EFFECT OF ITAX SYSTEM ON REVENUE COLLECTION AMONG SMALL AND MEDIUM ENTERPRISES IN CENTRAL BUSINESS DEVELOPMENT

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

2019

DECLARATION

I declare this research project is my original work and affirm to the best of my knowledge that it has not be presented for any academic award in any university.

Signature……..… Date: …….

Name: EDWIN NDUMA

HDB336-C016-6679/2016

This research proposal has been submitted for examination with my approval as University supervisor

Signature…… Date: ……

Dr.Marion Nekesa

ACKNOWLEDGEMENTS

I wish to thank our almighty God for the gift of life, care, provisions and blessings that he has granted me this far and to achieve my dream in pursuing my Post Graduate Diploma in Tax at Kenya School of Revenue Authority.

DEDICATION

This project is dedicated to my family for their invaluable support and their encouragement. May the Almighty lord bless them abundantly.

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ACRONYMS AND ABBREVIATION

ETR	Electronic Tax Register
E-	Electronic
EACC	Ethics and Anti-corruption commission
DTD	Domestic taxes department
GOK	Government of Kenya
IT	Information Technology
ITMS	Integrated Tax Management System
KIPRA	Kenya Institute of public policy research and analysis
KRA	Kenya Revenue Authority
CBD	Central Business Development
PIN	Personal Identification Number
SMES	Small and medium enterprises
SPSS	Statistical Package for Social Sciences
VAT	Value Added Tax

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ABSTRACT

The study aim to the general objective of this study was to find out the effect iTax system on revenue collection among SMEs in Central Business Development, Nairobi County. The study was guided by the following specific objectives: to determine the effect of E-registration on revenue collection among SMES in CBD, Nairobi County, establish the effect of E- filing on revenue collection among SMEs in Central Business Development, Nairobi County, assess the influence of E-payment on revenue collection among SMEs in Central Business Development, Nairobi County. The study adopted descriptive research design. The study target population was 1400 Small and Medium taxpayers in CBD Nairobi County. The study sample size was 140. 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 was done using the statistical package for social sciences (SPSS Version.24). Analysis of variance (ANOVA) used to 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. The study found that e-registration, e-filling and e-payment significantly influences revenue collection. Based on study finding, this study recommends there is need for effective cost management when administering automation tax processes.

CHAPTER ONE

INTRODUCTION

1.1 Background of the study

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.

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.

1.1.1 Global Perspective

Tax systems in developing economies, like those in more developed ones, face both new challenges and new possibilities because of technological change. Malaysia's ongoing reform of its electronic tax filing and payment system describes how technology can benefit both tax authorities and taxpayers. Singapore was one of the first economies to adopt electronic systems in its public administration. In 1992, the Inland Revenue Department was replaced by the Inland Revenue Authority of Singapore, which developed an integrated, computerized tax administration system (World Bank, 2000). The authority's first step was shifting from a hard-copy filing system to paperless imaging. Going electronic made administrative processes more efficient by freeing staff from unproductive paper shuffling, enabling better taxpayer service. The time needed to issue assessments dropped from 12–18 months to 3–5 between 1992 and 2000 This change allowed staff to work more on auditing and investigation. (World Bank, 2000).

For every tax filing or payment, taxpayers had to log in, select and complete the appropriate forms, sign and submit them digitally. An acknowledgment is received immediately. The e-filing system automatically calculates the necessary payment details. It also curbs deductions that taxpayers are entitled based on deduction rules—enabling taxpayers to avoid mistakes that would result in penalties (Doing business ,2014).

In addition, prefilled online tax returns have been available since 2006, starting with taxpayer's basic information and later extended to include their incomes and reliefs. In 2012 IRB enhanced its e-filing system by introducing smartphone

Gupta. (2012) stated in his study that all the reforms in Rwanda's tax base system were aimed at improving tax collections, administrations, and above all tax compliance. In a bid to improve tax compliance, Rwanda Revenue Authority (RRA) decided to opt for electronic tax management system which includes e payment, e filling and electronic tax education in order to improve on tax collection in the country. This research analyzed the effect of an electronic tax management system on tax collection in Rwanda.

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)

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 administration 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.

The use of technology to foster tax compliance by the United States Internal Revenue Service (IRS) shows that more developed economies also face challenges in increasing the use of e-filing. The IRS introduced e-filing of federal tax returns in 1986. Though this system predated Singapore's, it was initially less comprehensive. In fact, even though the number of electronic returns filed increased over time, the potential savings from that increase were partly offset by the ongoing use of paper filings for complex returns. But by 2012 the IRS achieved 80% e-filing of major returns. (Electronic Tax Administration Advisory Committee, 2012).

Initially, e-filing was not entirely paperless. Until 1999 electronic filers still had to submit signed paper documents. The IRS realized that when taxpayers switched to seeking the benefits of electronic tax systems and reflecting the government's vision of leveraging online technology, Malaysia's Inland Revenue Board (IRB) launched its electronic system for taxes in 2004. IRB aimed to increase revenue collection by improving taxpayer services. The goal was to cut time and cost and to allow taxpayers to comply with tax obligations more easily, enabling IRB to maintain a good reputation with taxpayers even as it widened its tax base. (Doing business, 2014)

Tax systems in developing economies, like those in more developed ones, face both new challenges and new possibilities because of technological change. Malaysia's ongoing reform of its electronic tax filing and payment system describes how technology can benefit both tax authorities and taxpayers. Singapore was one of the first economies to adopt electronic systems in its public administration. In 1992, the Inland Revenue Department was replaced by the Inland Revenue Authority of Singapore, which developed an integrated, computerized tax

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Tax evasion is different from tax avoidance in that, tax avoidance is done within the confines of the tax laws (Sandmo, 2005). When there is ambiguity in the tax laws, this in some cases provides a tax saving opportunity for a business. A business can also evaluate their business model, transactions and financial profile to align themselves in such a way that they benefit from paying lower taxes The use of automated systems has been proven to be capable of introducing massive efficiencies to business processes at a minimal cost (Wasao, 2014). Information system has helped organizations to be highly efficient and to stay competitive in its environment; therefore, it has been widely used in public sector and business organizations (Gupta, 2012). Technology is transforming the ways governments deliver services and interact

with citizens across various sectors, from public financial management to social programs to elections and many others (World Development Report, 2016). These e-government initiatives typically seek to improve service delivery and efficiency. Often, they also aim to combat corruption by automating systems and reducing officials' discretion.

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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.

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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).

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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.

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Sreekantaradhya (2000) notes that taxation plays a vital role in the process of development of any country. It enables resource mobilization, allocation, distribution and stabilization. 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 administration 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.

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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.

1.1.2 Kenya Perspective

Automation can be referred 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)

1.1.3 Kenya Revenue Authority

Before the establishment of the KRA, government revenues were being collected by different ministries within the government.

However, the process of revenue collection was not effective since the different ministries lacked coordination. The different ministries lacked accountability of the revenue collected, which made them inefficient. The need for accountability, transparency, efficiency, created the need for a body that would collect revenue, hence the formation of KRA. The main objective of KRA was to streamline revenue collection by bringing all revenue collection agencies under one roof.

Since the formation of KRA in 1995, the management has spent time creating taxation systems and adopting new strategies that are aimed at improving efficiency in revenue collection. The functions of the body are therefore to account for the revenues collected in line with the set provisions by the laws and to provide advice on matters related to tax administration and collection of revenue.

KRA has created an integrated tax management system that is aimed at providing effective and efficient services to the Kenyans (Karingi, 2014). The integrated system provides each taxpayer with their personal details and the tax obligations that they are entitled to. The integrated tax system came after the domestic tax department was introduced by the KRA. The system has led to improvement in the provision of services in tax collection. According to Wamugunda (2014). KRA is committed to technological transformation in tax administration processes. For instance, in the Financial Year 2014-2015, the Board of Directors was committed to increasing the level of automation in the Authority from 90.6% to 92.4%. Similarly, the 6th Corporate Plan seeks to promote uptake of information management systems to increase efficiency and minimize cost of doing business both to the taxpayer and the Authority. Furthermore, it seeks to strengthen revenue administration capacity by KRA transforming into a single collector and a lead border agency.

This will be achieved through automation of internal processes of the Authority and electronic control of movement of goods into and out of Kenya. Major strides have been made towards automation of processes in various departments. For instance, all the processes in legal services and internal audit departments are fully automated.

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 KRA 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, VAT, 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 KRA 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 SMEs 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 SMEs 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 SMEs 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 SMEs 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 SMEs has not been collected fully since some of them are not registered with KRA 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 KRA. 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 KRA 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)

1.1.4 iTax System

The manual system used before the adoption of *i*tax had a lot of loopholes as compared to the current system which requires tax payers to register, file returns and pay their dues online. The manual system allowed unscrupulous taxpayers to under declare tax. The automation of all the procedures is good for enhancing the level of compliance and push up government revenue collection. Professionals who do not declare their taxes as required, it is very easy to identify them using the iTax system.

This is because, under the itax system there is a lot of corroborating evidence in the declarations made in the tax returns which once is generated, it automatically raising the standards of compliance. For example, withholding tax system has been significantly changed by itax. (Business Daily, 2015). Manual returns are tedious to file on the part of the taxpayer and difficult to reconcile on the part of KRA hence the adoption of itax system which aims at ensuring accuracy and timely reconciliation of the data contained, as it does automatic reconciliation and validation of the returns. (Muita, 2011).

