DETERMINANTS OF OWN-SOURCE REVENUE PERFORMANCE AMONG THE LAKE REGION ECONOMIC BLOC COUNTIES, KENYA: THE MODERATING INFLUENCE OF GROSS COUNTY PRODUCT.

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A Research Thesis Submitted in Partial Fulfillment of the Requirements for the Award of the Degree of Master in Business Administration, Masinde Muliro University of Science and Technology

OCTOBER, 2025

DECLARATION

I declare that this thesis is my original work prepared with no other than the indicated sources and support and has not been presented elsewhere for a degree or any other award

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CERTIFICATION

The undersigned certify that he has read and hereby recommend for acceptance of Masinde Muliro University of Science and Technology a thesis entitled '**Determinants of Own-Source Revenue Performance among the Lake Region Economic Bloc Counties, Kenya: The Moderating Influence of Gross County Product'**

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ACKNOWLEDGEMENT

I give glory to Almighty God for His grace, wisdom, and strength throughout this journey.

I sincerely thank Masinde Muliro University of Science and Technology (MMUST), under the leadership of Vice Chancellor Prof. Solomon Shibairo, for providing a conducive learning environment. I also appreciate my lecturers and classmates for their guidance, teamwork, and encouragement.

My heartfelt gratitude goes to my supervisors, Dr. Muli Maingi and Dr. Fredrick Kiongera, for their invaluable guidance and support in shaping this work.

I owe profound gratitude to my parents, Jane and Hamis Kisaka, for their unconditional love, sacrifices, and unwavering belief in me. Their prayers, values, and encouragement have been a constant source of strength and inspiration throughout my academic journey.

Lastly, I extend my deepest gratitude to my beloved wife, Rhoda, and my daughters, Arianna and Annalisa, for their unwavering love, patience, and encouragement during this academic pursuit. This accomplishment would not have been possible without your support.

ABSTRACT

Own Source Revenue in Kenya is anchored in the 2010 Constitution, the Public Finance Management Act of 2012, and the County Government Act of 2012. Enhancing county-level revenue performance is essential for fiscal autonomy and effective public financial management. However, many counties continue to face challenges including weak legal frameworks, limited citizen participation, inadequate diversification of revenue sources, and slow adoption of technology. This study was motivated by the persistent fiscal gaps in devolved governments, particularly within the Lake Region Economic Bloc, where counties have significant potential yet continue to underperform in revenue mobilization. The study examined influence of the determinants -county legal frameworks, public participation, tax diversification, and technology adoption on own source revenue performance, while also assessing how Gross County Product shapes these influences. It was guided by the Modern Portfolio Theory, the Sequential Theory of Decentralization, and the Technology Acceptance Model. A descriptive survey design was employed, targeting 170 county officials from 14 counties within the bloc. Structured and unstructured questionnaires were used, and a pilot study was conducted in Uasin Gishu County to ensure reliability and validity. Findings revealed that enforceable county legal frameworks ($\beta = 0.198$, $p = 0.004$) enhanced own source revenue performance. Public participation ($\beta = 0.142$, $p = 0.034$) built trust and compliance and tax diversification ($\beta = 0.211$, $p = 0.002$) strengthened own source revenue performance. Technology adoption ($\beta = 0.338$, $p < 0.05$) was the most influential factor, improving efficiency and transparency, while stronger Gross County Product significantly influenced the benefits of these determinants on own source revenue performance. The study concludes that institutional, participatory, fiscal, and technological reforms, supported by local economic growth, are essential for sustainable own source revenue performance. It recommends that county governments strengthen revenue laws, institutionalize citizen engagement, broaden revenue streams, and invest in digital financial technologies to achieve greater fiscal independence.

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ACRONYMS AND ABBREVIATIONS

CBIRR: County Budget Implementation Review Report

CBK: Central Bank of Kenya

CBROPs: County Budget Review and Outlook Papers

CoB: Controller of Budgets.

CoK: Constitution of Kenya.

CRA: Commission on Revenue Allocation

ETR: Electronic Tax Register.

GCP: Gross County Product

IMF: International Monetary Fund

KCRA: Kakamega County Revenue Agency

KIPPRA: Kenya Institute for Public Policy Research and Analysis

LREB: Lake Region Economic Bloc.

OECD: Organisation for Economic Co-operation and Development

OSR: Own Source Revenue

PFM: Public Financial Management Act

SBP: Single Business Permit

SPSS: Statistical Package for the Social Sciences

UNCTAD: United Nations Conference on Trade and Development

USAID: United States Agency for International Development.

VAT: Value Added Tax

OPERATIONAL DEFINITION OF TERMS

County legal framework:	Measured by the existence and enforcement of county by-laws, alignment with national tax laws, anti-leakage provisions, and law enforcement in revenue collection
Gross County Product:	Measured as the sum of Gross Value Added (GVA) of all county industries plus taxes minus subsidies on products
Own source revenue performance:	Assessed by the total revenue collected and achievement of revenue targets.
Public participation:	Assessed through awareness forums, taxpayer involvement in policy decisions, feedback inclusion, and improved compliance levels.
Tax diversification:	Measured by the number of new revenue streams, compliance across streams, reduced reliance on single sources, and financial stability
Technology:	Evaluated through automation, e-monitoring, ICT platforms, mobile payments, and anti-corruption measures in revenue collection

CHAPTER ONE

INTRODUCTION

1.1 Background

Own Source Revenue (OSR) is widely recognized as a cornerstone of fiscal autonomy for sub-national governments. In principle, it allows local authorities to reduce overdependence on central transfers while improving service delivery. OSR supplements national transfers and is critical for sustaining public services (World Bank, 2021). Globally, OSR effectiveness is shaped by governance structures, economic activities, and administrative capacities. Developed economies, particularly in the European Union and North America, have implemented advanced fiscal decentralization frameworks that emphasize efficiency, accountability, and technological integration in revenue collection (Boadway & Shah, 2009). These models highlight the importance of legal frameworks, political will, and institutional efficiency in enhancing OSR performance (Smoke, 2013). Additionally, digital innovations, such as e-governance and automated tax systems, have significantly improved revenue collection efficiency (Gupta et al., 2017).

In Africa, the adoption of fiscal decentralization has not fully translated into strong revenue performance. While the reforms were designed to promote responsive local governance, weak enforcement of tax laws, limited administrative capacity, and poor taxpayer compliance have constrained outcomes (Fjeldstad & Heggstad, 2012). This experience underscores that political reforms without institutional strengthening are unlikely to yield fiscal sustainability.

