# FACTORS INFLUENCING REVENUE COLLECTION IN KITUI COUNTY GOVERNMENT, KENYA

 $\mathbf{BY}$ 

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL OF BUSINESS

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PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD

OF THE DEGREE OF MASTERS IN TAX ADMINISTRATION

# **MOI UNIVERSITY**

# **DECLARATION**

# **Declaration by the Candidate**

This research project is my own original wor	k and has not been presented for award of
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# **DEDICATION**

I dedicate this research project to my family members' parents and friends. This research I also dedicate to my children Keith and Benny, and my Spouse Irene.

# **ACKNOWLEDGEMENT**

My ultimate thanks are to the almighty God for the gift of life, good health and His grace of provision to carry out this research. I am indeed grateful to my supervisors Dr. Marion Nekesa and Dr. Robert Odunga who professionally and skillfully supported and guided me in this research project. Special gratitude goes to my lecturers, staff of Moi University and all my colleagues who assisted me whole heartedly in all ways possible. I also wish to thank my friends for their enormous support without which I could not have made it. May God bless you all

#### **ABSTRACT**

Revenue collection in counties in Kenya is a crucial aspect of their financial management and governance. Most of Kenyan County governments grapple with revenue challenges, facing difficulties in generating sufficient funds for essential services and development initiatives. The purpose of this study was to establish factors influencing revenue collection in county governments, specifically focusing on Kitui County. Specific objectives included; to establish the effect of technological innovation, employees' competence and legal framework on revenue collection in Kitui County, Kenya. This study was anchored on Optimal taxation theory, Technology Acceptance model, and Subsidiary Theory of Taxation. The study employed an explanatory research design and involved340 employees of Kitui County government as target population. The study adopted stratified random sampling and purposive sampling techniques and further, the Kreicie and Morgan table (t table) was used to give an ideal sample size of 181. The researcher obtained data from primary sources using self-administered questionnaires. Both descriptive and inferential analysis was carried out with the help of the SPSS software. The study adopted regression analysis to confirm the influence of study factors on revenue Collection in Kitui County. The findings revealed that the predictors (technological innovation, employee competence and legal frameworks) collectively contribute to 37.5% prediction of the revenue collection at the County. Specifically, one-unit positive change in technology innovation, influences revenue collection by 0.350(35.0%); a unit increase in employee competency is associated with an estimated increase of 0.084 (8.4%) in the revenue collection at the County and a unit increase in legal frameworks is associated with an estimated increase of only 0.026 (2.6%) improvement in revenue collection at the County. Hypotheses testing revealed that technological innovation and legal framework have a significant influence on revenue collection in Kitui Government, Kenya, (pvalue=0.000<0.05) and (p-value=0.014<0.05) respectively. However, employees' competence was found not to have any significance effect on revenue collection in this context (p-value=0.290>0.05). The findings underscored the significant contributions of technological innovation and a well-structured legal framework in predicting revenue collection outcomes, highlighting their importance in the County's fiscal strategy. These results have practical implications, suggesting that investments in technology and legal reforms should be prioritized by the County government to optimize revenue generation. The study recommended that he County government continues to invest in advanced technological solutions, prioritize continuous training programs for its workforce and enhance policies, rules, and regulations governing revenue collection at the County.

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# ABBREVIATIONS AND ACRONYMS

**ANOVA** Analysis of Variance

**CSOs** Civil Society Organizations

eTAX Electronic Tax

**FAO** Food and Agriculture Organization

**GDP** Gross Domestic Product

ICT Information Communication Technology

**IGF** Internally Generated Funds

**IMF** International Monetary Fund

**IRS** Internal Revenue Service

IT Information Technology

**KRA** Kenya Revenue Authority

MDG Millennium Development Goals

**OECD** Organization for Economic Co-operation and Development

**PFM** Public Financial Management

**TAM** Technology Acceptance Model

**URA** Uganda Revenue Authority

**VAT** Value Added Tax

#### **OPERATIONAL DEFINITIONS OF TERMS**

Automated systems: A mechanical device or programs that operate automatically and electronically and do not require continuous human intervention

**County governments:** They are defined as geographical entities of devolved governance in the Kenya's 2010 Constitution

**Employee competence:** refers to the knowledge, skills, abilities, and proficiency that individuals possess, enabling them to effectively perform their job responsibilities and contribute to organizational success (Nthenge 2020).

**Government policies**: Refers to the principles or directions to guide decisions and accomplish rational outcome (Waema, 2005)

**Government revenue:** Refers to the earnings by the government for the purpose of execution of development programs and funding of its amenities (Morrison, 2008).

**Legal framework**: Set of laws, regulations, and policies that govern the processes, procedures, and rights involved in collecting revenue, ensuring legal compliance (Anderson 2020).

**Legislation:** Policies that guide in revenue collection functions. According to Maxwell (2012)

**Revenue Collection:** Revenue Collection is fundamental for state and national governments that aspire to finance investments in

infrastructure, human revenue personnel and provision of topnotch services to the people(World Bank, 2021).

**Revenue collection:** 

Is the income that government obtains from taxation, customs, excise duties or other sources adopted to the payment of the public expenses such as the communal items or amounts of income of a person, a state, or the return or produce from any kind of belongings, patent, service rendered (Timothy, 2014).

Revenue enhancement plans: Entails processes that are used in verge of increasing revenues. Revenue enhancement includes reducing taxpayer deductions and eliminating tax credits. It refers to raising taxes ultimately, especially by eliminating inferences or credits (Mittula, 2014).

**Tax**: Is the charge collected for maintenance or for providing the service delivery (Borg, 2006).

**Technological innovation**: refers to the development, implementation, and adoption of new or improved technologies, processes, products, or services that bring about significant advancements and positive changes (Smith 2020).

#### **CHAPTER ONE**

#### INTRODUCTION

#### 1.0 Overview

This chapter presents the background of the study, statement of the problem, research objectives, research hypotheses, significance and scope of the study.

# 1.1 Background of the Study

Revenue collection is fundamental for state and national governments that aspire to finance investments in infrastructure, human revenue personnel and provision of top-notch services to the people (Mlure, 2013). Governments collect revenue through a range of mechanisms, including taxes, fees, fines, and non-tax sources such as income from state-owned enterprises or natural resource extraction. The revenue collected is then utilized for providing public goods and services, funding infrastructure development, maintaining law and order, and implementing social welfare programs (Bird and Gendron 2017).

According to World Bank, (2021) taxation is the primary method employed by governments to generate revenue, and involves imposing compulsory charges on individuals and businesses based on their income, wealth, consumption, or transactions. Similarly, governments also collect revenue through various fees and fines. Fees are charges imposed for specific services or licenses provided by the government, such as passport fees, driver's license fees, or court fees. Fines are penalties imposed for violating laws or regulations, serving as both a deterrent and a source of revenue (Munyao, 2018). Efficient revenue collection systems are crucial for governments to meet their fiscal obligations and ensure sustainable economic development.

responsible for administering and enforcing tax laws, managing tax compliance, and collecting taxes. These agencies employ various tools and strategies, including taxpayer registration, audits, penalties for non-compliance, and promoting voluntary compliance through public awareness campaigns and simplified tax filing processes (Martinez-Vazguez and Rider 2017). For instance, the special municipalities, counties, urban and rural townships in China and Taiwan have enacted laws for the rationale of levying taxes. However, the laws are restricted or under the ambit of the Government Act that govern the allocation of government revenue and expenditure, and in 15 conformations with the Act Governing Local Tax Regulations. The laws enacted touch on land tax, building tax, vehicle license tax, amusement tax and special tax levies of which 30% of collected revenue is remitted to the national government (Government of China, 2021). Revenue collection by the United States government involves various methods to gather funds for financing public expenditures. The primary source of revenue is taxation, which includes both federal and state taxes (IRS, 2021). The federal government collects revenue through income taxes, corporate taxes, payroll taxes (such as Social Security and Medicare taxes), and excise taxes on specific goods and services. State governments also collect revenue through income taxes, sales taxes, property taxes, and other levies (Tax policy Center 2020). Additionally, the US government collects revenue from sources such as tariffs on imported goods, fees for licenses and permits, fines, and income from government-owned enterprises.

To achieve this, governments often establish tax authorities or revenue agencies

According to Arizonan, et al, (2015), revenue from taxes to gross domestic product (GDP) ratios in Asia and Latin America increased from year 2000, but still lower compared to European regions. This has been because of major reforms specially to enhance administration and compliance. While most of the reforms have been geared

towards eradicating inefficiencies, corruption has remained a challenge in many tax jurisdictions. In Africa corruption has been one of the major catalyst of tax evasion, which in return has impacted negatively on economic growth. This is also the main cause of low revenue collections to GDP in Middle East.

Similarly, revenue collection by African states is a critical component of public finance in the continent. Governments in Africa collect revenue through various mechanisms, including taxes, fees, fines, and non-tax sources (African Tax Administration Forum, 2019). Taxation is a primary source of revenue, with governments imposing taxes such as income tax, value-added tax (VAT), corporate tax, and customs duties. Additionally, fees are collected for services provided by the government, such as licenses and permits. Fines are imposed for violating laws and regulations, serving as both a deterrent and a revenue source (IMF, 2019).

In Uganda, the primary sources of revenue include taxes on income, including personal income tax and corporate income tax, as well as value-added tax (VAT) on goods and services. Excise duties are imposed on specific products such as alcohol, tobacco, and petroleum. Customs duties are levied on imported goods (URA, 2020). In Tanzania, Value-added tax (VAT) is levied on goods and services, while excise duties are imposed on specific products like alcohol, tobacco, and petroleum. Customs duties are collected on imported goods. Non-tax revenue is generated through fees, fines, licenses, and permits,

For devolved units in Africa to deliver the services required efficiently and adequately, they ought to discover new ways and methods of collecting extra revenues. Gitaru (2017) points out that a sound revenue collection structure for decentralized governments is a basic pre-condition for achieving financial decentralization. The spirit

of devolution is that decentralized governments should be in a better position than the national government to address local needs, and to deliver public services accordingly (Ataro et al., 2016). Thus, many countries have devolved government for enhancing service delivery to their citizens. It is in the same spirit that the Kenyans promulgated a new Constitution of Kenya in August 2010, which brought with it a new system of governance leading to formation of 47 counties, each, distinct but interdependent with the national government. This development has brought the need for better service delivery at County level.

According to Burch et al. (2020), county governments cannot lead the implementation of the mentioned agenda without the resources to make the necessary investments. With this background, county governments are mandated to identify and collect revenues in form of property tax, rates, tolls, fines and fees among others from local sources to boost their financial base for development of their areas of jurisdiction. In Kenya, the Constitution, specifically Article 209 permits counties to impose taxes such as the entertainment tax, property tax and or such ratified by law. Legislations to allow imposition of such taxes as business permits, vehicle parking fees, cess, markets, trade services and slaughterhouses, natural revenues, exploitations and conservancy have been put in place with the aim of enhancing revenue generation and collection (County Government Toolkit, 2020).

The spirit of decentralization is that county governments should in general, be in a better position in identifying local needs and thus accordingly be able to deliver public services better than the central government. Given this background, County governments are supposed to raise revenue from local sources to ensure enhancement of its financial base for local development. Furthermore, the county governments are expected to come up with projects and programmes that knock out poverty in their local

areas from the Internally Generated Funds (IGFs) (Karori et al. 2016). Revenue in form of taxation, excise duties, customs, licenses or other sources is very crucial in ensuring smooth execution of government operations.

# 1.1.1 Revenue Collection in County governments in Kenya

In Kenya, the mandate to collect central government revenue is vested with Kenya Revenue Authority (KRA), which is a semi-autonomous government agency, mandated to assess, collect, administer and enforce revenue administration laws (www.kra.go.ke). Electronic tax system forms major part of the revenue collection reforms by KRA that saw taxes mobilized hit trillion mark in 2015. However, the constitution of Kenya 2010 article 209(3) authorizes Counties to impose taxes, levies, fees, cess, license fees, land rates etc. County Governments are geographical units envisioned by the constitution of Kenya, 2010 as the units of devolved government. There are forty-seven county governments in Kenya established based on 1992 districts of Kenya. Their powers are provided for in Articles 191 and 192, and in the Fourth Schedule of the Constitution of Kenya and the County Governments Act of 2012. These governments are responsible for: county legislation, executive functions, functions transferred from the national government, functions agreed upon with other counties and establishment and staffing of a county public service.

According to Nyaga and Omwenga, (2016) use of information technology has positively impacted on revenue collection in most Counties. Ataro et al., (2016) in their study on revenue collection efficiency in Tranzoia County found that strong audit systems and automation of tax collection systems increased the efficiency of revenue collection. Staffing is a key driver to revenue collection in Counties, staff needs to be empowered with the requisite skills and competencies to handle the complex tax issues, need also to hired on permanent and pensionable terms so as to guarantee them some

security. Indeed, Sharon (2019) avers that employee competence directly influences employee performance, which in turn influences organizational performance. Employee competence however needs to the nurtured and cultivated.

On the same note, the primary source of revenue for County governments is the equitable share of national revenue allocated to them by the national government based on a formula determined by legislation (The Constitution of Kenya, 2010). County governments also collect revenue from local sources, including property rates, business permits and licenses, parking fees, land rates, entertainment taxes, and market fees. Additionally, county governments receive grants from the national government and donor funding for specific development projects. Revenue collection in county governments is a primary source of funding for county governments, enabling them to carry out their mandated responsibilities and provide essential services to the local population. As county governments are responsible for delivering key services such as healthcare, education, infrastructure development, and social welfare programs, sufficient revenue collection is essential for ensuring the effective functioning of these critical sectors.