However, in spite of different tax reforms, levels of compliance have remained very low. A study led by KRA, KIPPRA and the Treasury, in view 2012 information uncovered that VAT installment consistence was as low as 55% while return lodgment consistence was 65% (Masinde and Makau, 2010). Kenya's tax code is still complex and cumbersome, characterized by uneven and unfair taxes, a narrow tax base with very high tax rates and rates dispersions with respect to trade, and low compliance.

Additional challenges include tax systems with rates and structures that are difficult to administer and comply with are unresponsive to growth and discretionary policy hence low productivity; raise little revenue but introduce serious economic distortions; treat labour and capital in similar circumstances differently; and are selective and skewed in favour of those with the ability to defeat the tax administration and enforcement system (Karingi, Wanjala, Nyamunga, Okello, Pambah, and Nyakang, 2005). This led to the birth of itax in Kenya Revenue Authority. This is a web enabled system that enables the taxpayer file returns, make payments and monitor their profiles online.

Taxpayers' behavior towards tax system has evoked great attention among many revenue authorities in the world especially in developed countries.

However, it is debatable on what has been done towards the study of taxpayers' behaviour towards tax system in developing countries (Lumumba et al., 2010).

Despite all the efforts aimed at developing better and easier automated systems, these tax-filing systems has remained unnoticed by the public or are seriously underused in spite of their availability. Kenya is ranked among low compliance countries with the hard task of ensuring efficient and effective tax administration, in order to ensure tax compliance, hence raising more revenue (Mandola, 2013). Therefore, there is a need to understand the acceptance by the users of the automated systems and identify the factors that can affect their decision to use or not use these automated systems. This issue is important in that the answer could help the government to plan and promote new forms of electronic tax-filing systems in the future. From this definition, there are three dimensions of tax compliance: filing, reporting, and payment compliance. Therefore, a taxpayer would be called non-compliant if the three dimensions are not properly accomplished.

The aim of tax reforms in many countries is to achieve higher voluntary compliance and one way to do this is by introducing electronic filing system (Khadijah, 2013). No matter what the justifications advanced, a tax fails to the extent that it is avoided or evaded (Shultz and Harris, 2004). The aim of tax reform in many countries is to achieve higher voluntary compliance and one way to achieve this is by introducing a self-assessment system (SAS) (Khadijah, 2014).

1.2 Problem statement

Despite other reforms of tax systems through introduction of various tax reforms like electronic tax register ETR, Integrated tax Management System(ITMS), integrated tax Administration system, Electronic, KRA still not achieve its targets.

For instances, in the financial year 2014/2015 the authority collected exchequer revenue of 1,022 billion against the treasury target of 1,065.8 billion (KRA, 2015), 2016/17 the authority collected exchequer revenue of 1.365 billion against the treasury target of 1.415billion (KRA, 2015) and 2018/19 the authority collected exchequer revenue of 6.77billion against the treasury target of 633 (KRA, 2015). In addition, the practice of tax evasion still presents a serious threat to achieving this goal, and it continues to directly deny the Government its rightful revenue. For example, failure to fully declare the sales receipts of a business enterprise through keeping of parallel records is stealing of Government revenue. This means that the trader does not pay the right amount of Value Added Tax or Income Tax.

Achieving full tax compliance is the ultimate goal of any revenue administration. However, the practice of tax evasion still is a big challenge to achieving this goal and continues to reduce collectable taxes that are due to the authority. This often occurs when tax authorities and finance ministry through treasury do not have a suitable forecasting and monitoring systems in place to measure compliance levels.

Manual tax administration systems proved to be time consuming and labour intensive process in verifying and approving the compliant taxpayers. This could normally lead to delays in taxpayer registration, capturing of information and returns.

Despite the increasing need to increase revenue collection and enforcement so as to provide public services, and the introduction of electronic tax systems in most countries across the global divide, developing countries like Kenya, still face the challenges of low tax compliance and tax administration. The manual system used before the adoption of *i*tax had a lot of loopholes as compared to the current system which requires tax payers to register, file returns and pay their dues online.

The manual system allowed unscrupulous taxpayers to under declare tax. The inability of most counties to collect enough revenue has been a major concern. The available Auditor General report (2004) on revenue collection, indicated that Meru county missed the targeted revenue of Kenya shillings 600 million by 43% and in another report by (Mueke 2015), Nairobi county increased its revenue collection by 60% and this was due to Automation of revenue collection. In a similar report (Mueke 2015) there was element of corruption by revenue clerks and this will only be minimized by full implementation of Automation revenue collection. There is need to put in place a proper and effective strategy of revenue collection, that will help the counties governments to meet their revenue collection targets which can assist them in meeting their Social and economic goals in the development of counties. Cases of Nairobi (Mueke 2015) and Meru county Auditor general report (2014) clearly indicates that there is a huge gap between projected annual revenue collection and the actual annual revenue realized. This study sought to assess the effect of iTax system on Revenue collection among SMEs in District, Nairobi county. To achieve this goal, the study will compare the revenue collection before and after the implementation of Automation revenue collection based on data available from primary and secondary data.

1.3 Objectives of the study

The general objective of this study was to investigate the effect of iTax system on Revenue collection among SMEs in Central Business Development, Nairobi County.

1.3.1 Specific objectives

The study will be guided by the following specific objectives: -

i. To determine the effect of E-registration on revenue collection among SMEs in Central Business Development, Nairobi County.

ii. To assess the effect of E- filing on revenue collection among SMEs in Central Business Development, Nairobi, County.

iii. To assess the effect of E-payment on revenue collection among SMEs in Central Business Development, Nairobi County.

1.4 Research Questions

The research proposal intends to address the following research questions.

i. Does E-registration affect Revenue collection among SMEs in Central Business Development, Nairobi County?

ii. Does E-filing affect Revenue collection among SMEs in Central Business Development, Nairobi County?

iii. Does E-payment affect Revenue collection among SMEs in Central Business Development, Nairobi County?

1.5 The significance of the study

1.5.1 Policy Makers

This study will be useful to policy makers' concepts which is to develop a framework to explore tax compliance behaviour among SMEs. It has opened the underlying factors that promote tax compliance.

1.5.2 Investors/Shareholders

The investors include those people who would like to start companies in Kenya and particularly in Westland's district. The companies may include manufacturing sector, construction sector agriculture or any other sector which is legalized in Kenya under the Kenyan laws. They can use the research proposal to make their financial and investment decisions. The shareholders are the

owners of the company and they need to know if they can continue with their business or not, they can also use the research study for their future decisions.

1.5.3 Government of Kenya

The findings of this study will assist the GOK that regulates the revenue collection and Automation of tax process to know if there are factors influencing the automation of tax processes in Revenue collection on SMEs. This will help to know if there are positive effects or negative effects which need improvements.

1.5.4 The SMEs

The SMEs include the Small medium enterprises which deal with different sectors of economy like in manufacturing sector, construction sector, Educational sector, transport sector among others. The SMEs can use this research proposal to know if there are factors influencing the automation of tax processes in Revenue collection among SMEs. The effects could be positive or negative effects.

1.5.5 Future researchers

The study of this research proposal will assist the scholars to know if there are factors influencing the automation of tax processes in Revenue collection among SMEs. The scholars can use the information to make future decisions like conducting more research on the area and the research gaps can be known.

1.6 The scope of the study

1.6 Scope of the Study

Geographically, the study will focus on Small and Medium taxpayers in Central Business Development, Nairobi county. Justification of why the focus is that this area is that the area is

expected to have a high number of small and medium taxpayers and hence individual taxpayers should contribute a large portion of the revenue collected

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The chapter therefore provides theoretical and empirical information from publications on topics related to the research problem. It begins with a theoretical review where a number of theories are explained.

.2.2 Theoretical framework

This aimed to give a summary of a few theories to support the study being undertaken. It will review the following theories: Technology acceptance model (Davis 1989) and Unified theory of acceptance and use of technology The (Economic) Deterrent Model

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 The (Economic) Deterrent Model

The economic deterrence theory is a theory under criminology developed by Becker (1968). The theory is built on the perception that an individual will be deterred from committing a crime if the benefit of the crime is outweighed by the consequence of committing the crime. The theory is premised in the belief that all individuals are aware of the consequences associated with criminal

Behaviour. Taxpayers will act contrary to the law after evaluating the uncertain advantages of a successful evasion against the risk of being caught and punished. Rational taxpayers will evade taxes if the expected benefits are greater than the cost of being caught.

This theory, also known as deterrence theory, holds that behavior of tax payers is impacted by factors such as tax rate that determines the threats that may come with evasion, and also the likelihood of being detected upon evasion and what penalties one may face as a result of Allingham and Sadmo (1972).

Persuasive measures and also punitive measures can be combined to achieve deterrence. Measures such as increased chances of detection for evaders, increasing tax rates for non-compliers, and an imposition of tighter penalties. Alternative methods could include properly educating the tax payers, increasing publicity and the associated incentives. In economic terms, a tax payer is taken to be a person of upright morality who finds any ways to evade tax payment with an aim of maximizing their utility.

The model suggest that tax spenders play an audit lottery, that is, they perform computations of economic significances of varied obedient alternative, like whether to evade tax or not; the prospect of being detected and penalties that may accrue, and they select the alternate that make the most of their after tax earnings or proceeds. The concept suggest that tax payers are moral utility maximizers, hence the stress on augmented inspections and punishments as a resolution to compliance challenges. Monetary founded studies be certain of that tax payers' behavior is subjective to monetary motives like enlargement of profits and likelihood of being detected (Trivedi & Shehata, 2014).