Kenya's 2010 Constitution introduced devolution with the expectation that counties would achieve greater financial independence through OSR. More than a decade later, however, performance remains modest. Data from the Commission on Revenue Allocation (CRA) shows that between FY 2013/14 and FY 2022/23, counties mobilized only 63.5 percent of their OSR targets, collecting KSh 344.4 billion against projections of KSh 542.1 billion (CRA, 2023). On average, OSR contributes less than 10 percent of county revenues, indicating that counties remain heavily reliant on the national equitable share. This persistent gap suggests that devolution has expanded expenditure responsibilities without securing adequate revenue autonomy.

The underperformance of OSR in Kenya has multiple dimensions. First, legal frameworks are often fragmented or inconsistently enforced, creating loopholes that weaken collection (Ooko, 2021). Second, public participation, though a constitutional requirement, is frequently conducted as a mere formality. This practice erodes trust and undermines voluntary compliance (Omollo, 2020). Third, many counties have not diversified their tax base. Instead, they rely narrowly on business permits, market fees, and property rates, despite evidence that broader tax instruments can stabilize revenues (World Bank, 2021). Fourth, the adoption of technology has been slow and uneven. Counties that continue to rely on manual systems experience significant leakages and corruption (Odhiambo, 2021). Finally, variations in Gross County Product (GCP) have not consistently translated into revenue performance, raising questions about how economic capacity interacts with governance and administrative factors (KNBS, 2022).

The Lake Region Economic Bloc (LREB), comprising 14 counties in western Kenya, offers a vivid case study of these challenges. Counties such as Kisumu and Kakamega

have relatively high GCP but still fail to maximize OSR potential. Others, like Busia and Homa Bay, collect minimal OSR despite expanding economic activities (CRA, 2023; Ndung'u, 2021). These inconsistencies suggest that fiscal capacity alone does not guarantee revenue performance; rather, institutional, participatory, and technological dynamics play a decisive role.

The fiscal gap between potential and actual OSR has serious implications for county governance. Limited revenue mobilization weakens counties' ability to finance development priorities, expand infrastructure, and deliver essential services. CRA reports show that OSR constitutes less than 10 percent of county budgets, while the equitable share from the national government accounts for more than 70 percent of financing (CRA, 2024). Such dependence exposes counties to fiscal vulnerability and undermines the spirit of devolution.

This study was motivated by the need to examine why OSR remains weak despite counties having legal authority, constitutional support, and growing local economies. Scholars have long argued that revenue performance depends not only on economic factors but also on institutional quality, enforcement mechanisms, and taxpayer trust (OECD, 2020). In Africa, success stories such as Rwanda demonstrate that technology and stronger enforcement can improve compliance, yet in Kenya such reforms have been sporadic and uneven (Moore, 2015; Fjeldstad, 2016). For the LREB, which faces rising expenditure needs and urgent development challenges, understanding these dynamics is essential.

By interrogating the role of county legal frameworks, public participation, tax diversification, and technology adoption—while considering the moderating effect of

GCP—this study seeks to provide context-specific evidence. The findings are expected to inform both county and national policymakers on how to strengthen OSR as a pathway to sustainable devolution.

The study focused on five variables that shape OSR performance. The county legal framework provides the rules and enforcement mechanisms for revenue collection. Where laws are inconsistent or weakly enforced, revenue leakages and poor compliance tend to follow (Ooko, 2021). Public participation ensures inclusivity, transparency, and trust, which are essential for improving taxpayer compliance and legitimacy of county taxation (Omollo, 2020). Tax diversification enables counties to move beyond narrow, volatile sources such as market fees and single permits, thereby stabilizing revenue flows in line with local economic potential (World Bank, 2021). Technology adoption introduces efficiency and accountability in revenue administration, reducing leakages and corruption while improving compliance (Mugambi & Kamau, 2019). Finally, Gross County Product (GCP**)** represents the economic potential of a county. Prior studies show that stronger local economies do not automatically guarantee higher OSR, suggesting that institutional and governance factors moderate the relationship between economic output and revenue performance (Ndung'u, 2021).

1.2 Statement of the Problem

Own Source Revenue (OSR forms a critical pillar of fiscal decentralization in Kenya, as it enables counties to finance development priorities and deliver essential services. Yet, counties have persistently underperformed in OSR mobilization, leading to an overreliance on intergovernmental transfers (CRA, 2019; Njoroge & Kinuthia, 2020). This dependency has created fiscal instability and undermined the constitutional goal of

financial autonomy for devolved units (World Bank, 2021). Despite policy and institutional reforms, counties within the Lake Region Economic Bloc (LREB) continue to struggle with low OSR growth relative to expenditure needs, signaling that structural and administrative challenges remain unresolved.

Several factors are frequently cited in the literature as critical determinants of OSR performance, but gaps exist in their integration and empirical validation. First, county legal frameworks remain weak, inconsistent, or poorly enforced, resulting in revenue leakages and inefficiencies (Muchira, 2018). Second, public participation, although enshrined in the Constitution of Kenya (2010), is often symbolic rather than substantive, thereby weakening transparency, accountability, and compliance (Ooko, 2021). Third, revenue diversification has been proposed as a path to financial sustainability, yet counties in LREB still rely heavily on a narrow tax base while neglecting potential sources such as tourism, property rates, and public-private partnerships (Nyanumba et al., 2017; Ngicuru, 2017). Fourth, technology adoption has demonstrated promise in enhancing efficiency and curbing leakages, but uptake has been uneven due to financial constraints, weak capacity, and vested interests (Gupta et al., 2017).

The independent variables were informed by theoretical perspectives on fiscal decentralization, empirical studies on county revenue performance in Kenya and other jurisdictions, and policy priorities outlined in CRA and World Bank reports**.** While these factors have been explored individually, most prior studies have not examined them collectively within the LREB context. More importantly, there is scant empirical attention to how Gross County Product (GCP)—a measure of county-level economic output comprising agriculture, manufacturing, trade, services, and construction (KNBS,

2020)—moderates their influence. Counties with higher GCP may have stronger economic bases to support revenue mobilization, whereas those with weaker economic structures may remain disadvantaged despite implementing similar reforms. The absence of this moderating perspective limits understanding of why revenue performance varies widely across counties.