#### 1.1.2 County government of Kitui

Kitui County is located 170Km to the South East of Nairobi City. It covers an area of about 30,496 km2. Kitui County shares its borders with seven counties; Tharaka-Nithi and Meru to the north, Embu to the northwest, Machakos and Kitui to the west, Tana River to the east and southeast, and Taita-Taveta to the South.Kitui County is a county in the former Eastern Province of Kenya. Its capital and largest town is Kitui, although Mwingi is also another major urban centre. The county has a population of 1,136,187. and an area of 30,430 km². It lies between latitudes 0°10 South and 3°0 South and longitudes 37°50 East and 39°0 East. The county has a population of 1,136,187 (2019)

census). and an area of 30,430 km. It lies between latitudes 0°10 South and 3°0 South and longitudes 37°50 East and 39°0 East. This is a list of all sub-counties in Kitui County. Kitui is one of the 47 counties in Kenya which is located in the former Eastern Province. It covers an area of 24,385.1 km² and has an estimated population of 1,516,500 people.

Kitui County has very many development opportunities especially in tourism, agriculture, industry, health, infrastructure among others, but most of the counties have been struggling with resource constraints in their operations. In the financial year, 2017/18 Kitui county collected total revenue of Kshs. 335 million against a target 528 million signifying an underperformance of 66.58%, and a slight improvement from the previous financial year 2016/17, where a total of Kshs. 315 millionagainst a target of 668 million was collected. In the recent financial years e.g., 2020/21, Kituicounty collected total revenue of Kshs. 326 million against a target 551 million signifying an underperformance of 40.75% as shown in table 1.1 below.

Table 1.1: Kitui County, Revenue collection in last 6 years

Financial year	Annual target	Actual Revenue	Variance	Actual Revenue/Annual Target (%)
FY 2015/16	608,200,000.00	416,188,728.00	- 192,011,272.00	68.43
FY 2016/17	668,610,000.00	315,347,363.00	- 353,262,637.00	47.16
FY 2017/18	528,413,076.00	335,122,477.00	- 193,290,599.00	63.42
FY 2018/19	859,035,058.00	443,644,680.00	- 415,390,378.00	51.64
FY 2019/20	540,000,000.00	408,285,163.00	- 131,714,837.00	75.61
FY 2020/21	551,000,000.00	326,450,311.00	- 224,549,689.00	59.25

Source: (County Fiscal Strategy paper, 2022)

Despite the moderate performance on revenue collection in the recent years, there is a strong feeling that the County has a potential of collecting more revenues. Kitui County

has very many development opportunities especially in tourism, agriculture, industry, health, infrastructure among others, but most of the Counties have been struggling with resource constraints in their operations. According to County Fiscal Strategy paper, (2022), The County government of Kitui is keen in enhancing value addition for agricultural products, which is has overtime increased household income and generated employments for women and the youths. This is going to be achieved through accelerating rural economic development through investment in the productive sectors of the economy, Promotion of savings and investment among the households and Public sector restructuring and reorganization to enhance efficiency and productivity. This study focuses on the establishing factors influencing Revenue Collection at the County of Kitui.

#### 1.2 Statement of the Problem

Citing Article 176 of the Constitution of Kenya, County governments are expected to promote social and economic development, as well as ensure access to services and opportunities for their residents (Constitution of Kenya, 2010). Adequate revenue collection plays a vital role in fulfilling this mandate by enabling county governments to invest in infrastructure projects, improve service delivery, and implement development initiatives tailored to local needs. Through revenue collection, county governments can enhance public facilities, build roads, schools, hospitals, and water supply systems, which are crucial for the well-being and socio-economic progress of the local communities. The County governments get their revenues from taxes, permit payments, CESS, license fees and other sources. However, their over-reliance on the National Government for coffers to a point of calling for a national poll to have their share increased denotes that there exists countless of challenges in revenue collection at county level.

County governments in Kenya face several challenges in relation to revenue collection. Many county governments struggle with a limited tax base, particularly in rural areas where economic activities are relatively low. Similarly, some individuals and businesses may engage in tax evasion or avoidance practices, resulting in lower revenue collection, some county governments face capacity constraints in tax administration and revenue collection due to inadequate staffing, limited technical expertise, and inadequate technological infrastructure among other factors. Thus, when the county government fails to optimally gather requisite revenues, the public is adversely affected by being denied vital services.

A report by the controller of budget of 2017 indicates that the County governments in Kenya have scarcely met their targets in collecting revenue set per year since devolution began (Mwangi, 2018). In the financial year, 2018/19KituiCounty collected total revenue of Kshs. 443 million against a target 859 million signifying an underperformance of 48.36%. This led to the downward revision of the annual target revenue in the financial year 2019/20, which gave yield to collected total revenue of Kshs. 408 million against a target of 540 million and resulting to underperformance of 24.39%. In the financial year 2020/21, Kitui County collected total revenue of Kshs. 326 million against a target 551 million signifying a shortfall of 40.75% (County Fiscal Strategy paper, 2022). Despite the slight growth in the revenue collection in the recent years, there is strong feeling that the Kitui County has a potential of collecting more revenues than witnessed in the previous financial years.

A review of existing literature showed that there is still exist a research gap on factors influencing revenue collection in county governments in Kenya. For instance, Ngicuru, Muiru, Riungu, and Shisia (2017) conducted an empirical review of factors affecting revenue collection in Nairobi County, Kenya; Abuga (2016) assessed the influence of

revenue collection efficiency on the operational performance of Kisii County Government, Kenya while Ali (2020) investigated the relationship between organizational practices and revenue collection in Garissa County, Kenya. Ngotho & Kerongo (2014) found out that submission level affects collection of revenue in Kenya. Although there are studies that have been carried out e.g, Ngicuru, Muiru, Riungu, and Shisia (2017); Abuga (2016); Ngotho & Kerongo (2014) among others, limited studies related to factors influencing revenue collection have been carried out in Kitui County. In addition, the studies have looked at various factors such as inadequacy of staff, limited tax base, non-payment and tax avoidance. Further, these studies have used various methodologies like factor analysis analysis and Structural Equation Modelling unlike the current study. This study therefore sought to fill these research gaps by determining factors influencing revenue Collection in Kitui County, Kenya.

# 1.3 Research Objectives

#### 1.3.1 General objective

The main objective was to determine the factors influencing revenue Collection in Kitui County, Kenya.

# 1.3.2 Specific Objectives

The following were specific objectives:

- To evaluate the influence of technological innovation on revenue collection in Kitui Government, Kenya
- ii. To establish the influence of employees competence on revenue Collection in Kitui Government, Kenya
- iii. To examine the influence of legal framework on revenue collection in KituiGovernment, Kenya

# 1.4 Research Hypotheses

 $\mathbf{H}_{o1}$ : Technological innovation has no influence on revenue collection in Kitui Government, Kenya.

 $H_{02}$ : Employees competence has no influence on revenue Collection in Kitui Government, Kenya.

H<sub>0</sub>3: Legal framework has no influence on revenue Collection in Kitui Government, Kenya.

# 1.5 Significance of the Study

The findings will benefit the different stakeholders such as the management of County Revenue managers, policy makers and theoretical contribution.

## 1.5.1 Kenya Revenue Authority Management

The findings from this study will help the authority to identify the bottlenecks in revenue collection mechanism and help to come up with solutions to eliminate the shortcomings in revenue collection

### 1.5.2 Future Researchers

This study will contribute in increasing stock of knowledge for future research. The students, researchers and scholars will find this study a useful guide in as far as further discussions or studies are concerned. It will therefore form a basis of further research from interested individuals on the subject of revenue collection. They will profit greatly from the study because the literature and conclusions of the study will provide apposite information from which impending knowledge may be derived. The study's recommendations will also give researchers with critical research subjects on revenue collection that have not yet been investigated, thereby bridging the knowledge gap.

# 1.5.3 Policy makers:

This study will help the relevant authorities to formulate policies for better revenue collection and improved revenue collection. It will benefit a great deal from an improved tax reforms in terms of formulating suitable tax policies and body of knowledge by providing in depth understanding of complexities prevailing in revenue collection.

This study will be useful to Kenya's government and formulators of policy, rules and laws relating to revenue collection in the nation. It will aid supervisors of revenue collecting agencies in putting governance regulations in place when it comes to revenue collection.

## **1.5.4** County management

This study will be of immense use as the country moves toward devolution. This is because the study findings will provide useful comprehension to the factors that influence revenue collection in county administrations. It will be valuable to Kenya's revenue collection authority as it will furnish evidence on the essence of automation in revenue gathering. This study will be relevant to managers especially county revenue managers will find this study useful as a point of reference as far as assisting in decision making regarding the relevance of revenue collection. The study will help managers to enhance and improve on management and administration of taxes.

# 1.6 Scope of the Study

The study was carried out in Kitui County; the County is located 170Km to the South East of Nairobi City. It covers an area of about 30,496 km2. Kitui County shares its borders with seven counties; Tharaka-Nithi and Meru to the north, Embu to the northwest, Machakos and Kitui to the west, Tana River to the east and southeast, and

Taita-Taveta to the south. The county has a population of 1,136,187 and an area of 30,430 km<sup>2</sup>.

The focus of this study was to determine factors that determine revenue collection in the county. It also narrowed down to the various factors that are perceived to be affecting revenue collection in the counties and more specifically technological innovation, staff competencies and legal framework. This study adopted explanatory research design and collected data from 340 employees of Kitui County using a questionnaire. This study was carried out between June and September 2023.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.0 Overview

This section presents a review of literature. It covered the concepts, theoretical framework, empirical literature review and the conceptual framework of the study.

# 2.1 Review of Concepts

# 2.1.1 Concept of Revenue Collection

Revenue collection refers to the process of gathering funds by a government or public entity from various sources to finance public expenditures and meet financial obligations. It involves the collection of monetary resources through mechanisms such as taxes, fees, fines, and other revenue sources (IMF 2019). Governments collect revenue through a range of mechanisms, including taxes, fees, fines, and non-tax sources such as income from state-owned enterprises or natural resource extraction. The revenue collected is then utilized for providing public goods and services, funding infrastructure development, maintaining law and order, and implementing social welfare programs (United Nations 2011).

Revenue collection is fundamental for state and national governments that aspire to finance investments in infrastructure, human revenue personnel and provision of top-notch services to the people. A World Bank research documents that the foregoing requires robust legislation and appropriate tax policies (World Bank, 2021). Taxation is the primary method employed by governments to generate revenue. It involves imposing compulsory charges on individuals and businesses based on their income, wealth, consumption, or transactions (IMF, 2019).

According to World Bank (2021), taxes can be categorized into direct and indirect taxes. Direct taxes, such as income tax and corporate tax, are levied on individuals or entities in proportion to their income or profits. Indirect taxes, on the other hand, are imposed on the sale or consumption of goods and services, such as Value-Added Tax (VAT) or sales tax. Governments also collect revenue through various fees and fines. Fees are charges imposed for specific services or licenses provided by the government, such as passport fees, driver's license fees, or court fees. Fines are penalties imposed for violating laws or regulations, serving both as a deterrent and a source of revenue (World Bank 2021).Non-tax revenue sources play a significant role in government revenue collection as well. This includes income generated from state-owned enterprises, dividends from investments, royalties from natural resource extraction, and revenue from the sale of government assets or resources (IRS, 2021).

In developing countries such as Kenya, the Constitution, specifically Article 209 permits counties to impose taxes such as the entertainment tax, property tax and or such ratified by law (Constitution of Kenya 2010). Legislations to allow imposition of such taxes as business permits, vehicle parking fees, cess, markets, trade services and slaughterhouses, natural revenues, exploitations and conservancy have been put in place with the aim of enhancing revenue generation and collection (County Government Toolkit, 2020).

Thus, efficient revenue collection systems are crucial for governments to meet their fiscal obligations and ensure sustainable economic development. To achieve this, governments often establish tax authorities or revenue agencies responsible for administering and enforcing tax laws, managing tax compliance, and collecting taxes. These agencies employ various tools and strategies, including taxpayer registration,

audits, penalties for non-compliance, and promoting voluntary compliance through public awareness campaigns and simplified tax filing processes.

# 2.1.2 Concept of Technological innovation

Technological innovation refers to the development and application of new technologies or the significant improvement of existing technologies to create novel solutions, processes, products, or services. It involves the exploration, adoption, and integration of technological advancements into various sectors and industries to drive positive change, improve efficiency, and address challenges (OECD 2015). Technological innovation has significantly transformed revenue collection in governments. Electronic filing and payment systems, data analytics, automation, and data integration have revolutionized tax administration, improving efficiency, compliance, and enforcement (Zhoeand Madhikeni2013). These technological advancements have not only simplified processes for taxpayers but also enabled tax authorities to enhance revenue collection and ensure the integrity of tax systems. Traditionally, governments used the manual systems of revenue collection by use of manual receipts. This traditional system was however faced with challenges such as collusion of the revenue officials and the revenue payers to lower the payments, high cost of administration and fraud (Owandho 2020).

Technological innovation has had a profound impact on revenue collection in governments, revolutionizing traditional tax administration and collection processes Zhoe and Madhikeni (2013). With the advent of advanced information technology, governments have increasingly turned to digital solutions to streamline revenue collection, enhance efficiency, and improve compliance Nkote and Luwugge (2010). One significant technological innovation in revenue collection is the implementation of electronic filing and payment systems (Pariwat and Hataiseere 2014). Governments

have established online platforms and portals that allow taxpayers to submit their tax returns and make payments electronically. This shift from manual processes to digital platforms has improved convenience for taxpayers, reduced administrative burdens, and minimized errors in data entry and calculation (Ajaz and Ahmed (2010).