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) endeavoring 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

A conceptual framework is a concise description of the phenomenon under study represented by graphical depiction of the major variables of the study (Mugenda, 2003). Young *et al.* (2003) defines conceptual framework as a diagrammatic representation of the relationship between the dependent and independent variables.

The conceptual framework helps in guiding how the variables will connect with each other. In this study, the main variable under study is Revenue collection, which is a dependent variable. This variable will be influenced by various variables. This study however intends to concentrate mainly on three major factors (independent variables) including; E-registration, E- filling and E-payment on Revenue collection (dependent variable)

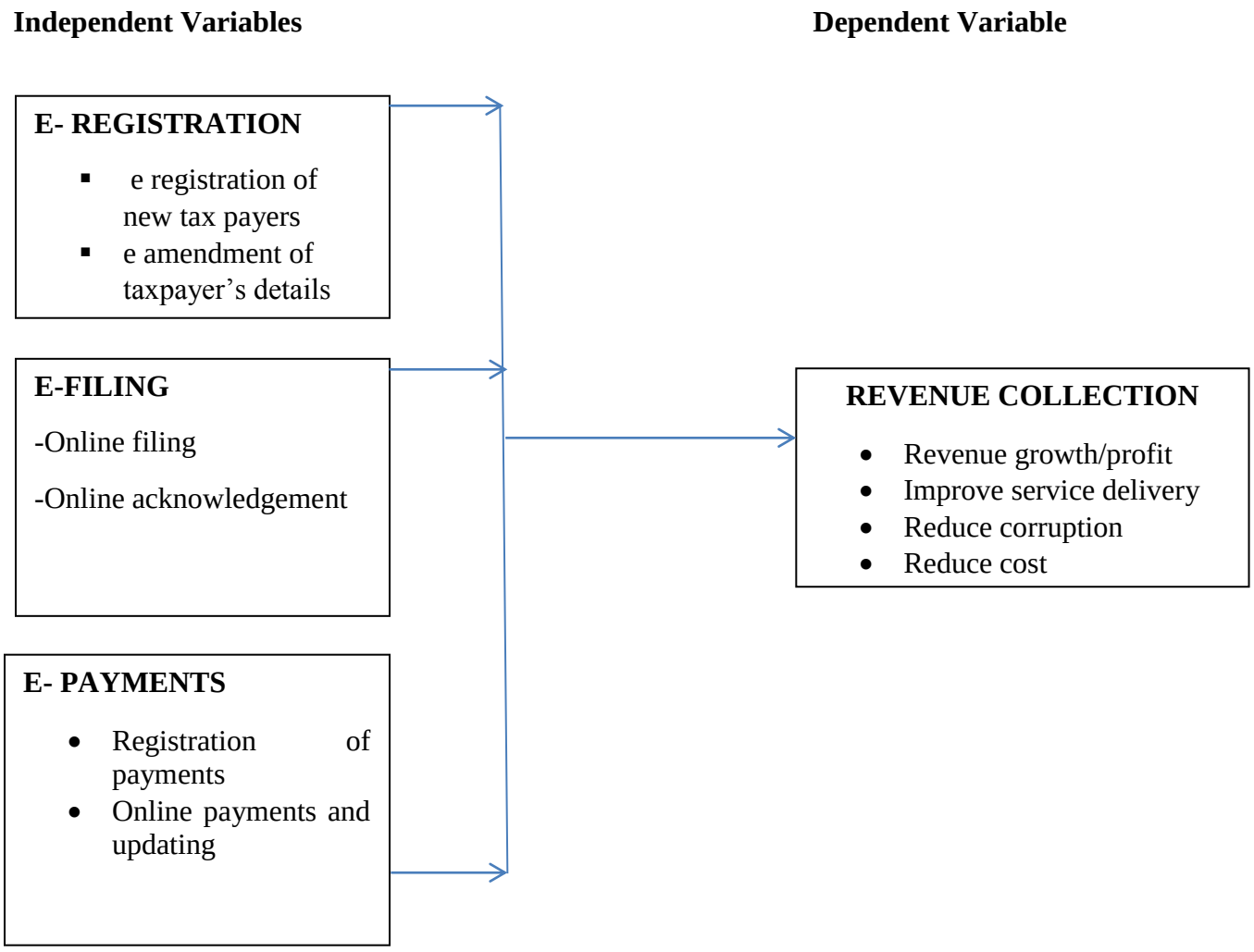

Figure 2.1 Conceptual Framework

2.3 Empirical review

The KRA sixth corporate plan is guided by the authority's ability to leverage technology to enhance service delivery and promote compliance. A research study of South Korea and Turkey on user evaluation of tax filing web sites was done by Lee et al. (2013), to compare the design and the complexity of the web sites and the ease with taxpayers can file tax returns and queries on their tax status. While Turkey had a complex online system, to the contrary Turkish users did not find tax filing system difficult to use and that was attributable to the fact that they relied on accounting professionals to do their tax returns online

According to a study conducted by Gidisu (2012), the following are the major usefulness Turkey is enjoying from the adoption of automation tax collection in the operation and management of municipalities: The automation of tax collection saves the cost and enhances the efficiency of the process. The adoption of the system in Turkey saved the country $23.1 million dollars as the system presented a platform for fewer workers to be employed with optimum efficiency: Another usefulness is time savings; in Turkey the new system of municipal management offers a great deal of effective management as the system is employed to perform a multiple task within a limited timeframe. Automation of tax collection also brings about efficiency and effectiveness in the declaration and subsequent payment of tax due. The situation in Turkey indicated that the new system offers a framework for all taxpayers to be tracked. The ultimate of all of these is enhancing tax compliance. (Gidisu (2012)

Wamathu (2013) studied the effects of electronic taxation on financial performance of audit firms in Kenya. From the finding the study found that there has been timely filing of returns since inception of I-tax, there has been a reduction in audit period due to introduction of I-Tax, respondents were quite knowledgeable. , system failure when login were less, iTax was user

manual friendly , I-tax system was reliable and that I-tax was not user friendly, iTax system cost effective, I-tax system was cost effective and respondent were aware of that iTax system was electronic cash register and electronic signature device. She recommended that there is need for the Kenya Revenue Authority to invest on technology in order to reduce the system failure as the study revealed that system failure affects system logins. System failure discourages use of technology.

A study done by Kamau (2014) focused on the adoption of technology as strategic tool in enhancing tax compliance in Kenya: a case study of large taxpayers of Kenya Revenue Authority. The study examined the impact of adoption of technology as a strategic tool in enhancing tax compliance in Kenya. The study revealed that the adoption of technology does have an impact on the tax compliance levels of the large taxpayers. In addition, it was found that there is a positive relationship between the adoption of technology and the tax compliance levels.

The conceptual framework above shows the relationship between the independent variable and the dependent variable. The independent variable is the online VAT services while the dependent variable is the tax compliance. The components of iTax include online taxpayer registration, online tax return processing, online compliance and monitoring

In this study, compliance was looked at comprehensively as VAT registration compliance, filing compliance and payment compliance, Registration compliance relates to the portion registered taxpayers with the appropriate tax obligation which is VAT in this study. Filing compliance relates to the proportion of VAT tax returns filed on time, e-return acknowledgement receipt and penalty imposed for non-compliance.

Computation compliance measures the percent of the correct VAT tax liability that is correctly. Computed and reported. Tax payment compliance measures the portion of the computed tax liability that is paid within the timelines of tax laws through payment registration slip based on the reported tax due and bank confirmation receipt.

2.3.1 E- Registration

The E- registration a tax process on Automation involves Online application of pin and Online approval of pin through the KRA itax system which is done online at the convenient of the person making the application. For an organization like KRA, their main aim is to achieve the revenue targets set for them by the Ministry of Finance. This is why they have adopted such measures as automating their processes so that they can meet those targets (Kenya.2013). Prior to the year 2009, taxpayers would register for their PINs by presenting themselves physically to KRA offices and filling the appropriate forms. They would then be allocated PINs using the Legacy system and printed for a hard copy of the same. In 2009, KRA developed a system called ITMS (Integrated Tax Management System) where taxpayers could register their PINs and also do returns online. However, most taxpayers still continued doing their returns manually as the online technology was still a mystery to them. Later, with coming up of iTax in the year 2012, manual registration for PINs was stopped and therefore all new PINs registrations were done online. In the year 2015, the Commissioner of Domestic taxes announced abolishment of manual returns. All individual and company returns for the financial year 2014, and other monthly returns could now only be done online through iTax. After doing returns, taxpayers generate e-slips and make payments at various banks that have partnered with KRA (Kimeli, 2008). As a result, taxpayers no longer had to bring the payment slips from the bank to KRA as this information was already available to KRA.

Coming with the online services, taxpayers are able to access their ledgers and raise their concerns where there is data mismatch. This is a big step compared to earlier where taxpayers only raised issues after visiting KRA offices when they need KRA services such as Tax Compliance Certificates or clearance certificates and find out their ledgers reflecting huge amounts of tax arrears.

Currently, KRA has continued to improve on its technology usage by enhancing its systems and improving their network to ease access by taxpayers as they seek services from the Authority. In return, the Authority is leveraging on these improvements to enable it raise the compliance to tax laws in Kenya which they believe will go a long way in helping them meet their revenue targets (Fifth & Sixth KRA Corporate plans). KRA has also joined the Social Media bandwagon (Facebook and Twitter) managed by the Marketing and Communication department with dedicated staff sending tax information to the taxpayers and attending to queries and concerns raised by the taxpayers (Manyasi, 2012).