Thus, the problem is twofold: First, Persistent underperformance of OSR in LREB counties, reflected in inadequate revenues, high dependence on national transfers, and fiscal instability. Second, there is limited empirical evidence on how county legal frameworks, public participation, revenue diversification, and technology adoption collectively influence OSR performance, especially when considered alongside the moderating role of GCP. This study was therefore motivated by the need to fill these gaps by empirically analyzing how the four determinants interact with GCP to influence OSR performance in LREB counties. The findings are expected to generate actionable insights for policymakers seeking to strengthen fiscal autonomy and sustainability at the county level.

1.3 Research Objectives.

1.3.1 General Objective

The general objective of the study was to investigate the determinants of Own Source revenue performance among the Lake Region Economic Bloc counties in Kenya.

1.3.2 Specific objectives.

The specific objectives for this study are:

i. To evaluate the influence of county legal framework on Own Source revenue performance in Lake Region Economic Bloc.

ii. To establish the influence of public participation on own source revenue performance in Lake Region Economic Bloc.

iii. To determine the influence of revenue diversification on own source revenue performance in Lake Region Economic Bloc.

iv. To examine the influence of technology on own source revenue performance in Lake Region Economic Bloc.

v. To establish the moderating influence of Gross County Product on the Legal Framework, Public Participation, Tax Diversification, and Technology on Own Source Revenue in Lake Region Economic Bloc.

1.4 Research Hypothesis.

The study was guided by the following research hypothesis.

$H0_1$: There is no significant influence of Legal Framework on the Own Source revenue performance in Lake Region Economic Bloc.

$H0_2$: There is no significant influence of Public participation on the own source revenue performance in Lake Region Economic Bloc.

$H0_3$: There is no significant influence of Tax diversification on the own source revenue performance in Lake Region Economic Bloc.

$H0_4$: There is no significant influence of technology on own source revenue performance in Lake Region Economic Bloc.

$H0_5$: Gross County Product does not moderate the influence of Legal Framework, Public Participation, Tax Diversification, and Technology on Own Source Revenue in Lake Region Economic Bloc.

1.5 Significance of the Study

The findings of this study are significant to policy, practice, and knowledge. For policy, they provide evidence to guide both county and national governments in formulating effective frameworks for enhancing own-source revenue, while highlighting practical challenges and opportunities that can inform more responsive fiscal measures. In practice, the results equip county governments and public finance practitioners with context-specific strategies to strengthen revenue collection and management systems, thereby supporting sustainable income mobilization. In terms of knowledge, the study extends existing literature on fiscal decentralization and public finance by addressing identified gaps and offering new insights that can inform future research on revenue performance in devolved units.

1.6 Scope of the Study

The study focused on the LREB Counties. The study was limited to investigation of Influence of County Legal Framework, Public Participation, Tax Diversification, and Technology on Own Source Revenue in LREB county governments in Kenya. The conceptual scope of this study was limited to four variables namely, county legal framework, Tax diversification, public participation and technology. Gross County Product was considered as a moderating variable while Own source revenue performance will be the response variable.

This study only looked at 14 LREB county governments in Kenya. They were formed because, although the devolved system of government promises to fix inclusive governance's long-standing political problems, the counties might not be big enough to benefit from economies of scale. Using a descriptive survey research approach, this study analyzed the correlation between OSR performance in Kenyan LREB county

governments and factors such as county legal framework, public participation, tax diversification, and technology. The data was collected from March to August 2024.

1.7 Limitations of the Study.

This study faced several limitations. First, obtaining information from senior management officials in the Lake Basin Economic Bloc county governments proved difficult, as many had demanding schedules that limited their availability, while others declined to respond to the questionnaires. To mitigate this, the researcher employed the drop-and-pick method and conducted follow-ups, giving respondents more time to complete the questionnaires at their convenience.

Second, some respondents expressed reluctance to participate due to skepticism about the purpose of the study. This was addressed by presenting an official introduction letter from the university, which assured confidentiality and clarified that the findings would be used strictly for academic purposes.

Third, the accuracy of the results depended on the respondents' honesty when completing the questionnaires. While this could not be fully controlled, the assurances provided were intended to encourage truthful responses.

Lastly, the study experienced time-related constraints, including delays in data collection due to slow responses and scheduling difficulties with key informants. Despite these challenges, the researcher made every effort to minimize the impact of these limitations on the quality of the finding.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction.

This chapter reviews the literature about the impact of the legal framework, public participation, tax diversification, and technology on the performance of own source revenue among the LREB county governments in Kenya. The review is based on theoretical and empirical literature, including books, research articles, journals, and online material. This chapter on the literature review aims to establish a foundation about the principal theories related to the issue of investigation. This chapter will examine the principal ideas proposed to comprehend and evaluate the impact of Legal Framework, Public Participation, Tax Diversification, and Technology on Own Source Revenue Performance. The review establishes a theoretical framework for discussing the diverse approaches to own source revenue performance in the counties of the Lake Region Economic Bloc. The chapter finishes by introducing a conceptual framework that the researcher will employ to examine the relationship between dependent and independent variables.

2.2 Theoretical Review

2.2.1 Modern Portfolio Theory (MPT)

Modern Portfolio Theory (MPT), introduced by Markowitz (1952), posits that investors can optimize returns for a given level of risk by holding a diversified portfolio of assets with imperfectly correlated returns. The principle has been extended beyond finance into public sector budgeting, where diversifying revenue instruments—such as property

taxes, licenses, user fees, and service charges—helps local governments spread fiscal risk (Carroll & Stater, 2009). For county governments, reliance on a single OSR source increases exposure to volatility, while diversification enhances fiscal resilience (Hendrick, 2002).

Despite its utility, MPT assumes normally distributed returns and treats variance as the sole measure of risk (Riedl & Ferguson, 1991). Public finance outcomes, however, often display asymmetry, where shocks and extreme events occur more frequently than expected (Fabozzi et al., 2014). Refinements such as Post-Modern Portfolio Theory (PMPT) incorporate downside risk to address these shortcomings (Sortino & Price, 1994).

MPT provides the foundation for the revenue diversification variable, showing how broadening the OSR base reduces vulnerability to shocks and improves county fiscal stability. Existing literature largely applies MPT to financial markets, with limited adaptation to subnational fiscal systems in Africa. Empirical studies on revenue diversification at the county level are scarce, and those available rarely link diversification to OSR performance directly. This study addresses that gap by operationalizing MPT in the context of Kenyan counties, assessing how revenue diversification strategies affect OSR performance.