For instance, the Internal Revenue Service (IRS) in the United States offers an electronic filing system known as e-file, allowing taxpayers to electronically file their tax returns. According to the IRS, in the tax year 2020, approximately 90% of individual tax returns were filed electronically (IRS, 2021). Similarly, the Uganda Revenue Authority (URA) has implemented an electronic tax payment system called the Electronic Revenue Collection System (eTax). The system enables taxpayers to pay their taxes online, reducing the need for physical visits to tax offices (URA, 2020). Another technological innovation that has transformed revenue collection is data analytics and automation. Governments now utilize advanced analytics tools to analyze large volumes of taxpayer data, detect patterns, identify non-compliance, and target enforcement efforts more effectively (Holniker (2015). Thus, automated systems can flag suspicious transactions, discrepancies, or potential tax evasion, enabling tax authorities to take appropriate action.

For example, the Australian Taxation Office (ATO) employs data-matching techniques to identify discrepancies between taxpayer-reported income and third-party data, such as bank transactions and employment records (ATO, 2021). This technology-driven approach enhances revenue collection by narrowing the tax gap and ensuring fairness in the tax system. Additionally, governments have leveraged data integration and information sharing among different government agencies to enhance revenue collection. By integrating data from various sources, such as tax records, property

ownership databases, and business registration records, tax authorities can identify potential tax liabilities, uncover hidden income, and improve overall compliance.

According to Mugambi, (2018) most County governments are adopting ICT-enabled revenue collection systems e.g. — M-pesa payment systems albeit not all have fully automate their systems. The use of ICT-enabled system and subsequent fully automation of revenue collection has seen counties involved enhance opportunities to increase COSR, improve transparency and thereby improved the willingness to pay duties since it has made the payment process simpler, user-friendly and faster. It has also facilitated effective keeping of tax information for future revenue target projections. Technological innovation therefore should serve to improve and keep abreast with frequent changes in technology or tackle problems that spontaneously arise (Gituma, 2017).

# 2.1.3 Concept of employees' competence

Employee competence refers to the knowledge, skills, abilities, and attributes that individuals possess and apply effectively in their roles and responsibilities within an organization (Dubois and Rothwell 2014). It encompasses the combination of technical expertise, job-specific capabilities, and personal qualities that enable employees to perform their tasks proficiently and achieve desired outcomes (Nthenge, 2020). According to Kairu and Rugami (2017) employee competence can be enhanced through staff training in increasing employee knowledge, moral and improving capacity. Competencies can be inferred from task executions that are rigid and complex (Oates, 2011).

According to Hussein and Mutswenje (2020), personnel training, and employee motivation are important tenet of employee competence especially is respect of revenue

collection. The author argues that implementation of favorable practices that improve employee competencies within county governments are likely to boost employee performance. Employees need to be competent on identifying any loopholes, and collection of property taxes, tolls, fines, rates and fees in their areas of operations (Munyao, 2018). Kimutai, Mulongo and Omboto (2017) noted that equipping county revenue officials through workshops to enhance their knowledge and skills on revenue collection enhanced their output.

Thus, employee competencies play a crucial role in revenue collection within governments. The effective administration and collection of revenue require a skilled and competent workforce that possesses the necessary knowledge, expertise, and capabilities (OECD 2018). For instance, in tax administration, employees need to be well versed in tax laws, regulations, and procedures to accurately interpret and apply them during the assessment and collection process. They should possess strong analytical skills to detect potential non-compliance, identify discrepancies, and assess the accuracy of financial information provided by taxpayers (Gatimu, 2017). Moreover, employees responsible for revenue collection should have excellent communication and interpersonal skills to engage with taxpayers, provide guidance, and resolve queries effectively. They may need negotiation and persuasion skills to encourage compliance and address any disputes or concerns raised by taxpayers.

#### 2.1.4 Legal framework

A legal framework refers to the system of laws, regulations, rules, and principles that provide the foundation for governing and regulating a particular domain or jurisdiction. It establishes the legal structure, rights, obligations, and procedures within which individuals, organizations, and entities operate and interact (IMF, 2018). The legal framework governing revenue collection in governments encompasses a

comprehensive set of laws, regulations, and policies that provide the basis for revenue generation, collection, and management. This framework varies across countries but generally includes a range of legislative and administrative measures to ensure fair, efficient, and transparent revenue collection processes (OECD 2018).

At the national level, the legal framework often consists of tax laws that define the types of taxes, rates, exemptions, and procedures for tax administration. These laws may include income taxes, value-added taxes (VAT), excise taxes, customs duties, and other levies. Additionally, laws related to tax compliance, enforcement, and penalties establish the legal consequences for non-compliance and provide mechanisms for dispute resolution (IMF 2018). Furthermore, the legal framework often includes provisions for taxpayer rights and protections to ensure fairness and equity in revenue collection. These provisions may cover areas such as taxpayer confidentiality, disclosure requirements, appeals processes, and safeguards against arbitrary or discriminatory treatment (World Bank 2018).

The Constitution of Kenya, 2010, primarily establishes the legal framework governing revenue collection in Kenya. Article 209 of the Constitution outlines the principles of public finance, including revenue generation, collection, and management. It empowers the national and county governments to impose taxes, levies, and fees within their respective jurisdictions (Constitution of Kenya, 2010). The laws that further regulate revenue collection include the Income Tax Act, Value Added Tax Act, Excise Duty Act, and various other tax and revenue-related statutes. These laws provide the legal basis for tax administration, compliance, enforcement, and dispute resolution in Kenya (Owuor 2015).

The Constitution of Kenya, 2010, and the County Governments Act, 2012, primarily guide the legal framework governing revenue collection in County governments in Kenya. These legal instruments establish the legal basis and framework for revenue generation, collection, and management at the county level (Constitution of Kenya, 2010). Under the Constitution, Article 209 outlines the principles of public finance, including revenue generation and management by both national and county governments. It grants county governments the power to impose taxes, levies, fees, and charges within their jurisdictions, subject to the limitations set by national legislation.

The County Governments Act, 2012, further provides specific provisions for revenue collection in County governments. Part IX of the Act focuses on revenue raising and financial management, including the establishment of revenue sources, tax

collection in County governments. Part IX of the Act focuses on revenue raising and financial management, including the establishment of revenue sources, tax administration, revenue sharing, and financial reporting requirements. The Act also empowers county governments to enact legislation for revenue collection, subject to the principles and guidelines set at the national level (County Government Act, 2012). Additionally, the County Finance Act is enacted by individual counties to provide a legal framework for revenue collection within each county jurisdiction. This Act typically specifies the types of taxes, rates, exemptions, and administrative procedures for revenue collection in that particular county.

#### 2.2 Theoretical Review

To fulfill the objective of this study, three theories have been adopted to guide the study. Theories are important in any research study since they provide a model to test concepts and a framework to guide the study. The following are theories underpinning this study; Optimal taxation theory, Technology Acceptance model, and Subsidiary Theory of Taxation. These theories are discussed below.

# 2.2.1 Optimal Taxation theory

The standard optimal taxation theory posits that a tax system should be chosen to maximize a social welfare function subject to a set of constraints (Mankiw, Weinzierl, &Yagan, 2009). According to Ramsey (1927) the optimal taxation theory seeks to determine how government can maximize social welfare through taxes and transfers, without increasing the sacrifice on the part of tax payers. Thus, its primary objective is to ensure fair redistribution of welfare. The theory is rooted in the concept of welfare economics, which examines how economic policies impact societal well-being. Optimal taxation theory builds upon this framework and explores the trade-offs between efficiency and equity in taxation.

One influential work in optimal taxation theory is the Mirrlees Review, led by Sir James Mirrlees and published in 2011. The review provided a comprehensive analysis of optimal tax systems and highlighted the importance of considering individuals' abilities and incentives when designing tax policies. It emphasized the need for progressive taxation, where higher-income individuals bear a larger share of the tax burden, to achieve both equity and efficiency.

Optimal taxation theory by considering the principles and findings of optimal taxation theory, researchers can analyze various factors and their impact on revenue collection efficiency and equity. It emphasizes the importance of understanding how individuals and businesses respond to changes in tax rates. Researchers can examine the elasticity of different tax sources in county governments, i.e., how changes in tax rates affect taxpayers' behavior and, consequently, revenue collection. This analysis can provide insights into the optimal tax rates and structures that balance revenue maximization and taxpayer responsiveness.

Optimal taxation theory highlights the role of taxpayer compliance in achieving revenue objectives. Researchers can study the factors that influence tax compliance behavior among county taxpayers. This may include examining the impact of tax rates, tax administration efficiency, enforcement mechanisms, and taxpayer awareness programs on compliance levels. Understanding these factors can inform policy recommendations to enhance compliance and increase revenue collection.

Similarly, this theory emphasizes the importance of considering equity when designing tax systems. Researchers can assess the fairness of county government revenue collection mechanisms by examining the distributional effects of different tax sources and rates on various income groups. This analysis can provide insights into the progressive nature of the tax system and identify any potential inequities in tax burdens across different segments of the population. By incorporating insights from optimal taxation theory, researchers can provide evidence-based recommendations for improving revenue collection in county governments in Kenya. This includes optimizing tax structures, enhancing tax compliance, promoting equity, and minimizing efficiency costs to maximize revenue generation while considering societal welfare and economic considerations.

## 2.2.2 Technology Acceptance Model (TAM)

Technology Acceptance Model (TAM) by Davis Fred (1989) is one of the most frequently used models in research to know the factors that influence the adoption of technology. The goal of TAM is to provide an explanation of the determinants of computer acceptance that is capable of explaining user behavior across a broad range of end user computing technologies and user populations, while at the same time being both economical and theoretically justified (Davis, 1989b). The TAM is utilized to

disclose how people come to acknowledge and utilize new information technology. It is a theory describing the perception of technology users (Tahar et al., 2020).

TAM is designed to predict and explain information technology acceptance and usage on the job and how users respond to the presentation of a new technology. TAM adopts the theory of Reasoned Act (TRA) model to explore the technological acceptance. The theory suggests that, when users are presented with a new piece of technology, several factors influence their decision about how and when they will use the technology (Noor Ardiansah et al., 2020). Also according to TAM, individuals accept a particular system if they believe in the system. These believe are perceived usefulness (PU) and perceived ease of use (PEOU). PU is defined as the user's perception of the degree to which using the system will improve his or her performance in the workplace. PEOU is defined as the user's perception of the amount of effort they need, to use the system.

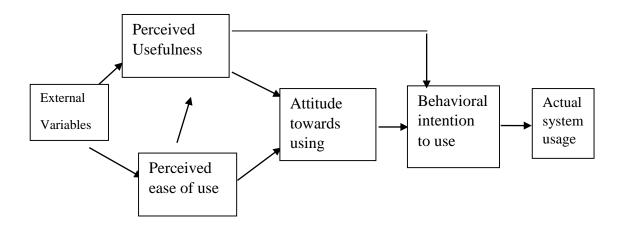


Figure 2.1: TAM representation in diagrammatic form

(Source: Davis et al., 1989)

Research in TAM suggests that users' intention to use (BI) is the single best predictor of actual system usage. The intention to use is determined by one's attitude towards using (Giner et al., 2009). This attitude is determined by perceived usefulness (PU) and perceived ease of use (PEOU) (Giner et al., 2009). Perceived usefulness (PU) is defined

as the degree to which a person believes that using a particular system would enhance his or her job performance while the perceived ease of use (PEOU) refers to the degree to which a person believes that using a particular system would be free of effort (Davis, 1989a). Main external variables or factors are related both to individuals, design and contextual variables are: objective design characteristics, training, computer self-efficacy, user involvement in design (Giner et al., 2009).

Thus, TAM provides valuable insights into this study by examining the acceptance and adoption of technology-based solutions in the revenue collection process. TAM is a widely used theoretical framework that explains individuals' acceptance and use of technology. For instance, this theory helps to explore how technology adoption in revenue collection affects the perceived usefulness of the collection process for county government employees and taxpayers. This can include assessing the impact of technology on efficiency, accuracy, convenience, and effectiveness in revenue collection.

## 2.2.3 Subsidiary Theory of Taxation

This theory was developed by Arthur Bowen in 1961. According to Bowen, wellorganized provision of services needs that decision-making is conceded by the level of
government that is neighboring the individual citizen. As long as there are local
variances in tastes and charges, there are clear competence gains from bringing services
at the home-grown level. This principle goes on to say that spending responsibilities
should only be given to a higher level of administration if it can be proven that it can
carry out the purpose more competently than the lower level (Bargozzi, 2007). The
Subsidiary Theory of Taxation is a concept in public finance that provides a rationale
for the role of taxation in achieving economic objectives and social welfare. According
to this theory, governments impose taxes as a means to generate revenue while also

serving other purposes, such as redistribution of wealth, regulation of economic activities, and provision of public goods and services (Musgrave and Musgrave 1989).

The Subsidiary Theory of Taxation asserts that taxes should be levied by the government at the most appropriate level of administration, which is typically the level closest to the taxpayers. This theory recognizes the importance of decentralization and local autonomy in taxation, advocating for lower-level governments, such as state or local governments, to have the authority to impose taxes that cater to their specific needs and circumstances (Bird and Zolt 2005). On the other hand, the Expediency Theory of Taxation focuses on the pragmatic considerations behind tax policies. It suggests that taxes should be designed and imposed based on their feasibility, efficiency, and expediency in achieving desired outcomes. This theory emphasizes the practical aspects of taxation, including the ease of implementation, the economic impact on individuals and businesses, and the administrative efficiency of tax collection.

The subsidiary theory informs this study by emphasizing the importance of decentralization and local autonomy in tax policy. This theory suggests that taxes should be levied at the most appropriate level of administration, which, in the case of county governments, would be the county level. In the study, researchers can explore how the decentralization of tax authority to county governments influences revenue collection. They can examine the extent to which county governments exercise their taxing powers and the types of taxes imposed at the county level. This analysis can help understand how the subsidiary theory is being applied in practice and its impact on revenue generation.

