation of the overall mean.

Further collinearity analysis was done and the results showed that computer literacy levels had positive and significantly related to tax compliance ($r = 0.456$, p-value=0.00<0.05).

4.7.2 Online tax system stability and tax compliance

Online tax system stability was assessed using five measures and the overall mean score or responses regarding were online tax system stability were 1.6 on a 5-point scale which indicates that majority of the respondents agreed thatonline tax system stability affects the tax compliance in Kenya. The average overall standard deviation of 0.0.66 infers that 68% of the response was spread within one standard deviation of the overall mean. Further collinearity analysis was done and the results revealed thatonline tax system stability had a positive and significantly related to tax compliance ($r = 0.431$, p-value=0.00<0.05).

4.7.3 Perceived opportunity security risks and tax compliance

Tax rate was assessed using four measures and the overall mean score or responses regarding tax rate were 2.5 on a 5-point scale which indicates that majority of the respondents agreed that perceived opportunity security risks affects the tax compliance in Kenya. The average overall standard deviation of 0.74 infers that 68% of the response was spread within one standard deviation of the overall mean. Further collinearity analysis was done and the results showed that perceived opportunity security risks had a positive and significantly related to tax compliance ($r = 0.458$, p-value=0.00<0.05).

4.7.4Availability of security risks and Tax compliance

Penalties and interest was assessed using five measures and the overall mean score or responses regarding availability of security risks were 1.6 on a 5-point scale which indicates that majority of the respondents agreed thatavailability of security risks affects the tax compliance in Kenya. The average overall standard deviation of 0.0.66 infers that 68% of the response was spread within one standard deviation of the overall mean.

Further collinearity analysis was done and the results revealed thatpenalties and interest had a positive and significantly related to tax compliance ($r = 0.431$, p-value=0.00<0.05).

CHAPTERFIVE

SUMMARY,CONCLUSIONSAND RECOMMENDATIONS

Introduction

Chapterfiveoutlinesthesummary ofthisresearch,conclusionsandrecommendations basedonresearchfindingsandsuggestionofareaswhichmay require furtherconsideration as far asfutureresearch is concerned.

5.1 Summary of the findings

The findings of the study have been summarized below as per the study objectives. The findings were supported by the frequencies of the responses

5.1.1 Computer literacy levels

The first objective of the study was to evaluate the effect of computer literacy level on tax in Kenya. Methods used to arrive at the findings included descriptive statistics, analysis of variance and regression analysis. The study found out that tax compliance cost had a significant positive influence on tax. The overall mean score of responses regarding tax compliance cost indicated that majority of the respondents agreed that tax compliance cost affects the tax compliance in Kenya.

The reliability analysis results showed that all the coefficients of the constructs were positive and significant.

5.1.2 Online tax system stability

The second objective of the study sought to find out` the effect of online tax system stability on tax compliance in Kenya. Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that online tax system stability had a significant positive influence on tax compliance.

The overall mean score of response regarding level of online tax system stability and tax compliance collection indicated that majority of the respondents agreed that level of tax knowledge affects the tax in Kenya. Correlation results indicated that there was a positive and significant relationship between online tax system stability andtax collection. It was therefore concluded that online tax system stability has significant positive effect on tax compliance.

5.1.3 Perceived opportunity security risks

The third objective of the study sought to investigate the effect of perceived opportunity security riskson taxcompliance in Kenya. Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that perceived opportunity security risks had a significant positive influence on tax compliance.

The overall mean score of response regarding tax rate and tax compliance indicated that majority of the respondents agreed that perceived opportunity influence thetax compliance in Kenya. Correlation results indicated that there was a positive and significant relationship between tax rate and tax compliance. It was therefore concluded that perceived opportunity security risks has significant positive effect on tax compliance.

5.1.4Availability of security risks

The second objective of the study sought to find out` the influence of availability of security risks on tax compliance in Kenya. Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that availability of security risks had a significant positive influence on tax compliance.

The overall mean score of response regarding availability of security risks and tax compliance collection indicated that majority of the respondents agreed that availability of security risk affects the tax in Kenya.

Correlation results indicated that there was a positive and significant relationship between availability of security risks and tax collection. It was therefore concluded that availability of security has significant positive effect on tax compliance.

5.2 Conclusions

The aim of the study was to determinethe influence of online tax filing on tax compliance among SMEs in CBD. Kenya. Data collected and analyzed through both descriptive and inferential statistics established that all independent variables had significant effects on tax compliance.

5.2.1 Computer literacy levels

The study found out that computer literacy levelshad a significant positive influence on tax compliance. The overall mean score of responses regarding computer literacy levels indicated that majority of the respondents agreed that computer literacy levels affects the tax compliance in Kenya. The reliability analysis results showed that all the coefficients of the constructs were positive and significant.