2.2.2 Sequential Theory of Decentralization

Falleti (2004) explains decentralization as a process that unfolds sequentially across political, administrative, and fiscal dimensions. The order of these reforms shapes outcomes: when fiscal powers follow administrative and political decentralization,

subnational units enjoy both authority and capacity to raise revenues. Conversely, if expenditure responsibilities precede fiscal authority, local governments face unfunded mandates that weaken fiscal autonomy.

In Kenya, the 2010 Constitution devolved service delivery to counties, granting them OSR powers. However, the effectiveness of these powers depends on the enabling legal framework and the capacity built through earlier stages of decentralization (World Bank, 2020). Public participation—anchored in political decentralization—further strengthens accountability and voluntary compliance, making citizens more willing to support county revenue initiatives.

Sequential Theory informs the county legal framework and public participation variables**,** emphasizing that institutional design and sequencing directly influence counties' ability to raise and safeguard OSR. While decentralization theories are widely studied in Africa, most research emphasizes expenditure responsibilities or intergovernmental transfers rather than county-level OSR generation. The role of legal frameworks and public participation in shaping OSR performance remains underexplored. This study bridges that gap by applying Sequential Theory to examine how legal mandates and participatory mechanisms drive OSR outcomes in Kenyan counties.

2.2.3 Technology Acceptance Model (TAM)

The Technology Acceptance Model (TAM), developed by Davis (1989), explains technology adoption based on two perceptions: perceived usefulness —the belief that technology improves performance—and perceived ease of use —the belief that it

requires minimal effort. These perceptions influence attitudes and ultimately determine system adoption.

In revenue administration, TAM has been applied to understand adoption of digital tools such as electronic tax registers, mobile payment platforms, and e-filing systems (Venkatesh & Davis, 2000). Counties benefit from technology adoption when taxpayers view systems as reducing compliance costs and errors, and when revenue officers perceive them as easy to use. This enhances compliance, reduces leakages, and boosts OSR performance.

Although robust, TAM has been critiqued for underplaying external factors such as regulation, organizational culture, and infrastructure (Bagozzi, 2007). Yet its simplicity and predictive power make it a relevant framework where user perceptions strongly shape technology uptake.

TAM underpins the technology adoption variable, providing a lens for understanding how perceptions of usefulness and ease of use influence uptake of digital revenue collection systems in counties. Prior research on TAM has predominantly focused on private sector settings and national tax administrations. Limited empirical work has examined how TAM applies in subnational governments, particularly in African counties adopting digital OSR systems. This study fills that gap by applying TAM to explore the behavioral and administrative drivers of technology adoption in county revenue management.

2.3 Conceptual Review

2.3.1 Own Source Revenue.

According to Article 209 of the Constitution of Kenya (2010), Own Source income (OSR) are defined as income that are created by one level of government. In this particular instance, the County Government generates money from property taxes, entertainment taxes, fees and charges from the services that they provide.

2.3.2 County Legal Framework.

A comprehensive legal framework is the initial prerequisite for establishing an efficient tax and fee system. This framework must explicitly delineate essential components of regulations and policies regarding the definition of taxes and fees (base, rate, exemption); assessment and payment duties; rights and responsibilities of tax/fee payers; and enforcement procedures. The clarity and comprehensiveness of these texts establish the fundamental basis for the tax and fee administration process. Veig (1982) posits that administration is the deliberate action undertaken to achieve a specific objective. It is the methodical organization of activities and the strategic allocation of resources, designed to facilitate desired outcomes while concurrently obstructing undesired developments. It is the organization of available labor and resources to achieve desired outcomes at minimal expenditure of energy, time, and money.

A structured administrative system denotes the organization, personnel, practices, and processes necessary for the effective execution of the functions assigned to the executive branch of government.

2.3.3 Public Participation.

A strong legal framework is the initial stage to facilitate the establishment of an efficient tax and fee system. This framework must explicitly delineate essential components of regulations and policies regarding the definition of taxes and fees (base, rate, exemption); assessment and payment responsibilities; rights and remedies. Citizen participation refers to the active engagement of individuals in all developmental activities (Mwesigye, 2013). Engaging residents in the decision-making of their social matters fosters support for development programs. Consequently, inclusive programs must be structured to ensure that every individual in the community see themselves as integral to the growth (Kihehere, 2013).

Citizen participation is essential for several reasons; primarily, it enhances the legitimacy and accountability of democratic institutions. Secondly, it empowers communities and fosters social solidarity. Third, this procedure facilitates the provision of public services to communities based on their specific requirements. Ultimately, it bolsters citizens' self-esteem by cultivating their intrinsic abilities and knowledge, while also fostering political awareness regarding their duties as active participants (Brodie, Cowling, & Nissen, 2009). Obligations of tax and fee payers; and enforcement procedures. The clarity and comprehensiveness of these texts establish the fundamental basis for the administration of taxes and fees. Veig (1982) posits that administration is the deliberate action undertaken to achieve a specific objective. It is the methodical organization of activities and the strategic allocation of resources, intended to facilitate desired outcomes while concurrently obstructing occurrences that contradict our objectives. It is the organization of available labor and resources to achieve desired outcomes at minimal expenditure of energy, time, and money. A structured

administrative system denotes the organization, personnel, practices, and processes necessary for the effective execution of the functions assigned to the executive branch of government.

Historically, decision-making concerning government revenues and expenditures was characterized by opacity, with the treasury, central bank officials, and tax administrators being the sole entities accountable for public spending decisions. Parliamentary influence with public money was outlawed. Nonetheless, under decentralized administration, there has been a heightened interest and engagement about public participation and accountability in fiscal decision-making (Omwami & Omwami, 2010).

2.3.4 Tax Diversification.

Tax diversification entails the strategic utilization of various revenue streams, thereby mitigating reliance on particular categories of tax or non-tax sources (Hendrick and Crawford 2014). Neave (2000) and Teichler (2008) argue that as an institutional system diversifies, it leads to a greater differentiation within its subunits, such as departments or research units, as well as their functional components like study programmes. The dimensions articulated by Teichler (2008) and Neave (2000) encompass horizontal and vertical differences, formal and informal elements, as well as institutional size and the spectrum of disciplines. It appears that there is a prevailing notion regarding the favorable correlation between revenue diversification and performance.