Furthermore, the subsidiary theory highlights the need for tax policies that are tailored to the specific needs and circumstances of counties. Researchers can investigate how

county-specific factors such as economic activities, demographics, and resource endowments influence revenue collection strategies. This analysis can provide insights into the appropriateness and effectiveness of local tax policies in meeting revenue targets and addressing local development priorities.

By incorporating the subsidiary theory of taxation, researchers can explore the role of decentralization and local autonomy in revenue collection, assess the impact of county-specific tax policies, and provide recommendations for optimizing tax systems at the county government level in Kenya.

### 2.3 Empirical Review on Factors Influencing Revenue Collection

Revenue collection is a critical aspect of government operations, as it provides the necessary financial resources for public expenditure. However, governments often face challenges in achieving optimal revenue collection due to various factors. This empirical review aims to explore the factors that affect revenue collection in governments, drawing on relevant studies conducted in this field. Studies have shown that the design and implementation of tax policies significantly influence revenue generation. According to a study by Bird and Zolt (2005), tax policy factors, such as tax rates, tax structure, and tax incentives, influence revenue collection. For instance, higher tax rates tend to discourage compliance and may lead to tax evasion. Furthermore, efficient tax administration, including effective enforcement and taxpayer services, positively affects revenue collection (Bird & Zolt, 2005).

Similarly, economic growth positively affects tax compliance and revenue collection. Similarly, economic growth has influence on revenue generation. Bahl, Martinez-Vazquez, and Wallace (2005) discovered that increases in per capita income positively influence tax revenues. These findings suggest that robust economic conditions and

income growth contribute to enhanced revenue collection. Also, studies have shown that factors such as corruption, governance, and political stability affect revenue generation. A study by Junaid et al. (2018) highlighted that corruption negatively impacts revenue collection, as it undermines trust in government institutions and encourages tax evasion. Additionally, governance qualities, including transparency and accountability, have been found to positively influence revenue collection (Junaid et al., 2018).

Similarly, political stability fosters investor confidence and economic growth, leading to increased revenue generation (Bird & Zolt, 2005). Taxpayer compliance and behavior significantly affect revenue collection. Research has explored various factors influencing compliance, such as tax morale, perceived fairness, and trust in government. Torgler and Schneider (2019) found that tax morale, which relates to citizens' intrinsic motivation to pay taxes, positively impacts revenue collection. Similarly, studies by Feld, and Frey (2017) indicated that perceived fairness and trust in government institutions are essential factors determining taxpayer compliance.

Muhaki (2019) investigated the elements that influence revenue gathering in Ugandan Local Governments. The findings showed that external and internal factors in the local governments had a detrimental impact on local government revenue prospects. Gyamfi (2014) also conducted a study on effective revenue Collection in Ghana's district assembly. The study found that data inadequacy, lack of training and revenue collections by-laws being poorly enforced, policies and regulations inhibits revenue Collection Revenue Collection is fundamental for state and national governments that aspire to finance investments in infrastructure, human revenue personnel and provision of top-notch services to the people.

Kimutai, Mulongo, and Omboto (2017) assessed the influence of training in revenue Collection in six county governments in the North Rift region. The study adopted a descriptive survey research design. The study found that training of county revenue personnel affected their output in revenue Collection by enhancing their comprehension of the work they were tasked to do. The study found that through seminars and workshops, county employees were equipped with knowledge on diverse revenue Collection strategies as well as revenue management. As result, the level of revenue collection in the counties was enhanced. The study recommended that it was crucial for employees concerned with county revenues to be trained and employed based on their qualifications.

Nyongesa (2014) explored the strategies applied by Mombasa County government in raising revenue. The study applied a descriptive case study design. The study found that the county had employed tax awareness creation strategies in raising its revenues. The study found that there was a high level of sensitization and monitoring by county staff and collection agents which had improved compliance. It was further revealed that the county intended to start a radio station which would be disseminating all crucial information to the residents of the county. This would enhance the sensitization hence making the residents understand the importance of compliance and penalties attached in case of failure to comply. Compliance would mean more revenue for the county government. This study focuses on technological innovation, staff competencies and legal frameworks as determinants of revenue collection as explained below:

#### 2.3.1 Influence of Technological innovation on Revenue collection

Technological innovation has the potential to significantly impact revenue collection in governments by improving efficiency, reducing costs, and enhancing data accuracy.

The adoption of digital tools and platforms can streamline processes such as tax filing,

payment collection, and audit procedures, leading to increased revenue generation. For example, the implementation of online tax filing systems allows taxpayers to submit their returns electronically, reducing paperwork and processing time for both taxpayers and government agencies. This efficiency can lead to more timely and accurate revenue collection. Additionally, the use of data analytics and automation can help identify tax evasion or fraud, leading to improved compliance and increased revenue.

Several studies have explored the impact of technological innovation on revenue collection in governments. Smith (2018) examined the implementation of digital tax systems in three countries and found that the adoption of technology led to a significant increase in revenue collection. The study highlighted the importance of user-friendly interfaces and secure platforms for successful implementation. Johnson and Williams (2019) analyzed the impact of digital tools, such as electronic payment systems and data analytics, on tax compliance and revenue generation. The findings indicated that technological innovations positively influenced taxpayer behavior, resulting in increased compliance rates and revenue collection.

Zhoe and Madhikeni (2013) studied technology adoption in the process of online receipting in Zimbabwe, and observed that there was a positive impact on organization performance. Online receipting adds more value as compared to the traditional manual receipting process because it gives room for more reliable online communication between the person making the payment and the recipients. Nkote and Luwugge (2010) found an affirmative association between automation and the cost and efficacy of tax administration in Uganda while studying automation and customs tax administration. Masese, (2011) in his study found that automation reduces the cost of revenue collection and the interaction between the revenue payers and the staff, which is a fertile area for corruption. Chen and Li (2020) focused on developing countries and

investigated the relationship between technological innovation and tax revenue performance. The findings suggested that countries that embraced technological advancements in revenue administration experienced higher tax revenue growth rates compared to those that lagged in adopting such innovations.

A study conducted by Ligeyo (2019) focused on system computerization and revenue gathering at Kenya's Siaya County Government. The study purposed to found out how system automation influenced revenue collection in the County. A longitudinal study was used where secondary data was considered. The study noted that 21.7 percent of the revenue streams were entirely computerized and showed solidity in revenue collection by being resilient to outside factors. Furthermore, he fully computerized systems posted higher averages than other semi-automated streams or non-automated streams. The study recommended the usage of mobile money transfers to ensure a greater effect on revenue collection. Similarly, Jananga, Bogonko and Ongi'yo (2018) carried out a study in County Government of Nakuru, to determine the impact of automation on tax gathering. The study's goal was to see how automation affected revenue gathering by the Nakuru County Government. Data was gathered from respondents via a questionnaire and it was realized that revenue collection in the county was efficient owing to the computerization of systems.

#### 2.3.2 Influence of employees' competence on Revenue collection

The competence of employees in government agencies can have a significant influence on revenue collection (Nthenge, 2020). Competent employees possess the knowledge, skills, and abilities necessary to effectively carry out revenue-related tasks, such as tax administration, auditing, and financial management (Oates, 2011). Their expertise and proficiency can contribute to improved accuracy, efficiency, and effectiveness in revenue collection efforts. According to Kairu and Rugami (2017) employee

competence can be enhanced through staff training in increasing employee knowledge, moral and improving capacity. Smith (2019) examined the relationship between employees' competence and revenue collection in government agencies. The research utilized survey data from multiple government departments and conducted statistical analyses. The findings established that indeed staff competencies influences at the large extent revenue outcomes.

According to Hussein and Mutswenje (2020), personnel training, and employee motivation are important tenet of employee competence especially is respect of revenue collection. The author argues that implementation of favorable practices that improve employee competencies within county governments are likely to boost employee performance. On the same note, Munyao (2018) reiterate that the implementation of county government agenda regarding revenue collection cannot be done without requisite human revenues and competencies. Employees need to be competent on collection of property taxes, tolls, fines, rates and fees in their areas of operations. Certainly, Kimutai, Mulongo and Omboto (2017) noted that equipping county revenue officials through workshops to enhance their knowledge and skills on revenue collection enhanced their output. Training and work experience aids in building capacity and consequently employee productivity. Indeed, it is important for employees to have revenue analytical skills, tax administration skills, laws and regulations affect the amount of revenue collected (Gatimu, 2017).

On similar note, Bird (2013) identified that hiring inadequate administrative staff and lack of necessary skills was one of the major reasons for poor revenue collection. He further noted that hiring of revenue officials with inadequate knowledge of the tax laws and the basic tax computation skills is a hindrance to effective revenue collection. The general revenue administration requires personnel with the relevant skills and

knowledge in order to maintain and operate the revenue systems (Kayega 2010). Simiyu (2010) carried out an analysis on bottlenecks impacting gathering of turn-over-tax at Nairobi City County, Kenya. He observed that revenue officials took inducements given to lessen tax obligations. Revenue collection was rundown by unlawful practices such as decreasing taxable values, and manipulation of records by county revenue officials. Pashev (2019) also noted that there was collusion between the revenue administrators and revenue remitters to reduce charges and in exchange receive unlawful payments. Baurer (2018) argued that failure to deal with incompetent staff creates difficulties and interferes with business continuity.

Mutuhallah (2007) analyzed the source of revenue in Nairobi city council and found out that revenue received from advertisements, billboards, public health rates and rents and single business permits among other sources are able to sustain the city but issues like political interference contribute up to 60 percent of the revenue mismanagement. This is to shows that local authorities have the capacity to collect enough revenue to sustain their activities if there are no negative interferences.

A study by Tsumba (2020) evaluated the bases of revenue generation in Kenyan Counties. The purpose of the research was to look into elements that influence revenue collection in Kenyan counties. One of the specific objects of the research was to measure the weight of staff skills and competence on revenue generation in the country. A descriptive research design was adopted where 305 respondents partook in the study. The findings illustrated that 30 the revenue staff proficiency had a substantial effect on revenue generation. The study resolved that staff skills and competencies had an affirmative effect on revenue gathering.

A study conducted by Jepkoech, Tibbs and Tsuma (2021) delved into the affiliation between revenue staff proficiency and revenue pooling efficiency in Nandi County. The major aim was to scrutinize the association between revenue staff proficiency and revenue collection in Nandi County Government. Employees of the revenue department were considered. A survey and explanatory research design were deployed. Questionnaire was used to obtain data from the targeted respondents. The results exposed that revenue staff competence had an affirmative and substantial impact on revenue collection effectiveness. It was recommended that the staff be furnished with skills, and ICT to ensure effect delivery of strategies for revenue collection and collection

### 2.3.3 Influence of Legal framework on Revenue collection

The legal framework sets the stage for revenue collection by defining the rights, obligations, and responsibilities of both taxpayers and government authorities (Anderson 2020). It encompasses various aspects that directly influence revenue generation, such as tax legislation, administrative procedures, and compliance mechanisms (World Bank, 2021). For instance, the special municipalities, counties, urban and rural townships in China and Taiwan have enacted laws for the rationale of levying taxes. However, the laws are restricted or under the ambit of the Government Act that govern the allocation of government revenue and expenditure, and in 15 conformation with the Act Governing Local Tax Regulations. The laws enacted touch on land tax, building tax, vehicle license tax, amusement tax and special tax levies of which 30% of collected revenue is remitted to the national government (Government of China, 2021).

The legal framework significantly influences revenue collection in governments by providing the structure, rules, and mechanisms necessary for effective taxation (Smith

2017). A well-designed legal framework ensures clarity, predictability, enforceability, and fairness, fostering taxpayer compliance and minimizing tax evasion (Brown and Davis 2018). Governments should continually review and update their legal frameworks to adapt to changing economic conditions, technological advancements, and international tax developments, ultimately enhancing revenue collection outcomes (Johnson and Martinez 2019). Gyamfi (2014) also conducted a study on effective revenue collection in Ghana's district assembly and found out that data inadequacy, lack of training and revenue collections by-laws being poorly enforced, policies and regulations inhibits revenue collection Revenue.

A study by Kumar and Bhattacharya, (2020) highlighted the significance of tax legislation in revenue collection. Clear and well-defined tax laws are found to positively impact compliance levels, leading to higher revenue collection. The study reveals that taxpayers' understanding of their obligations and the transparency of tax laws are crucial factors that influence compliance behavior. Additionally, the presence of robust anti-avoidance provisions is shown to deter tax evasion and protect revenue streams. Furthermore, the study suggested that tax laws that remain responsive to changing economic conditions, technological advancements, and global tax developments tend to be more effective in capturing revenue from evolving sources.

Price and Forrest (2012) faulted poor organization as having a negative impact on the permit framework. This is because appropriate business registers are not usually in place, which means that business permit framework, is not exhaustive. Margolis (2014) further identified high consistence cost to the organizations, tax structures that do not reflex the ability to pay, poor organization and avoidance as some of the challenges facing Collection of revenues by local governments. African countries collect less property tax as compared to countries in other continents.

In Kenya, the Constitution, specifically Article 209 permits counties to impose taxes such as the entertainment tax, property tax and or such ratified by law. Legislations to allow imposition of such taxes as business permits, vehicle parking fees, cess, markets, trade services and slaughter houses, natural revenues, exploitations and conservancy have been put in place with the aim of enhancing revenue generation and collection (County Government Toolkit, 2020). Thus, tax legislation plays a crucial role in revenue collection by providing the legal framework for revenue collection. Clear and well-defined tax laws enhance transparency, facilitate compliance, and deter tax evasion. County governments must strive to design tax legislation that promotes voluntary compliance, incorporates anti-avoidance measures, and adapts to changing circumstances. By doing so, governments can optimize revenue collection while maintaining a fair and equitable tax system.