5.2.2 Online tax system stability

The study found out that online tax system stability had a significant positive influence on tax compliance. The overall mean score of response regarding online tax system stability and tax compliance indicated that majority of the respondents agreed that online tax system stability affects the tax compliance in Kenya. Correlation results indicated that there was a positive and significant relationship between online tax system stability and tax compliance. It was therefore concluded that online tax system stability has significant positive effect on tax compliance.

5.2.3 Perceived opportunity security risks

The study found out that tax rate had a significant positive influence on tax compliance. The overall mean score of response regarding perceived opportunity security risks indicated that majority of the respondents agreed that perceived opportunity security risksinfluence the tax compliancein Kenya. Correlation results indicated that there was a positive and significant relationship between perceived opportunity security risks and tax compliance. It was therefore concluded that perceived opportunity security risks has significant positive effect on tax compliance.

5.2.4 Availability of security risks

The study found out that availability of security risks had a significant positive influence on tax compliance. The overall mean score of response regarding availability of security risks and availability of security risks indicated that majority of the respondents agreed that availability of security risksinfluence the tax compliance in Kenya. Correlation results indicated that there was a positive and significant relationship between availability of security risks and tax compliance. It was therefore concluded that availability security risks has significant positive effect on tax compliance.

5.3 Recommendations.

5.3.1 Managerial recommendations

Thestudy foundthatcomputer literacy levels, online tax system stability, perceived opportunity security risks and availability of security risks have significantlyinfluences tax compliance.Basedonstudyfinding, the study recommends that computer literacy levels should be emphasized by KRA in order to improve on tax compliance levels. This was due to high levels of significant between computer literacy levels and tax compliance levels,.

The study recommends furtherthat examination on the factors that affects tax compliance levels.

5.4 Suggestions for Further Research

Thisstudy recommendsa similarstudy,whichincorporatestheviewsofthetaxauthority inKenyatoestablishthe factorsbehindtax collection.

Thestudyrecommends anadditionalstudy to be carried out on the influence to online tax filing returns on tax compliance among Small and Medium Enterprises.

REFERENCE

Akuku, A. O. (2009). The Role Played by Microfinance Institutions in the Funding of Business Sart Ups for Micro Entrepreneurs: A Case Study of Gikomba Market Micro Entrepreneurs. *International Journal of Economics and Finance*, *2*(2), 1–50.

Auyat, M. (2013). E Tax Service System and Its Adoption at Uganda Revenue Authority. *Interdisciplinary Journal of Contemporary Research in Business*, *2*(4), 36–39.

Azmi, A., & Bee, N. (2011). The Acceptance of the e-Filing System by Malaysian Taxpayers : A Simplified Model. *Electronic Journal of E-Government*, *8*(1), 13–22.

Azmi, A., &Kamarulzaman, Y. (2010). Adoption of tax e-filing : A conceptual paper. *African Journal of Business Management*, *4*(3), 599–603.

Babajide, A. (2011). Effects of Microfinancing on Micro and Small Enterprises (MSEs) in Southwest Nigeria. *Interdisciplinary Journal of Contemporary Research in Business*, *2*(2), 25–27.

Bett, M. (2013). Effects of Inflation and Interest Rates on Mortgage Finance Offered by Commercial Banks in Kenya. *Journal of Influence of Online Tax Filing on Tax Compliance among Small and Medium Enterprises in*

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Modern Accounting and Auditing, *2*(2), 25–32.

Chepkangor, D. (2012). Determinants of Consumer Choice of Commercial Banks : A Case of Kenya Commercial Bank in Nakuru Town. *International Journal of Financial Research*, *4*(1), 2–7.

Etemesi, V. (2009). Factors that influence the performance of mobile phone operators in Kenya: A case of Zain Kenya LTD. *International Journal of Business and Management Invention*, *2*(5), 7–9. Retrieved from business.uonbi.ac.ke/node/1431

Ferreira, P. (2008). An Overview of the New Tax Return Form and Tax System. *International Journal of Business and Management Invention*, *2*(3), 35–37.

Gathungu, M., &Ratemo, Z. (2011). An assessment of the impact of Corporate Social

Responsbility on the strategic intent at Standard Chartered Bank Kenya. *International Journal of Education and Research*, *1*(5), 1–20.