Research findings suggest that performance, such as profitability or service delivery in the context of counties, tends to improve with increased diversity, albeit only up to a certain threshold of complexity (Grant, Jammine and Thomas, 1988). Klein and Lasse (2009) present a comparable viewpoint, suggesting that a diversified organization within related portfolios may achieve efficiency benefits that are not accessible to a non-

diversified organization or one with unrelated portfolios. Although there is a consensus regarding the potential of revenue diversification strategies as a means for growth and expansion, Wernerfelt and Montgomery (1988), as referenced in Isoe (2014), contend that organizations can only pursue diversification to a point where the potential for synergistic benefits ultimately reaches zero.

2.3.5 Technology.

The advancement of technology has emerged as a significant factor in the realm of tax and revenue collection. The emergence of innovative tools designed to enhance business efficiency significantly influences the methodologies employed in tax and revenue collection. The realm of Information Technology evolves with remarkable speed, rendering current fiscal systems outdated in a relatively brief timeframe. The imperative to amalgamate previously established frameworks is increasingly pressing, as novel applications must be developed to support the intricacies of financial processes (Adams, 2002). Furthermore, the volume of processing data increases annually, necessitating a scalable infrastructure to maintain the efficacy of fiscal processes (Maxwell, 2005).

A study conducted by the CRA in collaboration with USAID through the AHADI program in 2017 examined the revenue automation systems of County Governments, aiming to evaluate the impact of automation and identify existing gaps, ultimately revealing deficiencies in the revenue management systems. The analysis revealed the presence of partial automation in revenue streams, the existence of multiple independent revenue management systems, deficiencies in internal control mechanisms, inconsistencies in cash and bank reconciliations, insufficient staffing levels, a lack of technical capacity among personnel, and the ownership of data being held by vendors (Odhiambo et al, 2020). The Chief Revenue Administrator elucidated the rationale

behind exceeding the First Quarter targets for 2021/2022, attributing this success to the implementation of a cashless system. This advancement significantly enhanced revenue collection by reducing corruption and addressing various vulnerabilities that previously resulted in financial losses. (Benard L, 2021).

Modifications to the financial management systems and processes of the Government are increasingly essential in light of the rising expectations for enhanced transparency and accountability in the stewardship of public finances (Chiumya, 2006). Information Communication Technology offers counties the chance to familiarize themselves with innovative strategies for effective lobbying, advocacy, design, implementation, and service delivery to citizens through the utilization of management information systems that align with local, national, regional, and international trends. The digitization of all procedural steps significantly contributes to the reduction of errors, the standardization of operational practices, and the minimization of costs. It may guarantee that the practice aligns with the prevailing legal framework. Moreover, an automated taxation framework has the potential to diminish the operational expenditures associated with revenue collection. By curtailing expenditures, it is likely that a remaining budget could be allocated towards initiatives aimed at improving the welfare of citizens, with a focus on addressing societal needs (Fisman & Gaht, 2002).

2.3.6 Gross County Product (GCP)

The GCP provides a detailed geographic analysis of Kenya's Gross Domestic Product (GDP), offering insights into the magnitude and composition of the economies within its counties. It serves as a standard for assessing the progression of county economies throughout various periods. The estimates of GCP align with the published national GDP, as the aggregate of the GCP corresponds to the national-level GDP. GCP is

constituted by Sum of Gross Value Added (GVA) of all industries in a county + Taxes – Subsidies on products. (Kenya National Bureau of Statistics, 2024, Annex VI p. 58-59).

Table 2.1: GCP by Current Prices, LREB Counties

COUNTY	**GCP 2023 (Million)**
KISUMU	**343,264**
KAKAMEGA	**291,817**
BUNGOMA	**268,684**
KISII	**268,484**
TRANS NZOIA	**231,741**
KERICHO	**230,560**
NANDI	**218,809**
BOMET	**211,774**
HOMA BAY	**184,466**
MIGORI	**161,556**
NYAMIRA	**150,928**
SIAYA	**144,288**
BUSIA	**123,819**
VIHIGA	**109,075**
TOTAL	**2,939,265**

Source: (KNBS, 2024)

2.4 Empirical Literature Review

Empirical studies on revenue performance have consistently highlighted that fiscal sustainability in devolved units depends on several interrelated factors. These include the legal and institutional frameworks guiding taxation, the extent of citizen engagement in fiscal matters, the diversification of revenue streams, the application of modern technology in tax administration, and the strength of the underlying economic base. This review synthesizes empirical findings related to these determinants of own source

revenue (OSR), focusing on lessons drawn from both developed and developing contexts, and identifies the gaps that justify the current study in the Kenyan county government setting.

2.4.1 County Legal Framework and Own Source Revenue

Muriithi and Moyi (2003) applied a time-series econometric model using Kenya's national tax data between 1973 and 1999. Their results showed that while reforms temporarily improved buoyancy and elasticity of taxes, weak enforcement, administrative loopholes, and widespread exemptions hindered long-term revenue productivity. The methodological strength lay in the use of elasticity and buoyancy measures to assess productivity trends. However, the study predates the 2010 constitutional reforms that introduced county governments, meaning its insights are limited to the centralized fiscal system. The lack of a subnational focus highlights a gap in understanding how legal frameworks function under Kenya's devolved units.

Fjeldstad and Heggstad (2012) investigated local government revenue mobilization in Tanzania, Uganda, and Ghana through a comparative case study. Their research combined analysis of finance reports with interviews of policymakers and tax administrators. The study found that reliance on politically sensitive revenue bases, such as property taxes and business licenses, compounded by corruption and weak enforcement, led to poor revenue outcomes. This institutional and diagnostic approach generated valuable qualitative insights but did not quantify the scale of revenue losses. In addition, the focus on urban municipalities limits applicability to counties with predominantly rural structures, such as those in Kenya.

Njoroge and Omweri (2019) conducted a survey in Nairobi City County involving 150 respondents, including policymakers and revenue officers. The study established that inconsistencies between county by-laws and national statutes created overlaps and weak enforcement, which in turn led to citizen resistance and reduced compliance. While the findings provided empirical evidence linking legal clarity to OSR at the county level, the single-county design limits generalizability, as Kenyan counties vary widely in terms of economic structures and institutional capacity. Broader multi-county research is therefore needed to capture these variations.