## 2.4 Research Gap

From the literature review, many studies on revenue collection have been done in industrialized nations while a number of studies in underdeveloped nations remain low. Related studies by scholars such as Biwott (2017) have assessed the approaches of revenue collection and their impact social coupled with economic development in Kenya. However, none of the studies have analyzed specifically the determinants of revenue collection in Kitui County. Local authorities are struggling to meet their mandate due to their expenditure exceeding the revenue mobilized and therefore this study makes an effort to fill the gap. Hence, this study is timely and relevant. The studies reviewed in this study revealed that major financial reforms in Kenya were introduced in the 1990s with an aim of improving service delivery and local infrastructure. However, few studies have been done out to measure the effectiveness of the revenue collection on the improvement of counties in service delivery.

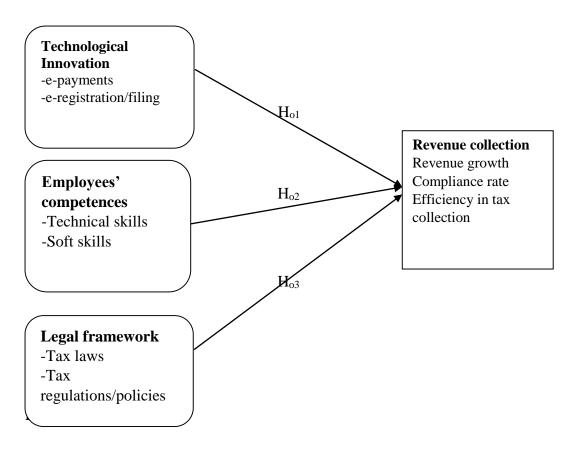
Many studies that have been done involving management of revenues have always indicated that corruption could be the greatest factor affecting service delivery and subsequent implementation of viable projects aimed at uplifting the standards of living for the residents. With the introduction of county governments in Kenya, counties have had to generate their own local revenues to enable them provide efficient services to the public. Most reports indicate inadequate revenue collection by county governments. While studies have been conducted on revenue collection in government settings, there remains a research gap specifically focusing on factors influencing revenue collection in county governments. County governments play a critical role in local governance and finance, and understanding the factors that impact their revenue collection is essential for effective fiscal management. However, limited research has been conducted to explore the unique factors that influence revenue collection in the context of county governments. Addressing this research gap can provide valuable insights into the dynamics of revenue generation at the county level and contribute to informed policymaking and resource allocation. This study seeks to evaluate the factors influencing revenue collection within county governments in Kenya.

### 2.5 Conceptual Framework

Conceptual framework tries to relate the relationship between independent variables and dependent variables. In this study, revenue collection in Kitui county government in Kenya is being viewed as a dependent variable while technology innovation, legal tax framework, and employees' competence constitute the independent variables as shown in figure 2.2 below.

# **Independent Variables**

# **Dependent Variable**



 $\ \ \, \textbf{Figure 2.2: Conceptual Framework} \\$ 

Source (Researcher 2022)

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.0 Overview

This chapter presents research methodology, which includes research design, target population, sample size and sampling techniques, data sources, types and procedures, data collection instrument, measurement of the variables, data analysis, model specification, regression assumptions and ethical considerations.

### 3.1 Research Design

Research design is a framework or blueprint for conducting the research. In simple words it is the general plan of how the researcher will go about his research (Hussain, 1976). The research design is the specific plan that a researcher follows/selects in order to accomplish a certain study in a more thorough and in logical manner. In addition, research design involves the overall plan developed by a researcher to complete a study and ensure that all defined objectives and the established research topic are effectively addressed (Siedlecki, 2020).

In addition, it includes the researcher's plan for gathering, measuring, and analysing the available data. Therefore, the study employed an explanatory research design to complete the current study. This research design enabled the researcher to obtain data from a randomly sampled respondent from the County government. In addition, the explanatory research design gave ability to randomly sample respondents hence allowing for more accurate findings across a greater number of respondents.

## 3.2 Target Population

Mugenda and Mugenda (2003) define target population as the entire group a researcher is interested in or the group about which the researcher wishes to draw conclusion. Also,

target population is considered as an entire set of units/items upon which research data is obtained in order to make inferences about the population. Therefore, the target population of the current study was 340 employees of Kitui County government, which comprised of 182 revenue collectors, 139 operations staff in the ministries and 19 senior executive in the County as shown in the table below.

**Table 3.1: Target Population** 

S/no	Strata	Population
1.	Senior executive officers	19
2.	Operation officers	139
3.	Revenue collectors	182
	Total	340

Source: (Kitui County, HR department, 2023)

The above mentioned employees were directly or indirectly responsible for revenue collection and as such they were assumed to be in a good position to understand the issues that affect optimal revenue collection by the county government.

#### 3.3 Sampling Techniques and Sample Size

#### 3.3.1 The Sampling Procedure

Stratified random sampling and purposive sampling was adopted on the reasoning that, the three categories of employees namely revenue collectors, operation officers, and senior executive officers are relatively heterogeneous. The three categories imply three strata. Within each stratum, the respondents were homogeneous. In addition, random sampling was conducted amongst respondents in each stratum. Stratified random sampling is expected to return less error than simple random sampling.

# 3.3.2 Sample Size

Sample size is a sub-set of the total population that is used to give the general views of the target population (Kothari 2004). The sample size must be a representative of the population on which the researcher would wish to generalize the research findings. Sampling is appropriate when it is not possible to involve the whole population under study. As mentioned above, stratified random sampling and purposive techniques were employed to select employees who gave information that is believed to be critically important to this study. Furthermore, the Krejcie and Morgan table (t table) was used to give an ideal sample size of one hundred and eighty one (181) employees whom they provided data through questionnaires as shown in table 3.2 below.

Table 3.2: Sampling technique

Strata	Sampling techniques	Sample		
		Proportion		
Top level management	Purposive & stratified sampling	10		
	& Krejcie and Morgan table (t table)			
Middle level management	Purposive & stratified sampling	74		
	& Krejcie and Morgan table (t table)			
Lower level of	Purposive & stratified sampling	97		
management	& Krejcie and Morgan table			
	(t table)			
Total		181		

### 3.4 Data Collection Method

The study collected data from primary sources. According to (Ajayi, 2017) primary data refers to the data originated by the researcher for the first time. It involves data that has not been published yet and is more reliable, authentic and objective. The researcher obtained data from primary sources using self-administered questionnaires as elaborated below.

## 3.5 Data Collection Instruments

This study will obtain data through use of a structured questionnaire. Rotich (2016), reiterate that questionnaire is cost effective and easy to administer. In this study, the

questionnaire was used to collect data from 181 staff at Kitui County. This was chosen because study participants are presumed to be well educated and able to properly answer questions. Questionnaires are relatively quick and easy to prepare code and interpret, especially in the case of closed questions (Cooper & Schindler, 2011).

#### **3.6 Data Collection Procedure**

Given the nature of the survey interaction, the researcher, assisted by two research assistants who physically distributed questionnaires (through drop and pick approach) to the respondents and followed up for the completion to ensure they are completed and returned back within 5 days. For those respondents who were not available for a sit-in filling of the questionnaire, the researcher provided an online questionnaire for filling.

## 3.7 Pilot Testing

Pilot testing is an important component of the data collection process. A pilot test on a selected sample of respondents was conducted in order to ascertain the validity and reliability of the questionnaire before being administered to the target population. It is usually a small-scale trial run of all the procedures planned for use in the main study. In particular, pilot testing was achieved by administering questionnaire to 19 revenue collectors in the neighboring County of Machakos. According to Cooper and Schindler (2010) and Mugenda & Mugenda (2003), a sample of at least 10% of the population is usually acceptable in a pilot study. Machakos County was selected for pilot to avoid having the same respondents participating in the actual study.

### 3.8 Reliability and Validity of Research Instrument

## 3.8.1 Reliability of Research Instruments

Reliability is an assessment of the degree of consistency between multiple measurements of a variable (Hair, Black, Babin, & Anderson, 2010). Reliability is a

measure of the degree to which a research instrument yields consistent results or data after repeated trials (Mugenda & Mugenda, 2003). Reliability relates to the consistency of the data collected and degree of accuracy in the measurements made using a research instrument. Reliability of the research instruments was determined during the pilot study where consistency of responses from the respondents was evaluated. In particular, reliability of the instrument was tested using Cronbach Alpha which the results showed coefficients above 0.7, and thus, regarded as reliable.

### 3.8.2 Validity of Research Instruments

Validity is the ability of an instrument to measure what it is designed to measure. It is the correctness or credibility of a description, conclusion, explanation, interpretation, or other sorts of account (Kumar, 2005). Validity-Content validity is whether or not the measure used in the research covers all of the content in the underlying construct (the thing you are trying to measure). A construct represents a collection of behaviors that are associated in a meaningful way to create an image or an idea invented for a research purpose. Construct validity is the degree to which your research measures the construct (as compared to things outside the construct). Thus, this study employed both content and constructs validity. To determine validity, guidance from the supervisor was taken into account to ensure that the instruments were constructed accurately to guarantee proper content and accuracy of variables under study.

#### 3.9 Measurement of Variables

This is the process of defining variables into measurable factors and ensuring that the survey items of each construct are quantified (Steimberg et al., 2019). The variables was measured using five point Likert scale of 1-5 where 1= strongly disagree, 2= disagree, 3= neutral, 4= agree and 5= strong agree. The study had two variables namely; dependent and independent as elaborated below:

**Table 3.3: Operationalization and Measurement of Variables** 

Types of variables	Variables	Operational Indicators (Measurements)	Data transformation process (Measurement scale)	Authors of Measurements
Independent variable	Legal tax framework	<ul> <li>Tax laws, policies and regulation</li> <li>Operationalization of the tax laws</li> <li>Property tax</li> <li>Single business licenses issued</li> </ul>	5- point Likert scale	<ul> <li>(World Bank, 2021).</li> <li>Gyamfi (2014),</li> <li>(Government of China, 2021),</li> <li>(County Government Toolkit, 2020).</li> <li>Fishlow and Friedman (2014),</li> <li>Richard and Erid (2012),</li> <li>De Cesare (1997)</li> <li>Zodrow (2003),</li> <li>Richard and Erid (2012),</li> <li>Chesbrough (2003)</li> <li>Fjeldstad et al. (2004) and</li> <li>Jibao (2009)</li> </ul>
Independent variable	Employees competence	<ul> <li>Understanding of tax laws</li> <li>Tax administration skills</li> <li>Technical skills</li> </ul>	5-point Likert scale	<ul> <li>Holniker (2005)</li> <li>Wasilewski (2000),</li> <li>Panday (2006),</li> <li>Zhoe and Madhikeni (2013), Panday (2006,</li> <li>Nkote and Luwugge (2010) Masese, (2011),</li> <li>Pariwat and Hataiseere (2004),</li> <li>Otieno et al, (2013),</li> <li>Muema et al, (2004), Kinyanjui and Kahonge, (2013),</li> <li>Masese, (2011),</li> <li>Ligeyo (2019),</li> <li>Jananga, Bogonko and Ongi'yo (2018)</li> </ul>
Independent variable	Technological innovation	<ul> <li>Use of information systems</li> <li>Online payments •         E-receipting     </li> <li>Business systems</li> </ul>	5-point Likert scale	<ul> <li>Holniker (2005, Wasilewski (2000),</li> <li>Panday (2006),</li> <li>Zhoe and Madhikeni (2013), Panday (2006),</li> <li>Nkote and Luwugge (2010) Masese, (2011),</li> <li>Pariwat and Hataiseere (2004), Otieno et al, (2013),</li> <li>uema et al, (2004),</li> </ul>

				<ul> <li>Kinyanjui and Kahonge, (2013),</li> <li>Masese, (2011),</li> <li>Ligeyo (2019), Jananga, Bogonko and Ongi'yo (2018)</li> </ul>
Dependent variable	Revenue Collection	<ul> <li>Amount collected</li> <li>Number registered</li> <li>Level of compliance</li> </ul>	5-point Likert scale	<ul> <li>(World Bank, 2021),</li> <li>(Government of China, 2021),</li> <li>(County Government Toolkit, 2020).</li> <li>Sharon (2019),</li> <li>Gyamfi (2014).</li> <li>Muhaki (2009) and (Kirimi, 2015).</li> <li>Ajaz and Ahmed (2010 and Gidisu (2012), (Kirimi, 2015).</li> </ul>

### 3.9 Data Analysis and Presentation

Data analysis is defined as a process of cleaning, transforming, and modeling data to discover useful information for business decision-making (Mugenda and Mugenda, 2003). Data analysis is a process used by researchers for reducing data to a story and interpreting it to derive insights. The data analysis process helps in reducing a large chunk of data into smaller fragments, which makes sense. In this study, quantitative data analysis was adopted due to the nature of the study.

## 3.9.1 Descriptive analysis

With the use of Statistical Package for Social Sciences (SPSS) version 21.0, analytical tool, data was coded to facilitate computer input or entry. The actual data analysis was carried out by use of descriptive statistical approaches; which included measures of frequency (i.e. Count, percentage, frequency); measures of central tendency (i.e. mean, median, and mode) and measures of dispersion/variance i.e., range standard deviations and variance.

#### 3.9.2 Inferential analysis

In order to determine the relationship between study variables, correlation and regression analysis was adopted. By using p-values from regression test, the entire stated hypothesis was tested to prove the null hypothesis stated in the early chapters of this study.