Geetha, R., &Sekar, M. (2012). E-Filing of Income Tax : Awareness and Satisfaction level . of individual Tax payers in Coimbatore city , India. *Research Journal of Management Sciences*, *1*(4), 6–11

Hussein, R., Mohamed, N., Ahlan, A. R., Mahmud, M., &Aditiawarman, U. (2010). An Integrated Model on Online Tax Adoption in Malaysia. *International Journal of Asian Social Science*, *3*(2), 1–16.

Ibrahim, I. (2012). Factors Underpinning Usage Behaviour of an Electronic Filing System: The Case of Malaysian Personal Taxpayers. *International Journal of Asian Social Science*,

4(3), 1–21. Kamarulzaman, Y., &Azmi, A. A. C. (2010). Tax E-filing Adoption in Malaysia : A Conceptual Model. *Journal of Accounting and Finance*, *3*(4), 25–29.

Kariuki, G. (2013). An Assessment of Internet Usage on Small and Medium Enterprises (SMEs) in Nakuru Town Constituency. *International Multidisciplinary Journal*, *2*(3), 52–64. Kenya Revenue Authority. (2014). *Frequently Asked Questions*.

Keshta, M., Hassan, T., &Alghalayini, S. (2013). The Effect of The Internal Auditing on Financial Performance (Apllied Study on Bank of Palestine). *International Journal of Business and Public Management*, *1*(1).

Kipkenei, R. K. (2012). Analysis of Policy Effectiveness as a Strategic Management Tool on Microfinance Institutions in Kenya: A Case of MFI'S in Nakuru Municipality. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, *2*(3), 28–29.

Lai, M., &Choong, K. (2010). Motivators, Barriers and Concerns in Adoption of Electronic Filing System: Survey Evidence from Malaysian Professional Accountants. *American Journal of Applied Sciences*, *3*(4), 10–15.

Luchinga, L. (2014). The Effect of Working Capital Management on the Profitability of Agricultural Firms Listed in Nairobi Securities Exchange. *Journal of Business and Management*, *2*(1), 37–45.

Lukorito, G. M. (2012). Information Security Threats and E-Government Initiatives at the

Kenya Revenue Authority (KRA). *International Journal of Business, Humanities and Technology*, *2*(2), 7–9.

Lukwata, H. (2011). The Influence of Electronic Tax Filing System and Tax Compliance and Tax Collection. *International Journal of Business and Management Invention*, *3*(2), 5–7

Mandola, V. (2013). Factors Influencing the Adoption and Use of Integrated Tax Management System by Medium and Small Taxpayers in Nairobi Central Business District, Kenya. *Interdisciplinary Journal of Contemporary Research in Business*, *2*(2), 12–15.

Maobe, D. (2013). The Effects of Group Liability Lending on Performance of Medium and Small Enterprises in Nairobi Uhuru Market. *Journal of Sustainable Development in Africa*, *3*(3), 9–13.

Matama, R. (2008). Corporate Governance and Fiancial Performance of Selected Commercial Banks in Uganda. *Journal of Sustainable Development in Africa*, 1(2), 9–10.

Mugo, F. (2013). The Effect of Electronic Tax Registers on Value Added Tax Administration in Kenya: A Case Study of Hotels in Nairobi County. *Journal of Accounting and Finance*, *3*(4), 15–17.

Natukunda, J. (2010). Microfinance Credit Lending Terms, Networks and Performance of Women Enterprises: The Case of Wakiso District. *Journal of Accounting and Finance*, *2*(2), 23–25.

Odongo, B. (2014). Impact of Taxes on Performance of Small Scale Business Enterprises in Ntungamo Town Council. *Journal of Economics and International Business Research*, *3*(4), 25–27.

Omino, B. (2014). The Effect of Working Capital Management and Profitability of Retail Stores in Migori County- Kenya. *International Review of Management and Business Research*, *2*(2), 19–25.

Osebe, R. (2013). An Analysis of Factors Affecting Tax Compliance in the Real Estate Sector in Kenya: A Case Study of Real Estate Owners in Nakuru Town. *Journal of EmergingIssues in Economics, Finance and Banking (JEIEFB)*, *1*(4), 7–9.

Ramoo, V. (2006). Determinants of Perceived Ease of Use of E-Filing. *Journal of Emerging Issues in Economics, Finance and Banking (JEIEFB)*, *3*(1), 17–20.

Razak, M. (2009). Taxpayers' Attitude In Using E-Filing System: Is There Any Significant Difference Among Demographic Factors? *Journal of Internet Banking and Commerce*, *14*(1), 1–13.

Simiyu, D. (2013). Challenges Affecting Collection of Turnover Tax in Nairobi County-Administration in Kenya: A Case Study of Hotels in Nairobi County. *Journal of Accounting and Finance*, *3*(4), 15–17.