Oduor et al. (2021) used panel regression on data from 15 Kenyan counties between 2013 and 2018 to assess the influence of legal frameworks on revenue performance. Their analysis revealed that clear by-laws and stronger enforcement mechanisms reduced revenue leakages by about 20%. The study's econometric rigor and multi-county scope provided robust evidence of the role of legal frameworks. However, the analysis focused narrowly on the clarity of laws, without examining how counties align their by-laws with national legislation or the institutional processes that underpin enforcement. This gap points to the need for deeper exploration of harmonization practices.

Olabisi (2012) examined Lagos State, Nigeria, using surveys and administrative tax office records analyzed with descriptive statistics and correlation methods. The study found that inadequate training of tax officers, corruption, and weak enforcement mechanisms negatively affected revenue generation. The metropolitan context, however, makes the findings less transferable to Kenya, where counties encompass both urban and rural settings and operate under a devolved system with different institutional dynamics.

Bird and Slack (2020) conducted a comparative study of Latin American municipalities, analyzing how institutional arrangements and tax frameworks shape revenue performance. Their findings suggested that municipalities with stronger legal clarity and simplified frameworks achieved better compliance and broader tax bases. While informative, the study was largely focused on metropolitan municipalities, overlooking rural areas where informal economic activity dominates. This limits the direct applicability to Kenya's counties, which combine both urban and rural economies.

2.4.2 Public Participation and Own Source Revenue

Ebdon and Franklin (2006) examined citizen participation in municipal budgeting in the United States using a qualitative case study approach. Their findings indicated that active involvement of citizens in budget processes improved trust and compliance with revenue systems. However, they also noted challenges of sustaining participation due to participation fatigue and unequal representation. While the study provides a strong theoretical foundation for linking participation with compliance, the U.S. context—with its advanced institutional maturity and high civic education levels—differs significantly from Kenyan counties. This limits the direct applicability of findings to devolved contexts where literacy levels and political dynamics shape participation differently.

Mwangi (2016) employed a mixed-methods design in Nakuru County, combining surveys of taxpayers with focus group discussions. The study found that limited awareness forums reduced taxpayers' understanding of obligations, leading to weak compliance with county taxes. The methodology captured both quantitative and qualitative dimensions of participation, strengthening validity. However, the single-county focus restricts generalizability to other counties, particularly those with different

socio-economic profiles. In addition, the study concentrated mainly on awareness forums without analyzing other participation mechanisms such as citizen feedback integration into fiscal policies.

Kariuki and Wanjala (2018) used a descriptive survey in Machakos County to examine the role of citizen involvement in county decision-making. Their findings suggested that public involvement created ownership of policies, reduced resistance to taxation, and enhanced compliance. Nonetheless, the reliance on self-reported perceptions raises concerns of social desirability bias, and the absence of robust statistical analysis limits the ability to infer causality. While the study underscores the significance of participation, it leaves unanswered the extent to which such participation quantitatively improves OSR outcomes.

Kariisa and Nsamba (2019) conducted a survey of 320 respondents across Ugandan local governments and analyzed the data using regression techniques. The study revealed that structured public forums positively influenced compliance and strengthened OSR mobilization. The use of regression analysis provided stronger empirical evidence compared to descriptive studies. However, Uganda's governance framework is more centralized than Kenya's devolved system, making the findings partially transferable. The contextual differences suggest a need for Kenya-specific studies that test similar dynamics.

Omolo (2022) investigated six counties in western Kenya through qualitative interviews and document reviews. The findings showed that participatory budgeting forums enhanced compliance, particularly when citizen feedback was formally integrated into county financial policies. The study offered locally grounded insights, but its qualitative

design lacked the quantitative rigor necessary to measure the magnitude of the observed effects. The absence of comparative statistical testing reduces its ability to generalize beyond the sampled counties.

The reviewed studies collectively demonstrate that citizen participation enhances compliance and strengthens OSR mobilization. While evidence from advanced economies emphasizes trust and ownership, African and Kenyan cases highlight awareness creation and structured forums as crucial. However, methodological limitations such as single-county focus and contextual differences constrain generalizability. This pointed to the need for broader and multi-county research to quantify and contextualize the role of participation in OSR performance.

2.4.3 Revenue Diversification and Own Source Revenue

Carroll and Stater (2009) analyzed over 4,000 nonprofit organizations in the U.S. using econometric modeling to test the relationship between revenue diversification and financial stability. They found that organizations with multiple income streams were more resilient to financial shocks and enjoyed greater sustainability. Although methodologically robust, the nonprofit sector differs significantly from county governments, which operate under statutory and political constraints. This limits the direct applicability of their findings to county OSR, although the principle of diversification remains conceptually relevant.

Hendrick (2002) conducted a longitudinal study of U.S. municipalities over a 20-year period. The study showed that diversified revenue sources reduced fiscal stress and stabilized municipal budgets during downturns. The strength of the study lies in its long-term perspective, which captures fiscal dynamics over time. However, the U.S. context

is characterized by strong institutional frameworks and predictable intergovernmental transfers, unlike Kenya's counties where revenue bases are narrow and transfers are uncertain. This contextual gap suggests the need for localized empirical testing.

Waweru and Riro (2013) carried out a survey of Nairobi County's revenue streams using both descriptive and inferential statistics. They found that overreliance on property rates created instability, and recommended diversification into permits, parking fees, and service charges. The study offered one of the few Kenyan insights into county revenue diversification. However, its urban-only focus neglected rural counties, where revenue bases differ substantially, limiting broader applicability.

Oates and Schwab (2015) investigated OECD countries through comparative analysis of fiscal federalism. They reported that diversified local revenue systems cushioned governments against economic downturns and enhanced fiscal autonomy. While informative, findings from advanced economies cannot be directly generalized to developing contexts such as Kenya, where informality and compliance challenges constrain the effectiveness of diversification.

Bird (2015) undertook a comparative study of emerging economies and concluded that diversification of revenue sources reduced fiscal crises and improved financial resilience. His work, while conceptually valuable, was broad and lacked empirical application to the Kenyan subnational context. This underscores the need for empirical evidence that specifically tests the role of diversification in Kenya's devolved counties.

Evidence across contexts suggests that revenue diversification enhances financial stability and reduces fiscal stress. U.S. and OECD studies provide robust econometric

evidence, while Kenyan studies offer localized but narrower insights. The key gap lies in the lack of multi-county empirical research that assesses how diversification strategies affect OSR across counties with different economic structures.