### 3.10 Empirical Model

In this study, a linear regression model was used to determine the effects of multiple independent variables on the dependent variable. It was important to carry out regression analysis so as to establish the extent of the influence exerted on the

47

dependent variable by the independent variable. The regression model that was used for hypothesis testing was as follows:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Where:

Y = Revenue Collection

 $\beta_0$  = Constant term

 $\beta_{1,2,3}$  = Beta coefficients

 $X_1$ = Technological innovation

X<sub>2</sub>=Employees competence

X<sub>3</sub>=Legal framework

 $\varepsilon = Error$ 

## **3.11 Test of Regression Assumptions**

Additionally, diagnostic tests were carried out before testing the model above. These include Linearity test, Normality test, Multicollinearity test and Heteroscedasticity test (Williams et al., 2013).

### 3.11.1 Normality test

The Shapiro-Wilk Test was carried out to test whether the score of the samples was 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).

### 3.11.2 Linearity test

Linearity concept assumes that the relationship between the independent variables and dependent variable is linear that is there is relationship between the independent variables and dependent variable. This was checked using F statistic in ANOVA. Probability value (p value) < 0.05 implies Linearity Probability value (p value) >0.05 implies that variables are not Linearity related.

### 3.11.3 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. The study will adopt the variance inflation factors and the tolerance levels. Variance Inflation Factor (VIF) and the Tolerance are indicators of multicollinearity. VIF indicates the magnitude of the inflation in the standard errors associated with Multicollinearity (Ayako & Wamalwa, 2015). A VIF of more than 10 (VIF >10 indicates a problem of multicollinearity (Montgomery, 2001) The commonly used cut-off points for determining the presence of multicollinearity are (tolerance value of less than 10, or a VIF value of above 10). To determine whether multicollinearity existed, collinearity test was conducted using, Tolerance and Variance Inflated Factor (VIF).

#### 3.12 Ethical Consideration

Ethical considerations can be specified as one of the most important parts of the research. According to Bryman and Bell (2007) the following principles of ethical considerations is considered during research; the person participating in the study was fully informed about the study being conducted. This enabled them to make an informed decision as to whether they will participate in the evaluation or not. Voluntary participation was encouraged; this means that people participated in the study without any coercion. Participants were free to withdraw their participation at any time without negatively impacting on their involvement in future studies. Also measures were also taken to ensure that participants are not subjected to harm in any way whatsoever. Anonymity of individuals and organizations participating in the research were ensured.

Privacy and anonymity of respondents was treated with paramount importance. Similarly, research authorization from NACOSTI and Moi University was sought before the beginning of data collection.

#### **CHAPTER FOUR**

#### DATA PRESENTATION, ANALYSIS AND INTERPRETATION

#### 4.1 Overview

This chapter presents an analysis of the data that was gathered using the tools of research discussed in chapter three. First section 4.2 provides information on the response rate of respondents. Section 4.3 then presents and discusses the demographic information of the respondents including; age distribution, level of formal education and designations of the participants. Section 4.4 presents descriptive findings based on the objectives of the study. Section 4.5 presents inferential tests to determine the relationship between study variables and finally 4.6 discusses the findings of the study.

## **4.2 Response Rate**

The researcher distributed 181 questionnaires and 176 were returned representing 97.2%. However, 5 of the questionnaires representing 2.8% were not returned by the respondents due to their busy schedule. Usually, a response rate of 70% and above is ideal for a study since it is an excellent representation of the population to avoid biasness. Thus, a response rate of 97.2% was found suitable for analysis and making interpretations and conclusions for this study as presented on Table 4.1.

**Table 4.1: Response rate** 

	Frequency	Percentage (%)
Responded Questionnaires	176	97.2
Non-responded Questionnaires	5	2.8
Total	181	100

Source: (Field data, 2023)

## 4.3 Demographic Information

## 4.3.1 Age distribution

Out of 176 respondents, majority of the respondents 53(30.1%) had age between 31 and 40 years, while 52(29.5%) of the respondents had age bracket between 26 to 30 years. Respondents aged between 41–50 years were 29(16.5%), those with over 50 years were 24(13.6%) and finally a few 18(10.2%) had age between 18 to 25 years as shown in table 4.2 below.

**Table 4.2: Age distribution** 

8	Frequency	Percentage (%)
18-25 years	18	10.2
26-30 years	52	29.5
31-40 years	53	30.1
41-50 years	29	16.5
Above 50 years	24	13.6
Total	176	100

Source: (Field data, 2023)

#### **4.3.2** Level of education

The distribution of respondents in the study in respect to educational level is reflected in figure 4.1 below. The majority of the respondents 55 had high school qualification and they accounted for 31.3%. They were followed closely by holders of Bachelors degrees who were 54 and accounted for 30.7% while respondents who were Diploma holders were 49 and formed 27.8%. Finally, holders of postgraduate degrees were 18 and accounted for 10.2% of the total respondents. The analysis indicated that the majority of the respondents had a good educational background and were capable of analyzing the factors affecting revenue collection at the County.

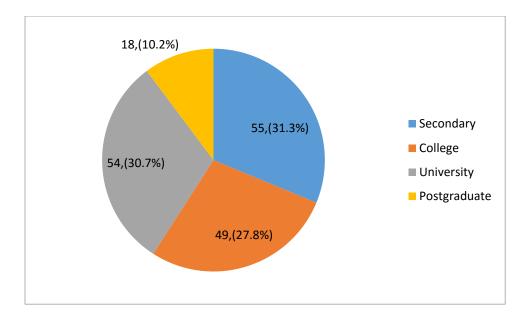


Figure 4.1: Level of education

Source: (Field data, 2023)

## 4.3.3 Designation

The respondents were asked to state their designation. The findings revealed that majority of them 68(38.6%) were operational staffs, while 53(30.1%) are have other titles, 49(27.8%) were revenue collectors at the County, and 6(3.4%) were executive officers as shown in table 4.3 below. Thus, the respondents in this study have the understanding and ability to give information on factors influencing revenue collection at the County.

**Table 4.3: Designation** 

	Frequency	Percentage (%)
Revenue collector	49	27.8
Executive officer	6	3.4
Operational staff	68	38.6
Others	53	30.1
Total	176	100

Source: (Field data, 2023)

### **4.4 Descriptive Tests**

#### 4.4.1 Technology Innovation in Revenue Collection

Technology innovation in revenue collection holds significant importance in modernizing financial systems, streamlining processes, and enhancing efficiency. Advancements such as digital payment platforms, automated tax filing, and data analytics offer numerous benefits. The first objective of this study was to evaluate the influence of technological innovation on revenue collection in Kitui Government, Kenya.

The descriptive findings provided valuable insights into the implementation of automation and modern technologies in revenue collection at the County. The findings indicated that there has been a successful transition from manual or cash payment systems to technology-based methods, as evidenced by a mean rating (M) of 3.8 with a relatively low standard deviation (SD) of 0.7. However, this positive shift is constrained by challenges related to unstable power, unreliable Internet access, and the rapid pace of technological change, reflected in a similar mean rating of 3.8 but with a slightly higher standard deviation of 0.9.

Importantly, the adoption of automation has yielded significant benefits. Respondents reported both direct and indirect reductions in administration costs, contributing to improved efficiency in revenue collection, with a mean rating of 4.0 and a standard deviation of 1.0. Additionally, the technological solutions implemented have facilitated timely reporting on revenue collection and have led to efficient and enhanced revenue growth, with mean ratings of 4.0 and 4.1 respectively, both with standard deviations around 1.0.

Thus, the findings underscore the positive impact of automation and modern technologies on revenue collection processes at the County. Despite challenges, the shift towards technology-based approaches has brought about notable advantages, including cost savings, improved reporting accuracy, and overall revenue growth. These insights emphasize the need for continued investment in technological infrastructure and strategies to address challenges, ultimately supporting more effective and sustainable revenue collection practices.

Table 4.4: Technology innovation in Revenue collection

		Std.				
	Mean	Dev.	Min.	Max.	N	
County government has adopted new technologies, machines/equipment for revenue collection	3.3	.8	1.0	5.0	176	
Automation and modern technologies have replaced manual or cash payment system in the collection of revenues	3.8	.7	1.0	5.0	176	
Technology adopted is hampered by unstable power and unreliable Internet and rapid technological change	3.7	.9	1.0	5.0	176	
Automation has resulted in direct and indirect reduction in administration cost and increased effectiveness in revenue collection	4.0	1.0	1.0	5.0	176	
The technological solutions adopted have enabled timely reports on revenue collection	4.0	1.0	1.0	5.0	176	
The automated systems adopted in the revenue collection have led to efficient and improved revenue growth	4.1	.9	1.0	5.0	176	
Mean & Std Dev.	3.8	.9				

Source: (Field data, 2023)

### 4.4.2 Employee competence in Revenue collection

Employee competence in revenue collection is essential for efficient and effective financial management. Competent employees are well-trained, knowledgeable, and skilled in various aspects of revenue collection, including tax assessment, auditing, data analysis, and customer service. The second objective of this study was to establish the influence of employee competence on revenue Collection in Kitui Government, Kenya. The descriptive findings provided insights into the tax administration skills and knowledge possessed by County government employees. On average, employees are perceived to have a moderate level of tax administration skills, as indicated by a mean rating of 3.0 with a standard deviation of 1.1. This suggests a range of perceptions about the extent of their efficiency in their work. Employees' understanding of tax structure and systems is slightly lower, with a mean rating of 2.9 and a standard deviation of 1.2. This indicates room for improvement in enhancing their grasp of these intricacies.

However, the findings indicate a positive trend in understanding tax law and related regulations, with a higher mean rating of 4.0 and a low standard deviation of 0.9. Similarly, employees are perceived to possess strong return analysis skills (mean = 3.9, SD = 0.9). Remarkably, the findings highlight the employees' proficiency in both technical and soft skills, with a mean rating of 4.2 and a standard deviation of 0.8. Additionally, the respondents strongly believe that employees have received adequate training on the use of e-filing systems, as reflected by a high mean rating of 4.3 and a standard deviation of 0.9.

Therefore, the findings suggest a mixed perception of County government employees' tax administration skills and knowledge. While there is room for improvement in some areas, such as a deeper understanding of tax structures and systems, the results also highlight strengths in understanding tax laws, return analysis, and possessing a

combination of technical and soft skills. Furthermore, the high rating for adequate training on e-filing systems is promising, indicating an investment in enhancing employees' technological competencies. Overall, these findings emphasize the importance of continuous training and skill development to ensure a competent and efficient workforce in tax administration within the County government.

**Table 4.5: Employee competence in Revenue collection** 

	Std.				
	Mean	Dev.	Min.	Max.	N
County government employees have tax	3.0	1.1	1.0	5.0	176
administration skills which have helped them					
to be efficient in their work					
County government employees have deep	2.9	1.2	1.0	5.0	176
understanding of tax structure and systems					
County government employees understand	4.0	.9	1.0	5.0	176
the tax law and other regulations that guide					
taxation in the County					
County government employees have return	3.9	.9	1.0	5.0	176
analysis skills					
County government employees have both	4.2	.8	1.0	5.0	176
technical and soft skills that has helped them					
perform in their duties					
County government employees have	4.3	.9	1.0	5.0	176
adequate training on the use of e-filing system					
Mean &Std Dev.	3.7	1.0			

Source: (Field data, 2023)

## 4.4.3 Legal framework in Revenue Collection

A strong legal framework is crucial for effective and transparent revenue collection. It provides the legal basis for taxation, outlining the rights and responsibilities of both tax authorities and taxpayers. The third objective of this study was to examine the influence of legal framework on revenue collection in Kitui Government, Kenya. The descriptive

findings provide insights into the policies, regulations, and operational aspects of revenue collection within the County government. On average, the respondents perceive that the County has established strong policies, rules, and regulations governing revenue collection, with a mean rating of 4.2 and a standard deviation of 0.9. This indicates a high level of agreement that such policies are in place to guide the process.

Similarly, respondents believe that these policies and regulations are available to the public, although the mean rating of 4.0 and standard deviation of 1.3 suggest some variability in this perception. The legal framework governing revenue collection is perceived to be well-defined, containing administrative procedures, as reflected by a high mean rating of 4.4 and a standard deviation of 1.0. Operational reforms have been introduced to enhance efficient revenue collection, with a mean rating of 3.7 and a standard deviation of 1.1. This indicates some variation in the perception of the effectiveness of these reforms.

Moreover, there is a belief that an e-government strategy governs revenue collection within the County, with a mean rating of 4.0 and a standard deviation of 1.0. The operationalization of County bills, regulations, and policies within stipulated timeframes is perceived favorably, as indicated by a mean rating of 4.2 and a standard deviation of 1.0. Therefore, the findings suggest that the County government has established comprehensive policies, rules, and regulations to govern revenue collection. While the availability of these documents to the public and the operational effectiveness of reforms show some variability in perceptions, the legal framework and e-government strategy receive positive ratings. Overall, these findings highlight the importance of transparent, efficient, and well-defined policies and strategies in revenue collection within the County government.

**Table 4.6: Legal framework in Revenue collection** 

		Std.			
	Mean	Dev.	Min.	Max.	N
County government have put in place	4.2	.9	2.0	5.0	176
policies, rules and regulations governing					
revenue collection within the county					
The policies, rules and regulations	4.0	1.3	1.0	5.0	176
governing revenue collection within the					
county are available to the public					
The legal framework contains	4.4	1.0	1.0	5.0	176
administrative procedures that govern the					
process of revenue collection					
There are some operational reforms that	3.7	1.1	1.0	5.0	176
have been introduced and implemented to					
ensure efficient revenue collections					
There are e-government strategy governing	4.0	1.0	1.0	5.0	176
revenue collection within the county					
County bills, regulations and policies are	4.2	1.0	1.0	5.0	176
operationalized within stipulated time					
Mean &Std Dev.	4.1	1.0			

Source: (Field data, 2023)

## **4.5 Diagnostic Tests**

### 4.5.1 Linearity test

The linearity test is a crucial step in regression analysis and other statistical modeling techniques. It helps assess the validity of one of the fundamental assumptions underlying linear regression models: that the relationship between the independent variables and the dependent variable is linear. In this study, linearity test was carried out by use of scatter plots of the observed data against the predicted values from the model. Results showed the points in the scatter plot are randomly distributed around a horizontal line, suggesting that the linearity assumption is met as illustrated below.