Sagas, Nelimalyani and Kimaiyo (2015), did an assessment of the impact of electronic tax register on revenue collection by Kenya Revenue Authority western region, Kenya. Findings from their study indicated that indicated that 75% of the respondents were of the opinion that ETR machines have helped to curb cases of tax evasion 86% of the respondents were of the opinion that ETRs have helped increase revenue collection due to their efficient nature.
(Wang'ombe ,2014)

2.3.2 E-Filing

The main aim of electronic filing is to enable taxpayers to meet their normal tax obligations in a convenient manner without visiting tax office. Tax compliance has always been an area of concern to policy makers, tax administrators and society in general. This is mainly because tax compliance affects revenue collection and the ability of the government to achieve its fiscal and social goals (Tan and Sawyer, 2003).

The aim of tax reforms in many countries is therefore, to achieve higher voluntary compliance and one way to do this is by introducing electronic filing system (Khadijah, 2013). In Kenya, various taxes are filed and remitted by due dates, which are mandatory dates for either tax returns. Mandola (2013) defines electronic filing as an internet-based system that enables the taxpayers to register and submit their tax returns over the internet. A number of governments have responded by adopting electronic filing (henceforth e-filing) of taxes. E-filing refers broadly to online submission of tax declarations, typically replacing in-person submission to tax officials. As of 2015, 32 percent of developing countries had introduced e-filing and its prevalence continues to grow rapidly (World Development Report, 2016)

The most common feature of tax reforms reported in the 2015 World Bank Doing Business Indicators was the introduction or enhancement of electronic systems for filing and paying taxes, with 26 economies implementing such changes on e-filing contribute to system-wide efficiency gains by removing the need for physical collection of forms and data entry. Lastly, by making tax information submitted by taxpayers immediately available electronically, e-filing may increase the ease of data analysis for monitoring. (World Development Report, 2016) .

Electronic filing allows taxpayers to submit their tax declarations online instead of in person at the tax office thereby eliminating the need for time-consuming visits to the tax office and frequent interactions with tax officials (and the potential unofficial behaviors that may arise from these interactions) (Okunogbe, 2017). E-filing or online return filing of income tax refers to successful filing of Tax Returns through the internet or web-based tax systems.

Electronic systems for filing returns and paying the due taxes, if accepted and adopted by most businesses and individual taxpayers, result in tangible advantages to both the taxpayers and the government.

The government gains in the form of reduced operation costs such as costs associated with submission, storage and handling of returns in addition to saving time which in turn boosts compliance. The taxpayer benefits from the system is form of reduced calculation errors, preparation and filing time. Furthermore, the tax domain is different from other situations where individuals may choose electronic services over traditional services, such as electronic retail services or online banking because the domain (that is the tax law) is complex and most taxpayers are not experts. In addition, e-filing introduces the issues of security and privacy protection and taxpayers' dislike and distrust of the tax authorities and the government in general. Finally, e-filing research provides an intersection of various academic disciplines, namely information systems, public finance, public administration, public policy, and accounting (taxation). (Pippin & Tosun, 2014).

The iTax system has simplified the various tax processes, shortening the time taken to file returns and increased revenue collection.

Taxpayers can use the iTax system to file returns for Pay As You Earn (PAYE), Value Added Tax (VAT), Individual annual Income Tax Return (IT1), Corporate Tax returns and agency revenue that includes Sugar Development Levy, Stamp Duty and Kenya Bureau of Standards. (KRA press release ,2015)

The iTax online system is used to facilitate payment of all income taxes, VAT and excise duty. Additionally, monthly and annual self-assessment returns for these taxes are filed on the iTax online system. Once the payment is made and tax returns filed, the company's iTax ledger is updated automatically to reflect the company's tax position.

The iTax online system also allows for online Personal Identification Number (PIN) registration, amendment of PIN details, applications for waiver of penalties and interest, assessment dispute resolution, application for tax compliance certificates and applications for tax refunds. The system also facilitates e-communication with the KRA.

Mandola (2013) defines electronic filing as an internet-based system that enables the taxpayers to register and submit their tax returns over the internet. A number of governments have responded by adopting electronic filing (henceforth e-filing) of taxes. E-filing refers broadly to online submission of tax declarations, typically replacing in-person submission to tax officials. As of 2015, 32 percent of developing countries had introduced e-filing and its prevalence continues to grow rapidly (World Development Report, 2016)

The most common feature of tax reforms reported in the 2015 World Bank Doing Business Indicators was the introduction or enhancement of electronic systems for filing and paying taxes, with 26 economies implementing such changes on e-filing contribute to system-wide efficiency gains by removing the need for physical collection of forms and data entry. Lastly, by making tax information submitted by taxpayers immediately available electronically, e-filing

may increase the ease of data analysis for monitoring. (World Development Report, 2016) Electronic filing allows taxpayers to submit their tax declarations online instead of in person at the tax office thereby eliminating the need for time-consuming visits to the tax office and frequent interactions with tax officials (and the potential unofficial behaviors that may arise from these interactions) (Okunogbe, 2017). E-filing or online return filing of income tax refers to successful filing of Tax Returns through the internet or web-based tax systems.

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The government gains in the form of reduced operation costs such as costs associated with submission, storage and handling of returns in addition to saving time which in turn boosts compliance. The taxpayer benefits from the system is form of reduced calculation errors, preparation and filing time. Furthermore, the tax domain is different from other situations where individuals may choose electronic services over traditional services, such as electronic retail services or online banking because the domain (that is the tax law) is complex and most taxpayers are not experts. In addition, e-filing introduces the issues of security and privacy protection and taxpayers' dislike and distrust of the tax authorities and the government in general. Finally, e-filing research provides an intersection of various academic disciplines, namely information systems, public finance, public administration, public policy, and accounting (taxation). (Pippin & Tosun, 2014).

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In the Sixth Corporate Plan, the KRA recognized that its goal was to enable the government of Kenya achieve revenue independence by the year 2018 which would effectively eliminate its reliance on financing its budget deficit through loans. In this Plan, the importance of using technology to enhance tax compliance was emphasized.

This was seen as a way to deal with tax evasion and fraud (KRA, 2015). The iTax online system was initially introduced in phases. After successful piloting, it was made a mandatory requirement for filing of tax returns online from1 August 2015(KRA, 2015). In essence, this meant that all taxpayers including SMEs, were required to use iTax only and abandon the manual process.

Small companies pose challenges for tax administration by the revenue authorities worldwide, due to their large numbers which translates into huge tax administration costs. Additionally, the nature of the SMEs' transactions also poses a challenge as the SMEs tend to operate in the informal market and domestic market as opposed to the export market, hence making it harder to supervise their tax compliance (OECD, 2009). The KRA does acknowledge the challenges of tax compliance of the SME sector. According to Mungai (2015), the Office of the Commissioner General admits that many SMEs do not register voluntarily, and those who get to register often fail to keep records, file tax returns and settle tax liabilities promptly. In KRA's Fifth Corporate Plan, the revenue authority demonstrated its renewed focus on SME tax compliance.

The corporate plan denoted the SME sector as a sector with a low tax compliance (KRA, 2013). Additionally, in the Sixth Corporate Plan, the KRA noted that SME businesses in Kenya are over 2.7 million and many of these are not registered for tax (KRA, 2015).

Based on the foregoing, it is evident that that SMEs are prone to engage in tax evasion. Revenue authorities therefore need to bridge the gap between the huge tax administration costs they incur in ensuring tax compliance of SMEs and also lower the high tax compliance costs incurred by the SMEs. Going forward, the revenue authorities are left with no choice but to look for alternative methods to ensure tax compliance in a bid to minimize tax evasion.

An important point to note is that the iTax online system was introduced at a time when the KRA was under increasing pressure to seal tax loopholes and widen its tax net. There was also the need to increase efficiency in tax collection procedures by automating these procedures in order to improve revenue inflows from taxes. The iTax rollout also came at a time when there was renewed and specific focus on the taxpayers' tax compliance. The introduction was a welcome initiative, with the KRA aiming to promote equity among taxpayers by standardizing tax procedures. It was also seen as an effective tool for the effective and efficient collection of tax and widening of the tax net to cover more taxpayers, including the SMEs.

An analysis of the achievements so far as per the KRA's Sixth Corporate Plan showed that the use of iTax in tax compliance procedures is still low and underperforming. Underperformance was recorded specifically in electronic filing of annual corporate tax returns individual tax returns and making payments electronically. Some of the reasons put across by the KRA to try and explain the underperformance include late rollout of these modules, Kenyans been ranked poorly compared to other countries on degree of uptake of ICT and inadequate knowledge amongst taxpayers of these functionalities (KRA, 2015).

2.3.3 E- Payment

The E- payments a tax process on Automation involves Online registration of payments of the returns like VAT through the KRA iTax system which is done online at the convenient of the person making the payments and after payments to any banking Institution or online payments then there is online updating of the ledger and the transaction is successful. The study concluded that online process of automation of revenue collection processes influence performance in Trans Nzioa county government office to a great extent. The study further concludes that automation of revenue collection processes offers great deal of effective management; The study concludes that online payment process of automation of revenue collection processes influence performance in Trans Nzioa county government office to a great extent. Further, the study concludes that time saving, compliance with government rules, controlled cross-border flow of goods, revenue payment channels and that collection costs influence performance in Trans Nzioa county government office to a great extent. The study also concludes that online response process of automation of revenue collection processes influence performance in Trans Nzioa county government office to a great extent. As well, the study established that risk management, tax data entry and that feedback influence performance in their office. From the findings, the study recommends that automation of the revenue management process should be improved to enhance efficiency in the revenue collection process. The county should maximize employee's multi-dimensional abilities for better performance and hence improve revenue collection. The study further established that reliable online communication influences performance in the Trans Nzioa county government office. As a result, this study recommends that the administration at the County offices invest heavily in communication especially online communication amongst members.