2.4.4 Technology and Own Source Revenue

Davis (1989) introduced the Technology Acceptance Model (TAM), arguing that perceived usefulness and ease of use are primary drivers of technology adoption. Although the model is theoretical, it remains influential in explaining technology adoption across sectors. Its limitation is that it does not directly address public revenue administration, requiring contextual application to county OSR systems.

Githinji (2017) surveyed 200 traders in Kiambu County to assess adoption of e-payment systems. The study found that e-payments improved compliance and reduced revenue leakages. However, challenges such as low digital literacy and resistance to change hindered adoption. The study is relevant to Kenya but focused narrowly on traders, excluding other taxpayer categories and county officers involved in OSR management.

Komba and Mtembenuzeni (2019) analyzed Tanzanian local governments using regression models to assess the impact of e-payments. Results showed that technology adoption reduced cash-handling risks and improved efficiency in revenue collection. The econometric rigor strengthened the reliability of findings, but Tanzania's more centralized governance system limits comparability with Kenya's devolved units.

Njuguna and Moronge (2020) used a mixed-methods approach to evaluate Nairobi County's Integrated Revenue Management System (IRMS). They found that technology improved transparency and accountability but faced challenges such as system

downtime and inadequate user support. The study contributed valuable insights but focused primarily on system performance rather than citizen compliance or enforcement outcomes.

Mwaura and Karanja (2022) examined technology adoption across 10 Kenyan counties and found a 25% increase in compliance following the adoption of mobile money payment platforms. Their multi-county design enhanced generalizability. Nonetheless, the study emphasized taxpayer convenience without assessing institutional readiness or enforcement mechanisms, leaving out key administrative dimensions of technology use.

Azmi and Kamarulzaman (2019) studied Malaysian tax systems through survey data and found that compliance improved when taxpayers perceived technology as reducing transaction costs. This aligns with TAM's propositions but originates from a highly digitized economy, making direct comparisons to Kenya challenging.

Technology adoption consistently emerges as a factor that improves efficiency, transparency, and compliance in revenue systems. Kenyan studies affirm these benefits but reveal persistent challenges such as literacy gaps, institutional readiness, and system reliability. The literature points to a gap in research that integrates both user perceptions and institutional capacity to fully explain the role of technology in OSR performance.

2.4.5 Gross County Product and Own Source Revenue

Ljungqvist and Smolyansky (2018) employed panel econometric models using U.S. state data from 1970 to 2013 to assess the impact of tax policy on employment and income. They found that corporate tax increases reduced employment and income, while tax cuts had stronger positive effects during downturns. The methodological rigor is notable, but

the U.S. state-level context differs markedly from Kenyan counties, which face structural unemployment and weaker revenue bases. Gunter et al. (2019) conducted a cross-country econometric study on VAT and economic growth, finding nonlinear effects consistent with the Laffer curve. Their findings highlight the link between tax policies and economic performance, but the national-level focus on VAT is less applicable to Kenya's county OSR systems, which rely more heavily on licenses, fees, and service charges.

Nguyen et al. (2021) analyzed the U.K. economy using macroeconomic simulation models and found that reductions in income tax boosted GDP, consumption, and investment. The study demonstrates how economic strength enhances fiscal capacity, but the highly formalized U.K. economy contrasts sharply with the largely informal structures of Kenya's counties.

Bird (2015) offered a comparative analysis of emerging economies, arguing that stronger economic bases expanded the tax net and reduced fiscal crises. Although conceptually useful, the study lacked empirical focus at subnational levels, leaving open questions on how Gross County Product (GCP) interacts with OSR in devolved units such as Kenya's counties.

The reviewed literature consistently highlights a positive relationship between economic strength and revenue performance. While studies from developed and emerging economies provide useful theoretical and econometric evidence, their applicability to Kenyan counties is limited by differences in institutional structures and informality levels. This underscores the need for localized empirical studies that test how GCP influences OSR performance within Kenya's devolved governance framework.

2.4 Summary of Literature Review and knowledge gaps.

Table 2.2 presents a synthesized matrix of selected empirical studies, outlining their research designs, key findings, and the gaps that inform the present study.

Table 2.2: Summary of Literature Review and knowledge gaps.

S/N	Author(s)	Research Design	Key Findings	Gap
1	Muriithi & Moyi (2003)	Quantitative, time-series analysis	Weak enforcement and loopholes reduced tax productivity; reforms improved buoyancy	National-level focus, pre-devolution, lacks county OSR perspective
2	Fjeldstad & Heggstad (2012)	Comparative case study	Weak enforcement, corruption, politically sensitive taxes reduced revenue	Rich institutional insights but lacked econometric testing; rural dynamics underexplored
3	Njoroge & Omweri (2019)	Survey	Inconsistent laws weakened enforcement, caused resistance	Single-county scope; findings not generalizable across Kenya
4	Oduor et al.(2021)	Panel data	Clear laws reduced revenue leakages by 20%	Focused on law clarity only; did not examine harmonization with national frameworks
5	Olabisi (2012)	Descriptive Survey	Poor enforcement, weak training, corruption hindered revenue	Urban Nigerian context; less relevant to mixed urban–rural Kenyan counties

6	Bird & Slack (2020)	Comparative institutional analysis	Strong tax frameworks improved compliance	Focused on metropolitan cities; rural applicability limited
7	Ebdon & Franklin (2006)	Case study	Participation improved trust and compliance	U.S. civic maturity context differs from Kenya
8	Mwangi (2016)	Mixed-methods	Weak awareness forums reduced compliance	Single-county scope; limited to awareness, ignored other mechanisms
9	Kariuki & Wanjala (2018)	Survey, descriptive design	Involvement improved ownership and reduced resistance	Perception-based; lacked causality
10	Kariisa & Nsamba (2019)	Survey	Structured forums improved compliance	Uganda is more centralized; transferability limited
11	Omolo (2022)	Qualitative	Forums improved compliance when feedback integrated	Lacked quantitative analysis of effect size
12	Carroll & Stater (2009)	Econometric modeling	Diversification improved sustainability	Nonprofit focus; limited relevance to county governments