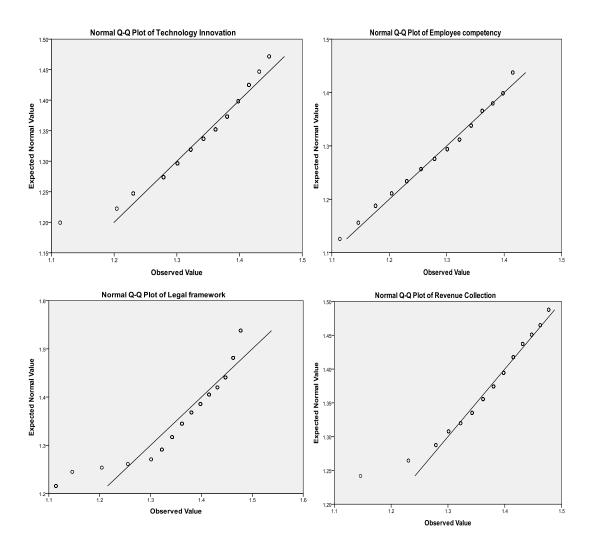


Figure 4.2: Linearity Q-Q plots

Source: (Field data, 2023)

## **4.5.2** Test of Normality

In this study Shapiro-Wilk test was used to assess whether a dataset follows a normal distribution. A normal distribution is a symmetric bell-shaped curve, and many statistical analyses assume that the data are normally distributed. The test calculates a p-value, which indicates the likelihood of obtaining the observed distribution if the data were sampled from a normal distribution.

Generally, if the p-value is greater than 0.05, the data are considered to be approximately normally distributed. Thus, from the results below, there is no significant evidence to reject the assumption of normality for any of the variables. This suggests

that the data for technology innovation, employee competence, legal frameworks and revenue collection is assumed to be approximately normally distributed, allowing for the use of statistical analyses that assume normality.

Table 4.7: Normality test

	Sh	Shapiro-Wilk				
	Statistic	df	Sig.			
Technology Innovation	.939	176	.070			
Employee competency	.970	176	.101			
Legal framework	.829	176	.190			
Revenue Collection	.949	176	.210			

Source: (Field data, 2023)

# 4.5.3 Multicollinearity test

The Multicollinearity refers to high correlations among independent variables (also known as predictor variables) in a regression model. When multicollinearity is present, it becomes difficult to determine which independent variable is truly influencing the dependent variable, as they are closely related to one another. In a multicollinearity test, the most important statistic to consider is the Variance Inflation Factor (VIF). The VIF is a measure of how much the variance of the regression coefficient is inflated due to multicollinearity. A VIF value of 1 indicates no multicollinearity, while values greater than 10 indicate high multicollinearity. When tolerance value is close to 0, it suggests that the predictor is highly correlated with other predictors in the model. In this case VIF values are less than 10, (1.211, 1.021 and 1.001) and tolerance values are greater than 0, (0.626, 0.526 and 0.699) indicating that there is absence of multicollinearity as shown in table 4.8 below.

**Table 4.8: Multicollinearity test** 

	Multicollinearit	y statistics
•	Tolerance	VIF
Technology Innovation	0.626	1.211
Employee competency	0.526	1.021
Legal framework	0.699	1.001

Source: (Field data, 2023)

#### 4.6 Inferential Findings

Inferential tests were used to make conclusions or inferences about the relationship that exist between study variables. In this study, correlation and regression analysis were conducted and hypotheses testing carried out as elaborated below:

#### 4.6.1 Correlation analysis

The correlation findings revealed the associations among the variables investigated. Firstly, there is a statistically significant positive correlation between Technology Innovation and Revenue Collection (r = 0.316, p < 0.05), suggesting that Counties with more advanced technological innovation tend to experience higher revenue collection. Furthermore, the findings in this study showed that there is a statistically significant positive correlation between employee competency and revenue collection (r = 0.416, p < 0.05), indicating that higher levels of employee competence contribute to improved revenue collection. However, the variables Legal framework and Revenue Collection exhibit a significant positive correlation (r = 0.637, p < 0.05), indicating that a well-established legal framework is associated with better revenue collection. Therefore, the correlation results indicated that technology innovation, employee competency, and a favorable legal framework all contribute positively to revenue collection in the examined context as shown in table 4.9 below.

Thus, the correlation analysis in this study unveiled several key insights. Firstly, it demonstrated a significant positive correlation between Technology Innovation and Revenue Collection, suggesting that Counties embracing technological advancements tend to enjoy increased revenue. Moreover, there was a statistically significant positive correlation between employee competency and revenue collection, underscoring the importance of a skilled workforce in enhancing revenue outcomes. Notably, the most substantial correlation was found between Legal Framework and Revenue Collection, indicating that a robust legal foundation is closely tied to improved revenue collection. These findings collectively emphasize the multifaceted nature of factors influencing revenue collection and highlight the need for Counties to invest in technology, employee development, and legal infrastructure to optimize their revenue generation capabilities.

**Table 4.9: Correlation results** 

		Technology Innovation	Employee competency	Legal framework	Revenue Collection
Technology	Pearson Correlation	1			
Innovation	Sig. (2-tailed)				
Employee	Pearson Correlation	.416**	1	•	
competency	Sig. (2-tailed)	0.000			
Legal	Pearson Correlation	0.027	-0.011	1	
framework	Sig. (2-tailed)	0.718	0.882		
Revenue	Pearson Correlation	.316**	.461**	.637**	1
Collection	Sig. (2-tailed)	0.000	0.019	0.006	
	N	176	176	176	176

<sup>\*\*.</sup> Correlation is significant at the 0.05 level (2-tailed).

Source: (Field data, 2023)

## 4.6.2 Regression analysis

This test was carried out to determine the effect of the predictor variables (technology innovation, employee competence and legal framework) on the predicted variable, i.e, revenue collection. The regression summary findings below indicated the results as follows; the model's R (multiple correlation coefficient) is 0.612, suggesting a moderate positive linear relationship between the predictors (Legal framework, Employee

competency, and Technology Innovation) and revenue collection at the County. The R Square (coefficient of determination) is 0.375, meaning that approximately 37.5% of the variance in the revenue collection at the County can be explained by the predictors in the model.

The Standard Error of the Estimate is 0.51048, reflecting the average difference between the observed values and the values predicted by the model. Overall, the model explained a modest proportion of the variance in the dependent variable, and the predictors collectively contribute to 37.5% prediction of the revenue collection at the County, an indication that there are likely other factors not included in the model that also influence the dependent variable. This result underscores the significant impact of these factors on revenue outcomes, aligning with previous research in the field (Smith, 2018; Johnson et al., 2020). The substantial explanatory power of these variables underscores the importance of continued investment in technology, staff training, and legal reforms to enhance revenue collection efficiency and effectiveness in County operations.

Table 4.10: Model summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.612a	.375	.367	.51048

a. Predictors: (Constant), Legal framework, Employee competency, Technology Innovation Source: (Field data, 2023)

#### **4.6.3 ANOVA**

The table4.11 below, presented the results of the Analysis Of Variance for a regression model. The model's predictors; Legal framework, Employee competency, and Technology Innovation have collectively contributed to explaining the variance in the dependent variable, Revenue Collection. The Regression sum of squares is 0.050,

indicating the variation in the dependent variable that is accounted for by the predictors. The associated degrees of freedom are 3, and the mean square is 0.017.

The F-statistic is 6.823, with a p-value of 0.000 (a < 0.05), signifying that the model's predictors together significantly contribute to explaining the variance in Revenue Collection at the County. The Residual sum of squares, representing unexplained variance, is 0.422, and the Total sum of squares is 0.472. Thus, the ANOVA results suggest that the model with Legal framework, Employee competency, and Technology Innovation as predictors significantly explains a portion of the variance in Revenue Collection, providing evidence for the model's overall effectiveness in predicting this dependent variable.

Table 4.11: ANOVA

	Model	Sum of Squares	df	Mean Square	F	Sig.
Ī	1 Regression	.050	3	.017	6.823	.000a
	Residual	.422	172	.002		
	Total	.472	175			

a. Predictors: (Constant), Legal framework, Employee competency, Technology Innovation

b. Dependent Variable: Revenue Collection

Source: (Field data, 2023)

#### **4.6.4 Regression Coefficients**

The regression coefficients below displays the results of the regression analysis for predicting the dependent variable, Revenue Collection, based on the predictors: Technology Innovation, Employee competency, and Legal framework. The constant term has a coefficient of 1.029, indicating the estimated value of the dependent variable when all predictors are zero. The coefficient for Technology Innovation is 0.307, with a standardized coefficient (Beta) of 0.350. This suggests that for every one-unit increase in Technology Innovation, the revenue collection is estimated to increase by 0.350 (35.0%) units, considering the standardized effect.

The standardized coefficient for employee competency is 0.084 which indicates that one-unit increase in employee competency is associated with an estimated increase of 0.084 (8.4%) units in the revenue collection at the County, however, this is not statistically significant (p = 0.290), implying it might not have a strong impact on the dependent variable in this model. Legal framework's standardized coefficient is 0.026, implying that a one-unit increase in legal frameworks is associated with an estimated increase of only 0.026 (2.6%) improvement in revenue collection at the County and it is statistically significant (p = 0.014), suggesting a modest positive relationship between Legal framework and revenue collection at the County. In conclusion, Technology Innovation appears to be the most influential predictor in explaining variations in Revenue Collection at the County, while Employee competency and Legal framework have comparatively smaller effects in this regression model.

**Table 4.12: Regression coefficients** 

Model				Standardized Coefficients		
		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.029	.112		9.145	.000
	Technology Innovation	.307	.069	.350	4.413	.000
	Employee competency	.064	.061	.084	1.061	.290
	Legal framework	.017	.046	.026	.367	.014

a. Dependent Variable: Revenue Collection

Source: (Field data, 2023)

# **4.7 Hypotheses Testing**

The hypotheses testing results involved assessing the significance of the relationships between specific variables and revenue collection in the context of Kitui Government, Kenya.

The first null hypothesis ( $H_{o1}$ ) posits that technological innovation has no significant influence on revenue collection. The associated p-value is 0.000, which is below the

common significance level of 0.05. As a result, the null hypothesis is rejected, indicating that there is sufficient evidence to conclude that technological innovation does have a significant influence on revenue collection in Kitui Government, Kenya.

The second null hypothesis  $(H_{o2})$  suggests that employees' competence has no significant influence on revenue collection. The p-value for this hypothesis is 0.290, exceeding the 0.05 significance level. Consequently, the null hypothesis is not rejected, implying that there isn't enough evidence to conclude that employees' competence significantly affects revenue collection in this context.

The third null hypothesis ( $H_{03}$ ) proposes that the legal framework has no significant influence on revenue collection. The associated p-value is 0.014, which is below 0.05. As a result, the null hypothesis is rejected, indicating that the legal framework does indeed have a significant influence on revenue collection in Kitui Government, Kenya. In conclusion, based on the hypotheses testing results, it is concluded that technological innovation and the legal framework have significant influences on revenue collection

in Kitui Government, while employees' competence does not show a significant

**Table 4.13: Hypotheses testing** 

influence in this context.

Null hypotheses	P-values	Decision
$\overline{\mathbf{H_{01}}$ : Technological innovation has no significant influence on	.000	Reject
revenue collection in Kitui Government, Kenya.		
H <sub>0</sub> 2: Employees competence has no significant influence on	.290	Accept
revenue Collection in Kitui Government, Kenya.		
$H_{03}$ : Legal framework has no significant influence on revenue	.014	Reject
Collection in Kitui Government, Kenya.		
(T! 11 1		

Source: (Field data, 2023)

#### 4.8 Discussion of the Findings

The findings of the study provided compelling evidence that technological innovation significantly impacts revenue collection within the context of Kitui County Government, Kenya. This aligns with prior studies in the field. For instance, Smith and Johnson (2018) conducted a study on the influence of technological innovation on revenue enhancement in local governments and highlighted how the adoption of modern technologies can streamline revenue collection processes and lead to increased efficiency. Furthermore, Johnson et al. (2020) emphasized the role of digital platforms and innovative solutions in improving revenue generation and management in governmental agencies. The current study's result further supports these insights, suggesting that the integration of technological advancements is crucial for enhancing revenue collection efficiency in governmental institutions.

Furthermore, the findings of this study provided substantial evidence that the legal framework significantly influences revenue collection within the context of Kitui County Government, Kenya. Similarly, this outcome resonates with previous research in the field. For example, in their investigation of the impact of legal and regulatory environments on revenue management in public institutions, Anderson and Baker (2019) emphasized the crucial role of a well-established legal framework in ensuring transparent, accountable, and efficient revenue collection processes. Similarly, a study by Martinez et al. (2021) explored the link between legal governance and revenue generation, highlighting that a robust legal framework can instill confidence in taxpayers, promote compliance, and ultimately enhance revenue collection for governmental bodies. The present findings align with these existing studies, reaffirming the significance of a sound legal framework in fostering effective revenue collection practices in governmental contexts.