This will help to attain maximum possible benefits of online receipting process. The study therefore recommends that the County should make a full migration to online payment process of all large transactions.

Tax administrations can exploit this infrastructure by introducing electronic channels such as Internet portals, mobile payment options, and ATMs as a powerful lever for improving service levels. By using these channels for simple taxpayer transactions, such as tax declarations and payments, and while conveying a strong sense of its public purpose. Such approaches not only help reduce the length of queues at tax offices, but by so doing remove a barrier to compliance. They also enable the databases to be of much better quality and, as a result, provide the basis for more effective audit and collection processes in the medium term.

(Pereira, Hoekstra, & Queijo, 2013**)**. Seelmann, Lerche, Kiefer and Lucante (2011) did a study Benefits of a computerized integrated system for taxation in Tanzania, they argued that Taxation is often the most important source of state revenue. However, many developing countries lack effective tax administration structures and processes. The e-filing system automatically calculates the necessary payment details. It also limits deductions that taxpayers are entitled to base on deduction rules—enabling taxpayers to avoid mistakes that would result in penalties (Doing business, 2014). In many rapidly developing economies, mobile and Internet penetration is often comparatively high.

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They also enable the databases to be of much better quality and, as a result, provide the basis for more effective audit and collection processes in the medium term

2.3.4 Revenue Collection

The Revenue collection involves the activity of receiving the taxes from SMEs which is done by KRA through the Itax system after filing the returns and generating the payment slip and paying to the various banking institutions. 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.

The study conducted by Okech and Mburu (2011) in Kenya sought to analyze the responsiveness of tax collection revenue as related to automation of revenue collection system between 1986 -2009. The study concluded that the automation of Kenyan tax system resulted to increase in revenue collection.

Muriithi and Moyi (2003) in Kenya looked at the level of tax revenue collections under automated system and non-automated system, the study found that under the un-automated system the revenue collection level was low compared to automated revenue collection. Mitullah (2005) conducted survey of 175 local authorities in Kenya on the effectiveness of automated revenue collection systems. The study established that automated system was instrumental in enhancing the proper management of revenue sources.

Maina (2013), on the other hand concluded that revenue collectors appreciated the role of automation system of revenue collection technology in ensuring effective revenue collection. Odoyo, Oginda, Obura, Aila, Ojera and Siring (2013) carried out a study to determine the effects of automated revenue collection system by Local Authorities in Homabay County. The study established that there is a strong positive relationship between automation and effectiveness in revenue collections. The study found that 95% of the respondents who participated in the study agreed that there is a strong positive relationship between automation of revenue and revenue collected. The major hindrance in the implementation of automated revenue collection was as a result of resistance to change by the council staff.

Kamolo (2014) in Kenya, in his study found that Local governments tend to depend on National government for revenue to perform their duties.

This dependency is as a result of Local government revenue collection system being inefficient and ineffective thus calling for the automation of revenue collection system. Following the establishment of devolved governments in Kenya 2013, county governments are expected to collect their own revenues to mitigate between allocation of revenue from central government and their own budget. This has called for automation of revenue collection systems from Local Authority Integrated Financial Operations Management System (LAIFORM) to Integrated Financial Management Information System (IFMIS). This is intended to enhance revenue collections from multiple revenue streams including single business permits, market stalls, parking fees, real estates, land rates, and to achieve real time transaction reports on a secure central server that must be accessible on web and mobile platforms (UNCTAD, 2008). Wahab (2012) in Ghana, observed that revenue collections fail because of several factors namely, inadequate senior management, ineffective planning, inappropriate organizational design, an inefficient system of monitoring, evaluating and controlling, misuse of resources.

Manyasia (2012) found that most Counties are faced with budgetary challenges to meet their set obligations, such as payment of wages, financing development programs. This is because revenue collection has been wanting. The Kenya Institute of Certified Public Accounts report (ICPAK 2014) confirmed the of (Munyasia 2012), but also recognized that several Counties are not able to collect enough revenues, thus inability to meet their objectives and being self-reliant. Awiata (2010) and Gachanja (2012) observed that in Kenya lack of commitment to automated revenues collections, limited management supervision and inadequate management information systems is the major hindrance in realization of good revenue collection. This study is motivated by the above background to examine the effects of automation on revenue collections by county governments, a case of Nakuru County Kenya.

2.4 Critique of existing literature relevant to the study

The previous studies which have been conducted with regard to the factors which have influences on automation of tax processes on revenue collection on SMEs has not been interpreted properly to apply to get the most efficient tax system in Kenya.

There have been complains in the media that the revenue collection by the KRA through the KRA Itax system that the ITAX is hard and cannot be used by the people who are computer illiterate. Some people have criticised it that it's not efficient leading to non- compliance with regard to the taxes. The KRA online system requires the taxpayer to have only the basic computer skills since the cyber attendants are able to file their returns with no difficulty and they are distributed country wide. KRA requires all the SMEs to be filing their returns efficiently and comply with the regulations of tax compliance. (Gcabo, 2007).

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2.5 Research gap

The increased adoption of electronic tax administration systems such as iTax, are computer based revenue platforms that do away with the need for manual registration, filing and processing of tax returns, refunds and other tax related services. The ultimate goal is to increase revenue collection through reducing costs associated with compliance and minimizing tax leakage. There are design to reduce physical contact between the tax administration and the taxpayers in order to achieve

the desired effect of reducing corruption. Despite the introduction of iTax system, KRA still continue to post revenues short of the treasury target. For instance, in the financial year 2014/2015 the authority collected exchequer revenue of 1,022 billion against the treasury target of 1,065.8 billion (KRA, 2015), 2016/17 the authority collected exchequer revenue of 1.365 billion against the treasury target of 1.415billion (KRA, 2015) and 2018/19 the authority collected exchequer revenue of 6.77billion against the treasury target of 633 (KRA, 2015)

2.6 Summary

The chapter on literature review attempts to review areas and various literature related to the effect of iTax system on revenue collection in Central Business Development. The tax processes include Electronic registration, Electronic filing and Electronic payment. There are other research work which are related to this study of Automation and they have been demonstrated in this study and the relationship between the Automation processes and the revenue collection has been demonstrated.

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Introduction

This chapter includes the research design, population of the study or target population, sample design and procedures, data collection methods and data analysis procedures which were applied.

3.1 Research Design

The research used is descriptive since the researcher objective is to assess if there are factors influencing the automation of tax processes on Revenue collection. This research design involves gathering data that describes evens and then organizes, tabulates, depicts and describes the data collected by the use of percentages, ratios and other qualitative methods. (Mugenda & Mugenda, 2003) This descriptive design is adopted because the data involved is qualitative, identifiable and the research problem is not well defined. (Krishnaswami & Satyaprasad, 2010)

3.2 Target Population.

A population includes all entities belonging to certain parameters which can be identified and categorized. The entities are specific items which are used for the purpose of the research and all the entities have equal chance of being selected. A target population is that which the researcher wants to generalize the results of the study. A population also refers to an entire group of individuals, events or objects having common observable characteristics. (Mugenda & Mugenda, 2003)

Cooper & Schindler (2003) define target population as the entire group of people events or objects that a study focuses on as the subject of analysis. The target population of this study was 1400 SMEs operating business in CBD, Nairobi county and registered.

Table 3.1 Target Population

Type of Enterprise	**Target Population**
Small Scale Enterprise	1000
Medium Scale Enterprise	400
Total	**1,400**

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3.3 Sample and Sampling technique

3.3.1 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 will indicate a significant difference when there truly is one. (Morgan, 2001)

The researcher used the following formula;

N/kith:

Where; N= Total number of companies in any given sector

Kith item = Every tenth organisation selected in succession from N to form the sample. E.g. If the target population is 1,400 firms divided by 10 = 140 respondents.

The respondent selected the first sample unit at random and then the remaining units were automatically selected in a definite sequence of the 10th. Hence the respondents were 140.

Table 3.2 Sample Size

Type of Enterprise	**Target Population**	**Sample Size 10%**
Small Scale Enterprise	1,000	100
Medium Scale Enterprise	400	40
Total	**1,400**	**140**

Where N is population size, n sample size and e is margin error of 0.05 based on 95% confidence level. Therefore, the sample size was 140 SMEs. Simple random sampling method was adopted.

3.4 Data collection Instruments

The instruments which the researcher used to capture primary data include the structured questionnaire which has both open and closed questions which will help the researcher to get the accurate results. The structured questionnaire is simple to use and one can capture a lot of data within a short period of time.

The data collection instruments included the secondary sources which are from published sources and available in soft copy or hard copy and the author is duly acknowledged and the source is stated from all the 140 SMEs. This helped in gathering data from each respondent and using the data collected to form a basis of the research.

3.5 Data Collection procedure

Both primary and secondary data were used for the study. Primary data was collected using questionnaires and secondary data using published records, professional journals, books

financial reports and other accepted publication related to automation of tax processes on revenue performance for SMEs. Well trained research assistant was used to administer the questionnaires. The questionnaire is a reliable tool to collect the data and produces accurate results if used well and the questions relate to the subject matter. (Mugenda & Mugenda, 2003)

3.6 Pilot testing

Pilot study was carried to determine the reliability as well as validity of the research tools in order to ensure there is consistency and accuracy of the research instruments.