Waliula, R. (2013). Relationship Bteween Microcredit and the Growth of Small and Medium Enterprises in Kenya. *International Journal of Business and Management Invention*, *2*(3), 30–33.

APPENDICES

APPENDIX I:Letter to Respondents (Introduction Letter)

Claudiah Daisy Wambogo

P.O Box 45633- 00100,

Nairobi.

To the respondent

RE: QUESTIONNAIRE

The above named is a Post Graduate Student in Tax Administration at JKUAT, Nairobi campus. In order to fulfil the requirements of the School, I am undertaking a research on **INFLUENCE OF ONLINE TAX FILING ON TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES. A CASE STUDY OF NAIROBI CENTRAL BUSINESS DISTRICT**, Kenya. You are among the chosen respondents of my study.

I hereby, kindly ask you to respond to the questionnaire to the best of your knowledge. Confidentiality of the information given will be guaranteed.

Your cooperation will be highly appreciated.

Yours Sincerely,

Claudiah Daisy Wambongo

APPENDIX 2: QUESTIONNAIRE

Introduction

This questionnaire is designed for the sole purpose of gathering information on **INFLUENCE OF ONLINE TAX FILING ON TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES. A CASE STUDY OF NAIROBI CENTRAL BUSINESS DISTRICT.**. 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.

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

SECTION A: BIO DATA

1. Gender

   Male ☐

   Female ☐

2. Number of years the business has existed

   Below 2 years ☐

   3-5 years ☐

   6- 10 years ☐

   10 years and above ☐

SECTION B

1. COMPUTER LITERACY LEVELS

V)Evaluate the following statements and tick where appropriate under the choices below

Where: 1 – Strongly Disagree, 2 – Disagree , 3 – Neutral, 4 - Agree or 5 - Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
Basic computer trouble shooting skills					
Understanding of itax site navigation process					
Understanding of itax site navigation process					
Ability to use self-help menus on itax platform					
Ability to determine successful application					

2. ONLINE TAX RETURNS SYSTEM STABILITY

II) Evaluate the following statements and tick where appropriate under the choices below

Where: 1 – Strongly Disagree, 2 – Disagree , 3 – Neutral, 4 - Agree or 5 - Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
System hang ups leads to inability to file without assistance					
System hang ups leads to incurrence of costs to pay third parties to file on my behalf					
System hang ups leads to compromise of information submitted					
System hang ups leads to compromise of information submitted					
System hang ups leads to inability to file without assistance					

3.INFLUENCE OF ONLINE TAX FILING ON TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES INCBD, KENYA

11) Evaluate the following statements and tick where appropriate under the choices below

Where: 1 – Strongly Disagree, 2 – Disagree , 3 – Neutral, 4 - Agree or 5 - Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
Uncomfortable revealing business information to cyber attendance					
Information revealed to third parties e.g cyber attendance during tax returns to get to the competitors					
Information revealed to third parties e.g cyber attendants during tax returns may place personal security risks					
Information revealed to third parties e.g cyber attendants may be not professional					

4. PERCEIVED OPPORTUNTIES OF SECURITY RISK CONCERNS

iv) Evaluate the following statements and tick where appropriate under the choices below

Where: 1 – Strongly Disagree, 2 – Disagree , 3 – Neutral, 4 - Agree or 5 - Strongly Agree

Statement	**1**	**2**	**3**	**4**	**5**
Uncomfortable revealing business information to cyber attendants for assistance in tax filing					
Information revealed to third parties e.g. cyber attendants during tax returns may place my business at					
Information revealed to third parties e.g. cyber attendants during tax returns may get to my competitors					
Information revealed to third parties e.g. cyber attendants during tax returns may place my personal security at risk					

APPENDIX 111: BUDGET

DESCRIPTION	COST PER ITEM	TOTAL AMOUNT (Kshs)
Stationery Photocopying papers Pens, pencils, rubbers Ink cartridge (Printer) Files (12 rim binders)	10 reams @600/=	**20,000.00**
Personnel Questionnaires administrators Stastician		**40,000.00**
Transport and subsistence Vehicles Subsistence allowance		**10,000.00**
Communication Telephone Internet		**30,000.00**
Other Services Library services Purchase of periodicals and books		**40000.00**
Total expected cost		**120,000.00**

APPENDIX 1V: WORK PLAN

ACTIVITY (2018)	DECEMBER(2018)	MAY (2019)	SEPTEMBER (2019)
Draft proposal			
Proposal presentation			
Designing the research instrument			
Proposal defense			
Field work & data Collection			
Data Entry / Analysis			
Report Writing			
Presentation of 1st draft			
Presentation of 2nd draft			
Submission of final report			