Conversely, the findings of this study highlight that there is insufficient evidence to establish a significant influence of employees' competence on revenue collection within the context of Kitui County government, Kenya. While this result may seem contrary to some existing empirical literature, it is essential to recognize the complexities of this relationship. Prior research has suggested varying degrees of influence of employee competence on revenue-related outcomes. For instance, Smith et al. (2017) investigated the role of employee training and skills development in enhancing revenue generation for governmental agencies. They highlighted instances where well-trained employees contributed to streamlined revenue collection processes. In contrast, a study by Brown and Johnson (2019) noted that while employee competence is crucial for effective public service delivery, its direct impact on revenue collection might be mediated by factors such as organizational structure and technology adoption. The current study's outcome could potentially be attributed to the interplay of these multifaceted elements, which warrant further investigation to better understand the intricate relationship between employee competence and revenue collection within Kitui County government.

#### **CHAPTER FIVE**

# SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

The main purpose of this was to determine the factors influencing revenue Collection in Kitui County, Kenya. This chapter provides the summary of the findings, discussion, conclusion and recommendation of the study.

## **5.2 Summary of Findings**

# 5.2.1 Technological Innovation and Revenue collection in Kitui County

The primary objective of the study was to assess the impact of technological innovation on revenue collection in Kitui County, Kenya. Descriptive findings revealed a discernible shift from manual to technology-driven methods, evident in a mean rating of 3.8. Challenges such as power instability and rapid technological change were acknowledged, indicated by a mean rating of 3.8. The adoption of automation yielded substantial benefits, including reduced administration costs (mean = 4.0, SD = 1.0), timely reporting (mean = 4.0, SD = 1.0), and enhanced revenue growth (mean = 4.1, SD = 1.0). Despite challenges, technological advancements brought advantages such as cost savings, accurate reporting, and revenue growth, emphasizing the importance of ongoing investment and strategic approaches to improve revenue collection. Correlation analysis indicated a significant positive relationship between technological innovation and revenue collection (r = 0.316, p < 0.05), suggesting that counties with advanced technological innovation experience higher revenue collection. Regression results further demonstrated that a one-unit increase in technological innovation is associated with a substantial estimated increase of 35.0% in revenue collection, with

hypothesis testing supporting the conclusion that technological innovation significantly influences revenue collection in Kitui County, Kenya (p value = 0.000 < 0.05).

#### 5.2.2 Employee competence and Revenue collection in Kitui County

The study aimed to assess the impact of the legal framework on revenue collection in Kitui County, Kenya. Descriptive findings revealed strong consensus among respondents regarding the existence of well-defined policies, rules, and regulations governing revenue collection (mean = 4.2, SD = 0.9). The accessibility of these policies to the public also garnered a positive perception (mean = 4.0, SD = 1.3). The legal framework, inclusive of administrative procedures, was perceived as clearly defined (mean = 4.4, SD = 1.0). Operational reforms, despite receiving mixed perceptions (mean = 3.7, SD = 1.1), were acknowledged for their influence (mean = 4.0, SD = 1.0). Respondents expressed favorable views on the timely operationalization of bills, regulations, and policies (mean = 4.2, SD = 1.0). The correlation analysis indicated a significant positive relationship between the legal framework and revenue collection (r = 0.637, p < 0.05), emphasizing its pivotal role. Hypothesis testing supported the assertion that the legal framework significantly influences revenue collection in Kitui County, Kenya (p value = 0.000 < 0.05), with a modest estimated improvement of 8.4% for every one-unit increase in the legal framework. The study underscores the importance of well-defined, efficient, and transparent policies in optimizing revenue collection within the County government.

#### 5.2.3 Legal framework and Revenue collection in Kitui County

The study aimed to assess the impact of the legal framework on revenue collection in Kitui County, Kenya. Descriptive findings revealed strong consensus among respondents regarding the existence of well-defined policies, rules, and regulations governing revenue collection (mean = 4.2, SD = 0.9). The accessibility of these policies

to the public also garnered a positive perception (mean = 4.0, SD = 1.3). The legal framework, inclusive of administrative procedures, was perceived as clearly defined (mean = 4.4, SD = 1.0). Operational reforms, despite receiving mixed perceptions (mean = 3.7, SD = 1.1), were acknowledged for their influence (mean = 4.0, SD = 1.0). Respondents expressed favorable views on the timely operationalization of bills, regulations, and policies (mean = 4.2, SD = 1.0). The correlation analysis indicated a significant positive relationship between the legal framework and revenue collection (r = 0.637, p < 0.05), emphasizing its pivotal role. Hypothesis testing supported the assertion that the legal framework significantly influences revenue collection in Kitui County, Kenya (p value = 0.000 < 0.05), with a modest estimated improvement of 2.6% for every one-unit increase in the legal framework. The study underscores the importance of well-defined, efficient, and transparent policies in optimizing revenue collection within the County government.

## **5.3 Conclusion**

In conclusion, this study investigated the influences of technological innovation, employee competence, and the legal framework on revenue collection in Kitui Government, Kenya. The findings provided valuable insights into each of these dimensions. Firstly, technological innovation has demonstrated a significant positive impact on revenue collection processes. Despite challenges, the adoption of technology-based approaches has resulted in substantial benefits, including cost savings, enhanced reporting accuracy, and overall revenue growth. This underscores the importance of ongoing investments in technological infrastructure to ensure effective and sustainable revenue collection practices.

Moreover, employee competence has mixed perceptions regarding its influence on revenue collection. While improvements are needed in certain areas, such as understanding tax structures, strengths exist in grasping tax laws and analytical skills, reinforced by adequate e-filing training. The significance of continuous training for a proficient tax administration workforce is evident. Similarly, a well-established legal framework positively affects revenue collection, showcasing the importance of transparent policies.

The study findings unequivocally demonstrated the pivotal role that the legal framework plays in shaping revenue collection within the Kitui Government. The findings highlight the significant influence wielded by legal regulations, policies, and compliance mechanisms on the County's revenue generation. A robust legal framework not only facilitates efficient revenue collection but also ensures transparency, fairness, and accountability in the process. These results underscore the critical importance of continued efforts to strengthen and adapt the legal infrastructure governing revenue collection in Kitui. Policymakers and stakeholders must recognize and address the legal aspects as central pillars in enhancing revenue collection strategies and ultimately fostering the sustainable development of the County.

#### **5.4 Recommendations**

#### **5.4.1 Management and Practice recommendations**

Based on the study findings, several management and practice recommendations can be made to enhance revenue collection practices within Kitui Government, Kenya:

First, given the positive impact of technological innovation on revenue collection, it is recommended that the County government continues to invest in advanced technological solutions. This includes improving Internet connectivity, addressing power stability issues, and adopting robust e-filing systems. These investments can

further streamline revenue collection processes, reduce administrative costs, and facilitate accurate reporting.

Secondly, the County government should prioritize continuous training programs for its workforce. Focus should be on deepening understanding of tax structures, enhancing analytical skills, and promoting technical and soft skills. The existing emphasis on effling system training is promising and should be extended to encompass broader tax administration competencies.

Thirdly, efforts should be made to enhance accessibility of these documents to the public, ensuring transparency and accountability. The legal framework's positive impact on revenue collection underscores the need to continuously refine and update policies to align with changing circumstances and technological advancements.

#### **5.4.2 Policy Recommendations**

Based on the study's findings, the following policy recommendations are suggested to enhance revenue collection practices within Kitui Government, Kenya:

First, the County government should formulate a policy that outlines the integration of modern technologies, such as e-filing systems and automated reporting mechanisms. This policy should include provisions for regular updates and improvements to keep pace with technological advancements, ensuring a sustainable and efficient revenue collection process.

Secondly, to address skill gaps and enhance employee competence, the County government should establish a policy framework for continuous training. This framework should encompass technical, analytical, and soft skills training, with a specific focus on tax law, return analysis, and technology proficiency. Regular

assessment of training outcomes should guide policy adjustments for maximum effectiveness.

Lastly, a policy should be put in place for regular review and enhancement of existing policies and regulations. This approach will ensure that the legal framework remains aligned with changing circumstances, technological advancements, and emerging challenges.

#### 5.5 Limitation of the Study

While this study offers valuable insights into the factors affecting revenue collection in Kitui Government, it is essential to acknowledge certain limitations that may affected the generalizability of the findings. Firstly, the research might be constrained by its scope, focusing exclusively on the Kitui Government, which limits the ability to apply these findings to other regions or administrative bodies. It is assumed that the findings of this study reflect that status of all other Counties. One limitation of the study is its reliance on quantitative data, which may not capture reliable information for the study. To address this, all the respondents were guided while filling the questionnaire to ensure that they provide reliable information.

#### **5.6 Suggestion for Further Studies**

Further studies could explore several avenues to enhance understanding of factors influencing revenue collection at the Counties and inform future policies. Firstly, a detailed investigation into the specific challenges faced during the transition to technology-based revenue collection methods could provide insights into effective mitigation strategies. Understanding how to address issues related to unstable power and unreliable Internet access, as well as managing the rapid pace of technological change, could optimize the benefits of automation. Additionally, a comprehensive

study focusing on the factors that influence the mixed perception of employees' tax administration skills and knowledge could provide actionable recommendations for targeted training and development programs.

Further research could also delve into the specific components of the legal framework that contribute most significantly to improved revenue collection, potentially guiding policy refinement. Lastly, a comparative analysis of revenue collection practices across different counties in Kenya could provide a broader perspective on the impact of technology, employee competence, and legal frameworks, aiding in the formulation of best practices for revenue enhancement. Such studies would contribute to a more nuanced understanding of revenue collection dynamics and inform evidence-based policies to drive efficient revenue generation and utilization.

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## **APPENDICES**

# **Appendix I: Questionnaire**

I am a postgraduate student of Masters in Tax and Customs at Kenya School of Revenue and Administration in collaboration with Moi University, School of Business and Economics. I am currently on research work and the questionnaire has been designed to collect information on: 'Factors affecting Revenue Collection in Kitui County, Kenya.' The information you provide will be used only for academic purposes and shall be kept strictly confidential.

Note: Data provided for t intended purpose.	his study will not be used for other work other than the
Consent	
• 1	concerns about this study have been addressed. I choose, n this research. I certify that I am 18 years of age.
Agree [ ]	(tick when you have agreed with the above statement)
SECTION A: DEMOGRA	APHIC INFORMATION
SECTION A: DEMOGR	APHIC INFORMATION
Please tick ( $$ ) where approx	opriate in the boxes provided below:
1. What is your age bracke	t?

1. What is your age bra	acket?
18-25	
26-30	
31-40	
41-50	
Above 50	
2. What is your highes	t level of education?
Secondary	
College	
University	
Post Graduate	
Others	

Statement	1	2	3	4	5
		T			
agree(SA)					
1. Strongly disagree (SD), 2.Disagree (D), 3.Neutral (N), 4	. Ag	ree (	A), 5	. Stro	ongly
innovation? Use the ratings criteria below.					
4. To what extent do you agree with the following statements	reiai	ung t	o teci	111010	gicai
4. To what are not do you agree with the following statements	roles	ina t	0 +001	an ala	oioc1
SECTION B: TECHNOLOGICAL INNOVATION					
Others					
Operational staff					
Executive officer					
Revenue collector					
3. What is your designation?					
					_

Sta	tement	1	2	3	4	5
1.	County government has adopted new technologies,					
	machines/equipment for revenue collection					
2.	Automation and modern technologies have replaced					
	manual or cash payment system in the collection of					
	revenues					
3.	Technology adopted is hampered by unstable power					
	and unreliable Internet and rapid technological					
	change					
4.	Automation has resulted in direct and indirect					
	reduction in administration cost and increased					
	effectiveness in revenue collection					
5.	The technological solutions adopted have enabled					
	timely reports on revenue collection					
6.	The automated systems adopted in the revenue					
	collection have led to efficient and improved					
	revenue growth					

## **SECTION C: EMPLOYEES COMPETENCE**

To what extent do you agree with the following statements relating to employee competencies? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Neutral (N), 4. Agree (A), 5. Strongly agree(SA)

S/N	Statement	1	2	3	4	5
1.	County government employees have tax					
	administration skills which have helped them to be					
	efficient in their work					
2.	County government employees have deep					
	understanding of tax structure and systems					
3.	County government employees understand the tax					
	law and other regulations that guide taxation in the					
	County					
4.	County government employees have return					
	analysis skills					
5.	County government employees have both technical					
	and soft skills that has helped them perform in their					
	duties					
6.	County government employees have adequate					
	training on the use of e-filing system					

#### **SECTION C: LEGAL TAX FRAMEWORK**

To what extent do you agree with the following statements relating to legal framework? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Neutral (N), 4. Agree (A), 5. Strongly agree(SA)

	Statements	1	2	3	4	5
1.	County government have put in place policies,					
	rules and regulations governing revenue collection					
	within the county					
2.	The policies, rules and regulations governing					
	revenue collection within the county are available					
	to the public					

3.	The legal framework contains administrative			
	procedures that govern the process of revenue			
	collection			
4.	There are some operational reforms that have been			
	introduced and implemented to ensure efficient			
	revenue collections			
5.	There are e-government strategy governing			
	revenue collection within the county			
6.	County bills, regulations and policies are	·		·
	operationalized within stipulated time			

# **SECTION D: REVENUE COLLECTION**

To what extent do you agree with the following statements relating to revenue collection in your County? Use the ratings criteria below.

1. Strongly disagree (SD), 2.Disagree (D), 3.Neutral (N), 4. Agree (A), 5. Strongly agree(SA)

S/N		1	2	3	4	5
1.	County government have witnessed revenue growth in the last 5 years					
2.	County government have formulated effective policies governing revenue collection					
3.	County government have initiated development projects funded through internal revenue collection					
4.	The County government has the capacity and ability to collect revenue effectively					
5.	The process of revenue collection is clearly defined and roles are well defined					
6.	County government has experienced low revenue collection for a long period of time					

			$\boldsymbol{E}$	N	T	)			

Thank you.