3.6.1 Validity of the research instruments

Kothari (2008) defines validity as a sound measurement that indicates the degree to which an instrument measures what it purports to measure. This study adopted content validity which is the extent to which a measuring instrument provides adequate coverage of the topic under study. So as to establish content validity and make adjustments to the research instruments, consultations and discussions with the supervisor was done.

. 3.6.2 Reliability of the research instruments

Reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials (Cooper, 2003). Instrument reliability is the dependability, consistency or trustworthiness of a test.

Cronbach's Coefficient Alpha approach was used to measure internal consistency of the research instruments. Cronbach's Coefficient Alpha is a scale measurement tool appropriate in measuring internal consistency in descriptive survey researches as recommended by Cohen, Manion and Morrison (2007). Computation of Cronbach's Alpha was done using statistical package for social sciences (SPSS Version.24).

3.7 Data collection procedure

Data collection procedures commenced upon approval of the proposal after its defense. An introduction letter was issued to the sampled entities for consent to collect data from the respondents. The questionnaire was administered to the respondents directly by the researcher with the help of two research assistants in order to save on time. For those respondents who were not available for a sit-in filling of the questionnaire, the respondent will be used to drop and pick method to ensure they fill the questionnaires

3.8 Data analysis and presentation

The study findings was analyzed using descriptive and inferential statistics using the SPSS software. The findings are presented in the following thematic areas: response rate; demographic characteristics of the respondents; KRA tax incentives; Rental income earners tax behaviors; testing hypothesis of the tax models used.

3.8.1 The Qualitative Analysis

Qualitative data was collected through questionnaires was first edited and response rate calculated. The data was 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. Qualitative data for the study was derived from the questionnaires and the purpose for analyzing the data.

3.8.2 The Quantitative Analysis

Quantitative data was analyzed using inferential statistics where both parametric (Chi- Square test) and non- parametric (Pearson correlation coefficient) test was used. Chi-square test was

used to test statistically significant difference between large and mutually unrelated parametric samples. Pearson correlation test was conducted to test level of significance between all independent variables and dependent variables. Pearson's correlation coefficient was used as a measure of linear correlation. The measure is symbolized by letter ® and varies between -1 and +1, with 0 indicating no linear relationship while Coefficient of determination (R^2) measures the amount of variation in the dependent variable explained by independent variables. The closer the R^2 is to 1 the better the regression line to the actual data (Sekaran, 2000).

3.8.2 Empirical Model

In multivariate analysis, multi-linear regression model will be used in explaining decision to financial performance by testing variables used as the independent variables of the study. Multiple regression analysis measures the effects of multiple independent variables on one dependent variable. Multiple regressions was therefore being adopted to measure the effects of multiple independent variables on the dependent variable and effects of multiple independent variable.

Regression analysis was applied in all the cases where correlation was found to exist between the independent and dependent variables. It is important to carry out regression analysis so as to establish the extent of the influence exerted on the dependent variable by the independent variable. A multiple regression model was used to determine the relative importance of each of the four variables in relation to the study which sought to understand the effectiveness of tax payer education as a revenue collection strategy in KRA. The regression model that was used for hypothesis testing was as follows:

The study adopted a multi regression model

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

Where:

Y = Revenue collection

β0 = Constant Term

β1 = Beta coefficients

X1 = E- Registration

X2 = E-Filing

X3 = E-Payments

ε = Error term

3.10 Measurement of Variables

Table 3.1 gives a summary of research objectives, variables of study, their indicators, level of measurement, tools of analysis for each objective and type of tool employed for each objective.

Table 3.2: Measurement of Variables

variable	Indicators/measures	Likert scale
E-registration	Online application of pin Online approval of pin	5 points
E-filling	Online filing Online acknowledgment	5 points
E-payment	Registration of payments Online payments and updating	5 points
Revenue collection	Growth/profit Improve service delivery Reduce cost	5 points

3.9.5 Diagnostic tests

To ensure that there was no violation of the assumptions, this study was tested for multicollinearity, autocorrelation and normality test. The following tests were undertaken.

a) Multicollinearity test

Multicollinearity or excessive correlation amount explanatory variables can complicate or prevent the identification of an optimal set of explanatory variables for a statistical mode. Cohen et al, (2013)'s definition of variance inflation factor (VIF) is that it provides an index of the amount that the variance of each regression coefficient is increased relative to a situation in which all of the predictor variables are uncontrolled" and suggest VIF to be too large hence not suitable.

c) 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.

d) Normality test

The Shapiro-Wilk Test will be carried out 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).

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.0 Introduction

This chapter represents the analysis, presentation and interpretation of the findings. 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 were to determine the factors influencing automation of tax processes on revenue collection on small and medium enterprise. 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 140 questionnaires administered the researcher ensured a 96% response rate by personally administering the questionnaires with the help of research assistant. A total of 135 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	135	96%
Unreturned	5	4%
Total	140	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 Cronbach's alpha	Comment
E-registration	0.721	Accepted
E-filling	0.734	Accepted
E-payment	0.761	Accepted
Revenue collection	0.723	Accepted

The results of the reliability test produced an overall Cronbach Alpha correlation coefficient of 0.8 while specific findings indicated that, E-registration had a coefficient of 0.721, e-filling had a coefficient of 0.734, E-payment had a coefficient of 0.761, and revenue collection had a coefficient of 0.723. 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.

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
E-registration	.887	1.145
E-filling	.876	1.154
E-payment	.855	1.177
Revenue collection	.776	1.234

a. Dependent Variable: Revenue collection

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	2.432

a. Predictors: (Constant), E-registration, E-filling and E-payment
b. Dependent Variable: Revenue collection

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.**
E-registration	.824	135	.167
E-filling	.833	135	.234
E-payment	.842	135	.061
Revenue collection	.835	135	.233

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 Effect of E-registration on Revenue collection

The study sought to establish the influence of e-registration on revenue collection in Kenya. Descriptive statistics results for e-registration were conducted and presented on table 4.6 below;

-**Table 4.6 E-registration**

Statement	SA	A	U	D	SD	Mean	SD
The level do E-registration has an influence on revenue collection on SMEs	49.1	44.3	3.2	1.1	0	1.8	0.5
E-registration do not influence the revenue collection on SMEs	26.3	52.2	12.8	1.8	0	1.6	0.6
E-registration have influences on revenue collection on SMEs	14.5	25.2	44.7	12.1	3.3	2.9	1.3

The findings on the statement the level do E-registration has an influence on revenue collection on SMEs contributes to revenue collection, 49.1 percent of the respondents strongly agreed, 44.3 percent of the respondents agreed, 3.2 percent of the respondents undecided and 1.1 percent of the respondents disagreed that the what level do E-registration has an influence on revenue collection on SMEs. This show that majority of the respondents agreed that the level do E-registration has an influence on revenue collection on SMEs contributes to revenue collection. Regarding the statement on the E-registration do not influence the revenue collection on SMEs contributes to revenue collection, 26.3 percent of the respondents strongly agreed, 52.2 percent of the respondents agreed, 12.8 percent of the respondents undecided and 1.8 percent of the respondents disagreed respectively that the E-registration do not influence the revenue collection on SMEs contributes to revenue collection. These shows that majority of the respondents agreed to the statement that the E-registration do not influence the revenue collection on SMEs contributes to revenue collection.

Regarding the statement of the E-registration have influences on revenue collection on SMEs**,** 14.5 percent of the respondents strongly agreed, 25.2 percent of the respondents agreed, 44.7 percent of the respondents undecided and 12.1 percent of the respondents disagreed and 3.3 percent of the respondents strongly disagreed respectively that the E-registration have influences on revenue collection on SMEs. This shows that the majority of the respondents were undecided to the statement that the E-registration have influences on revenue collection on SMEs

Table 4.6 the highest mean value was 2.5 which corresponds to the scale value of 3 in the questionnaire. On average, the results indicate that the e-registration influences revenue collection respectively.

E-registration was assessed using five measures and the overall mean score or responses regarding e-registration were 2.1 on a 5-point scale which indicates that majority of the respondents agreed that e-registration affects the revenue collection in Kenya. The study findings are supported by a number of studies which includes Ojera and Siring (2013)

4.4.2 Effect E-filing on revenue collection

The study sought to establish the effect of e-filing on revenue collection in Kenya. Descriptive statistics results for e-filing were conducted and presented on table 4.7 below

Table 4.7 E-filing

Statement	***SA***	***A***	***U***	***D***	***M***	***Sd***
The level do E-filing has an influence on revenue collection on SMEs	*36.3*	*53.2*	*7.5*	0	1.7	0.6
E-filing do not influence the revenue collection on SMEs	29.1	56.6	13.6	1.7	1.9	0.7
. E-filing have influences on revenue collection on SMEs	30.5	76.1	3.4	0	1.2	0.5

The findings on the statement that the level E-filing has an influence on revenue collection on SMEs on Revenue collection, 36.2 percent of the respondents strongly agreed, 53.2 percent of the respondents agreed, 7.5 percent of the respondents undecided and none of the respondents disagreed respectively that the level E-filing has an influence on revenue collection on SMEs. This show that majority of the respondents agreed level E-filing has an influence on revenue collection on SMEs. Regarding the statement on the E-filing do not influence the revenue

collection on SMEs, 29.1 percent of the respondents strongly agreed,56.6percent of the respondents agreed, 13.6 percent of the respondents undecided and 1.7 percent of the respondents disagreed respectively that the E-filing do not influence the revenue collection on SMEs. These shows that majority of the respondents agreed to the statement that the E-filing do not influence the revenue collection on SMEs. Regarding the statement that the E-filing have influences on revenue collection on SMEs on revenue collection, **39** percent of the respondents strongly agreed, 54.2 percent of the respondents agreed, 5.1 percent of the respondents undecided and 1.7 percent of the respondents disagreed that E-filing have influences on revenue collection on SMEs on revenue collection. This shows that the majority of the respondents agreed to the statement that the E-filing have influences on revenue collection on SMEs on revenue collection.

On average, the results indicate that the e-filing influence revenue collection. E-filing was assessed using five measures and the overall mean score or responses regarding e-filing were 1.6 on a 5-point scale which indicates that majority of the respondents agreed that e-filling affects the revenue collection. The study findings are supported by a number of studies which includes Awiata (2010) and Gachanja (2012).

4.4.3 Effect of e-payment on revenue collection

The study sought to establish the effect of e-payment on revenue collection in Kenya. Descriptive statistics results for e-payment on revenue collection was conducted and presented on table 4.8 below.

Table 4.8 E-payment

Statement	*SA*	*A*	*U*	*D*	*M*	*Sd*
The level of E-payment has an influence on revenue collection on SMEs	*49.3*	*58.2*	*9.5*	0	1.8	0.9
E-payment do not influence the revenue collection on SMEs	34.1	57.6	13.6	1.7	1.6	0.9
Other factors apart from E-payment have influences on revenue collection on SMEs	38.5	29	3.4	0	1.4	0.6

The findings on the statement of the level of E-payment has an influence on revenue collection on SMEs, 49.3 percent of the respondents strongly agreed, 58.2 percent of the respondents agreed, 9.5 percent of the respondents undecided and 1.8 percent of the respondents disagreed respectively that the level of E-payment has an influence on revenue collection on SMEs. This show that majority of the respondents agreed that the level of E-payment has an influence on revenue collection on SMEs. Regarding the statement on the E-payment do not influence the revenue collection on SMEs, 34.1 percent of the respondents strongly agreed, 57.6 percent of the respondents agreed, 13.6 percent of the respondents undecided and 1.7 percent of the respondents disagreed respectively that the E-payment do not influence the revenue collection on SMEs. These shows that majority of the respondents agreed to the statement that the E-payment do not influence the revenue collection on SMEs. Regarding the statement of the other factors apart from E-payment have influences on revenue collection on SMEs**,** 38.5 percent of the respondents strongly agreed, 29 percent of the respondents agreed, 3.4 percent of the respondents undecided other factors apart from E-payment have influences on revenue collection on SMEs

Table 4.8 the highest mean value was 1.8 which corresponds to the scale value of 2 in the questionnaire. On average, the results indicate that the e-payment influences revenue collection in Kenya.

Tax rate was assessed using five measures and the overall mean score or responses regarding tax rates were 2.5 on a 5-point scale which indicates that majority of the respondents agreed that e-payment affects the e-payment affect revenue collection in Kenya. The study findings are supported by a number of studies which includes Kamau (2014).

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 Revenue collection and the independent variables consist of e-registration, e-filling and e-payment.

The results depicted in table 4.9 below

Table 4.9: Correlation between independent variable and dependent variable

Variables		Revenue collection	E-registration	E-filling	E-payment
Revenue collection	Pearson Correlation	**1**			
	Sig. (2-tailed)				
E-registration	Pearson Correlation	0.477	1		
	Sig. (2-tailed)	0.002			
E-filling	Pearson Correlation	0.465	.3333	1	
	Sig. (2-tailed)	0.001	.0013		
E-payment	Pearson Correlation	0.476	.1440	.0644	1
	Sig. (2-tailed)	0.003	.0122	.0055	

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 correlation between e-registration and revenue collection as depicted by a correlation value of 0.477. This implies that e-registration was linearly related to revenue collection. The study also depicted that there is a positive correlation between e-filling and revenue collection with a correlation value of 0.465. Another positive correlation was between e-payment and revenue collection with a correlation value of 0.476. The findings show that there was a positive correlation between e-registration, -filling, e-payment and revenue collection. The findings of this study agreed with the study conducted by Odoyo, Oginda, Obura, Aila, Ojera and Siring (2013).

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 $Y = \beta_0 + \beta_1 \mathbf{x_1^z} + \beta_2 x_{2z} + \beta_3 x_{3z} + \varepsilon \ldots$

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) E-registration

To evaluate the effect e-registration and revenue collection in Kenya.

Table 4.10: Model Summary of revenue collection

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.437[a]	.160	.185	.87525	1.987

a. Predictors: (Constant), E-registration
b. Dependent Variable: revenue collection

The R square value in table 4.10 in this case is 0.160 which clearly suggests that there is a strong relationship between e-registration and revenue collection as indicated in table above. This indicates that e-registration share a variation of 16.0% of revenue collection.

Table 4.11: ANOVA of Tax compliance cost

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	12.892	5	10.8662	11.172	.000[b]
	Residual	32.767	135	.768		
	Total	34.648	140			

a. Dependent Variable: Revenue collection
b. Predictors: (Constant), E-registration

The ANOVA result in Table 4.11 showed that the overall model was a good fit since (F-value =11.162 and p-value=0.000<0.05).

Table 4.12: Coefficients of e-registration

Model		Unstandardized Coefficients		Standardized Coefficients		Sig.
		B	Std. Error	Beta	t	
1	(Constant)	.265	.122	-	2.257	.010
	e-registration	.424	.107	.467	2.562	.000

a. Dependent Variable: Revenue collection

Table 4.12 indicates that the regression weight for tax compliance cost was positive and significant (β= 0.424, t= 2.562, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that e-registration has a significant relationship with revenue collection. The regression estimate for tax compliance cost was 0.424; this indicates that a unit increase in e-registration would result in 40.3% increase in revenue collection.

b) E-filling

To find out the effect of e-filling on revenue collection Kenya.

Table 4.13: Model Summary of e-filling

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.438[a]	.216	.202	.82315	2.001

a. Predictors: (Constant), E- filling
b. Dependent Variable: Revenue collection

The R square value in Table 4.13 was 0.216 which clearly suggested that there is a strong relationship between e-filing and revenue collection. This indicates that e-filling share a variation of 21.6% of revenue collection

Table 4.14: ANOVA of e-filling

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	23.886	5	11.987	11.033	.000[b]
	Residual	34.643	135	.747		
	Total	32.648	140			

a. Dependent Variable: e-filling
b. Predictors: (Constant), Revenue collection

The ANOVA Table in 4.14 indicates that the overall model was a good fit since (F-value=11.033 and p-value=0.000<0.05).

Table 4.15: Coefficients of e-filling

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.245	.134	-	2.033	.010
	E-filling	.412	.112	.422	3.101	.000

a. Dependent Variable: Revenue collection

Table 4.15 indicates that the regression weight for e-filling was positive and significant (β= 0.412, t= 3.101, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that e-filing has a significant relationship with revenue collection. The regression estimate for e-filling was 0.412; this indicates that a unit increase in revenue collection would result in 41.2% increase in revenue collection.

c) E-payment

To investigate the effect of e-payment on revenue collection in Kenya.

Table 4.16: Model Summary of e-payment

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.423[a]	.186	.170	.87833	1.955

a. Predictors: (Constant), e-payment
b. Dependent Variable: Revenue collection

The R square value in Table 4.16 is 0.176 which clearly suggests that there is a strong relationship between e-payment and revenue collection as indicated in table above. This indicates that e-payment share a variation of 18.6% of revenue collection.

Table 4.17: ANOVA of e-payment

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	10.617	5	11.608	10.732	.00[b]
	Residual	34.035	135	.722		
	Total	44.647	140			

a. Dependent Variable: Revenue collection
b. Predictors: (Constant), e-payment

The ANOVA able in 4.17 indicates that the overall model was a good fit since (F-value=10.732 and p-value=0.000<0.05).

Table 4.18: Coefficients of e-payment

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.258	.115	-	2.235	.006
	e-payment	.411	.134	.433	2.308	.000

a. Dependent Variable: Revenue collection

Table 4.18 indicates that the regression weight for e-payment was positive and significant (β= 0.411, t= 2.308, p < .05). Therefore, the null hypothesis was rejected at P < 0.05 level of significance implying that e-payment has a significant relationship with revenue collection in Kenya. The regression estimate for e-filling was 0.411 this indicates that a unit increase in e-payment would result in 41.1% increase in revenue collection in Kenya.

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	.547[a]	.543	.402	.61722	2.022

a. Predictors: (Constant), E-registration, e-filling and e-payment
b. Dependent Variable: Revenue collection

From the model summary The R square value in Table 4.19 is 0.543 which clearly suggests that there is a strong relationship between e-registration, e-filling, e-payment and as indicated in table above. This indicates that e-registration, e-filling and e-payment share a variation of 54.3% of revenue collection 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= .543 and adjusted R=.402 as shown in Table 4.19. This is an indication that there is a strong relationship between independent variables and revenue collection.

Table 4.19: ANOVA for independent and dependent variables

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	24.376	5	5.444	10.338	.000[b]
	Residual	30.262	135	.533		
	Total	54.629	140			

a. Dependent Variable: Revenue collection

b. Predictors: (Constant), E-registration, e-filling and e-payment

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=10.338 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 revenue collection 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=10.338, 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)	.156	.091	-	2.054	.000
	E-registration	.352	.093	.234	2.266	.011
	E-filling	.356	.092	.355	3.110	.033
	E-payment	.434	.094	.314	3.061	.021

a. Dependent Variable: Revenue collection

$Y=\beta_0+ \beta_1\mathbf{x_1} +\beta_2x_2 + \beta_3x_3 +\varepsilon$…….

$Y = 0.156 +0.352X_1 +0.356X_2 +0.434X_3$ were significant with p- values of 0.011, 0.033, 0.021, respectively.

The regression equation above has established that taking all factors into account (e-registration, e-filling and e-payment) the findings reveals that assuming other variables are at zero a unit change (increase) in e-registration will lead to a 0.352 increases revenue collection ; a unit increase in e-filling will lead to a 0.356 increases revenue collection; a unit increase in e-payment will lead to a 0.434 increases revenue collection as shown in table 4.20. This infers that e-registration influences revenue collection to a great extent followed by e-filling while e-payment influence to a little extent revenue collection.

The regression coefficient results indicate a positive significant effect between e-registration, e-filling and e-payment and revenue collection.

4.7 Discussion of key Findings

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

4.7.1 E-registration and revenue collection

E-registration was assessed using five measures and the overall mean score or responses regarding re-registration were 2.2 on a 5-point scale which indicates that majority of the respondents agreed that -registration on revenue collection 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 e-registration had positive and significantly related to revenue collection ($r = 0.437$ p-value=$0.00<0.05$).

4.7.2 E-filling and Revenue collection

E-filling was assessed using five measures and the overall mean score or responses regarding E-filling were 1.6 on a 5-point scale which indicates that majority of the respondents agreed that e-filling affects the revenue collection 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 that e-filling had a positive and significantly related to revenue collection ($r = 0.438$, p-value=$0.00<0.05$).

4.7.3 E-payment and Revenue collection

E-payment was assessed using four measures and the overall mean score or responses regarding e-payment were 2.5 on a 5-point scale which indicates that majority of the respondents agreed that e-payment affects the revenue collection 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 e-payment had a positive and significantly related to revenue collection ($r = 0.438$ p-value=$0.00<0.05$).

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.0 Introduction

Chapter five outlines the summary of this research, conclusions and recommendations based on research findings and suggestion of areas which may require further consideration as far as future research 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 E-registration

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

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

5.1.2 E-filling

The second objective of the study sought to find out` the effect of e-filling on revenue collection in Kenya. Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that e-filling had a significant positive influence on revenue collection.

The overall mean score of response regarding e-filling and revenue collection indicated that majority of the respondents agreed that e-filling affects the revenue collection in Kenya. Correlation results indicated that there was a positive and significant relationship between e-filling and revenue collection. It was therefore concluded that e-filling has significant positive effect on revenue collection.

5.1.3 E-payment

The third objective of the study sought to investigate the effect of e-payment on revenue collection in Kenya. Descriptive statistics, regression analysis and analysis of variance were conducted. The study found out that e-payment had a significant positive influence on revenue collection.

The overall mean score of response regarding e-filling and revenue collection indicated that majority of the respondents agreed that e-payment affects the revenue collection in Kenya. Correlation results indicated that there was a positive and significant relationship e-payment and revenue collection. It was therefore concluded that e-payment has significant positive effect on revenue collection

5.2 Conclusions

Data collected and analyzed through both descriptive and inferential statistics established that all independent variables had significant effects on revenue collection.

5.2.1 E-registration

The study found out that e-registration had a significant positive influence on revenue collection. The overall mean score of responses regarding e-registration indicated that majority of the respondents agreed that e-registration affects the revenue collection in Kenya. The reliability analysis results showed that all the coefficients of the constructs were positive and significant.

5.2.2 E-filing

The study found out that e-filling had a significant positive influence on revenue collection. The overall mean score of response regarding e-filling and revenue collection indicated that majority of the respondents agreed that e-filling affects the revenue collection in Kenya. Correlation results indicated that there was a positive and significant relationship between e-filling and revenue collection. It was therefore concluded that e-filling has significant positive effect on revenue collection.

5.2.3 E-payment

The study found out that e-payment had a significant positive influence on revenue collection. The overall mean score of response regarding e-payment indicated that majority of the respondents agreed that e-payment affects the revenue collection in Kenya. Correlation results indicated that there was a positive and significant relationship between e-payment and revenue collection. It was therefore concluded that e-filling has significant positive effect on revenue collection.

5.3 Recommendations.

5.3.1 Managerial recommendations

The study found that e-registration, e-filling and e-payment had significant effect on revenue collection. Based on study finding, this study recommends there is need for Kenya Revenue Authority to invest on the systems that are not costly. In addition, the study also recommends that the tax authority in Kenya (KRA) need to develop effective policies to develop cost effective systems to encourage tax compliance on revenue collection.

5.4 Suggestions for Further Research

This study recommends a similar study, which incorporates the views of the tax authority in Kenya to establish the factors behind automation of tax processes.

The study recommends an additional study on the other factors that influence automation of tax process on revenue collection.

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APPENDICES

APPENDIX 1

LETTER OF SUPPORT/INTRODUCTION

EDWIN NDUMIA

P.O Box, 62000-00200

NAIROBI.

To whom it may concern,

Dear Sir/Madam,

RE: REQUEST FOR RESEARCH INFORMATION

I am a student at JKUAT University currently undertaking a study on the Factors influencing the automation of tax processes on revenue collection on SMEs, A case of Central Business District. I would like to request your assistance in obtaining Primary data related to this study by the use of Questionnaire.

Kindly be assured that the information provided will be treated confidentially and professionally for the purpose of this study.

Thank you in advance.

Yours faithfully,

Edwin Ndumia

QUESTIONNAIRE

INTRODUCTION

The purpose of this questionnaire is formulated to assist in obtaining information on the effect of iTax system on revenue collection among SMEs, A case of Central Business Development. Your response will be strictly confidential and for the school purposes. Do not indicate your name.

Instructions

- Do not write your name anywhere in the questionnaire.
- The information given is confidential
- Please respond to each item in the questionnaire by putting a tick [√] In the appropriate space provided.
- Fill in the blank spaces appropriately

SECTION A: GENERAL INFORMATION

1. Please indicate your gender

   a) Male [ ] (b) Female [ ]

2. Select the age group you belong

   a) 18-28 years [ ] (b) 29-39yrs [ ]

   c) 40-39yrs [ ] (d) 50 and above [ ]

3. What is the highest level of education you have attained?

   a) 0 – level _____ (b) Diploma _____

   c.) Degree _____ (d) Masters _____

   e) Doctorate _____ (f) Others _____

4. Please indicate, how long you have been a SMEs?

a) Less than 1 year _____(b) 1-5 years _____

c) 6-10 years _____ (d) 11-14 years _____

e) Above 15 years _____

5. Do you file your annual returns?

a) Yes [ ]

b) No [ ]

6. Do you have access to computers?

a) Yes [ ]

b) No [ ]

SECTION B: E-registration

5. Please tick the most appropriate option using the scale provided

1= Strongly disagree. 2= Disagree, 3=Not sure, 4=Agree, 5= Strongly agree

	Statement	*1*	*2*	*3*	*4*	*5*
1.	The E-registration has an influence on revenue collection on SMEs					
2.	E-registration do not influence the revenue collection on SMEs					
3.	Other factors apart from E-registration have influences on revenue collection on SMEs					

SECTION C: E-filing

5. Please tick the most appropriate option using the scale provided

1= Strongly disagree. 2= Disagree, 3=Not sure, 4=Agree, 5= Strongly agree

	Statement	**1**	**2**	**3**	**4**	**5**
1.	E-filing has an influence on revenue collection on SMEs					
2.	E-filing do not influence the revenue collection on SMEs					
3.	Other factors apart from E-filing have influences on revenue collection on SMEs					

SECTION D: E-payment

5. Please tick the most appropriate option using the scale provided

1= Strongly disagree. 2= Disagree, 3=Not sure, 4=Agree, 5= Strongly agree

	Statement	**1**	**2**	**3**	**4**	**5**
1.	E-payment has an influence on revenue collection on SMEs					
2.	E-payment do not influence the revenue collection on SMEs					
3.	Othe factors apart from E-payment have influences on revenue collection on SMEs					

SECTION E: Revenue collection

5. Please tick the most appropriate option using the scale provided

1= Strongly disagree. 2= Disagree, 3=Not sure, 4=Agree, 5= Strongly agree

	Statement	**1**	**2**	**3**	**4**	**5**
1.	ITax system reduces cost on revenue collection among SMEs					
2.	Itax system enhances Revenue collection among SME					
3.	KRA meets its targets after introduction of iTax system					
4	iTax system improves services delivery					

Thank you very much for your cooperation.

APPENDIX 2

BUDGET

PARTICULARS	AMOUNT (KSHS)
Photocopy papers(one Rim)	500.00
Pens pencils and files	500.00
Telephone Expenses	1,000.00
Transport for the Researcher to get secondary data	10,000.00
Other Expenditures	3,000.00
Total budgeted cost of the Research proposal	15,000.00

APPENDIX 3

APPENDIX 1V: WORK PLAN

ACTIVITY (2018)	**DECEMBER(2018)**	**FEBRUARY(2019)**	**MAY (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			

APPENDIX 4
SCHEDULE OF WORK PLAN

	Week 1	Week 2	Week 3	Week 4
Seek the permission to collect the primary data				
Collect the primary Data				
Summarize the primary data				
Analyze the data				