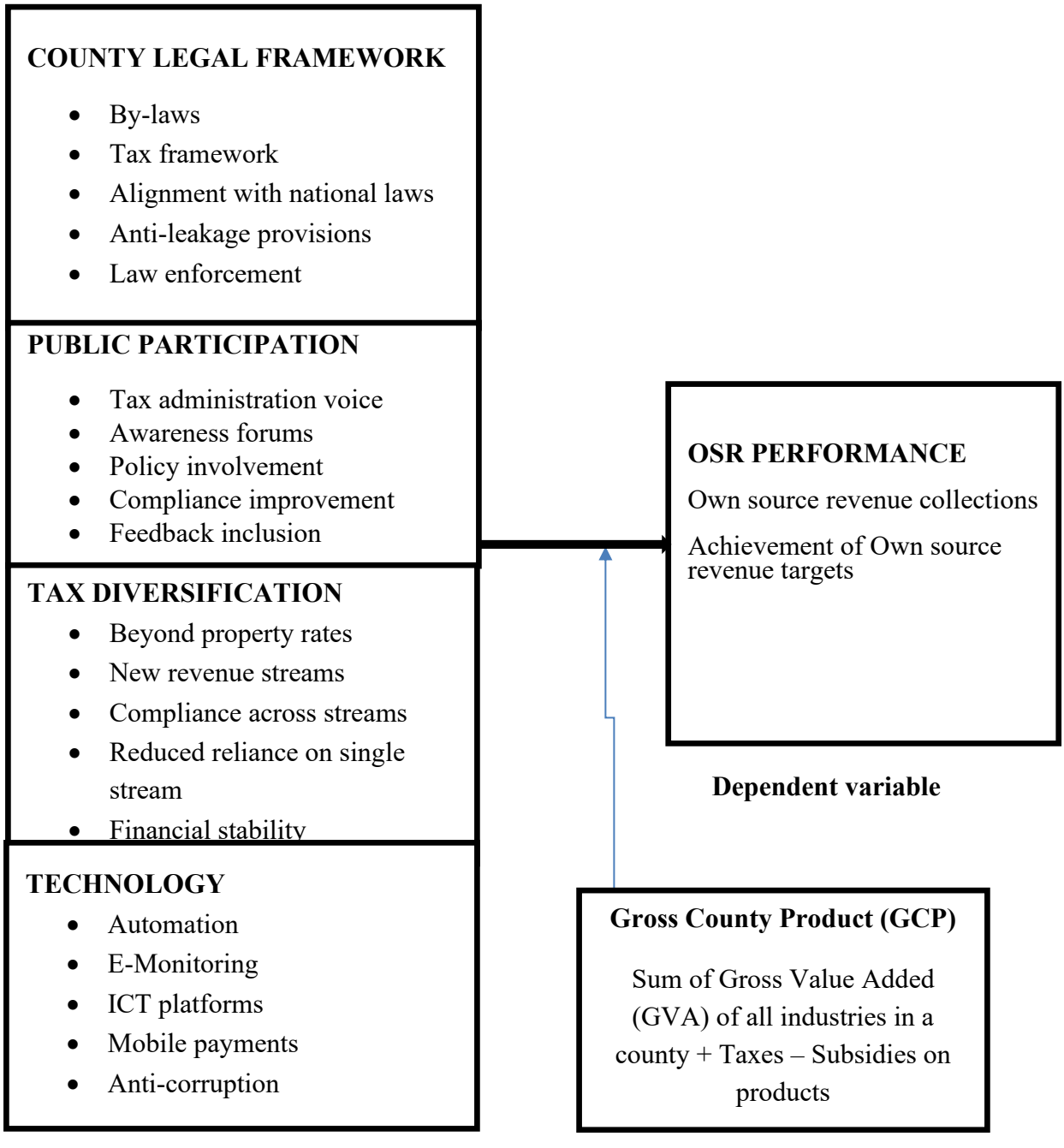
13	Hendrick (2002)	Longitudinal municipal study	Diversification stabilized budgets	Advanced U.S. context, unlike Kenya's counties
14	Waweru & Riro (2013)	Survey	Overreliance on property rates unstable; diversification needed	Urban scope only; rural counties excluded
15	Oates & Schwab (2015)	Comparative study	Diversification cushioned downturns	Advanced economies context; weak transferability
16	Bird (2015)	Comparative study	Diversification reduced fiscal crises	Broad and conceptual; no Kenya-specific evidence
17	Davis (1989)	Theoretical model	Usefulness & ease drive adoption	Generic; not directly linked to revenue systems
18	Githinji (2017)	Survey	E-payments improved compliance, reduced leakages	Focused on traders; excluded other taxpayers
19	Komba & Mtembenuzeni (2019)	Regression analysis	Reduced cash risks, improved efficiency	Centralized Tanzanian context; differs from Kenya
20	Njuguna & Moronge(2020)	Mixed-methods	Technology improved transparency but faced downtime issues	Narrow system-performance focus; excluded citizen views
21	Mwaura & Karanja (2022)	Multi-county survey	Mobile money increased compliance by 25%	Focused on convenience, ignored institutional readiness

22	Azmi & Kamarulzaman (2019)	Survey study	Compliance rose when tech reduced costs	Highly digitized context, less comparable to Kenya
23	Ljungqvist & Smolyansky (2018)	Panel econometrics	Tax increases reduced jobs; cuts boosted growth	U.S. labor markets differ from Kenya's counties
24	Gunter et al. (2019)	Cross-country econometric study	VAT had nonlinear effects (Laffer curve)	National-level VAT focus; less relevant to OSR
25	Nguyen et al. (2021)	Macroeconomic modeling	Cuts boosted GDP, consumption, investment	Highly formalized U.K. economy vs. Kenya's informality

Source: (Researcher, 2024)

2.6 Conceptual Framework.

This study presents a conceptual framework aimed at analyzing the influence of the county legal framework, public participation, tax diversification, and technology on the performance of own source revenue in LREB counties. The model comprises a singular dependent variable, namely Own Source revenue performance, alongside four independent variables: the county legal framework, public participation, tax diversification, and the utilization of technology. The selection of the four identified OSR determinants was guided by their comprehensive relevance across the extensive domains of legal, political, economic, and technological spheres, thereby rendering them exemplary representatives.



Source: Adopted **((**Markowitz (1952), Falleti (2004), Davis (1989) & KNBS (2024))

Figure 2.1: Conceptual Framework

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The methodology of research encompasses a detailed exposition of the techniques employed in the execution of the study. The document delineates the protocols to be adhered to in the execution of the study. This facilitates comprehension among fellow researchers regarding an individual's study, especially in contexts where replication is sought. The structure is delineated into the following segments: research design, population, sampling techniques, research instruments, data collection procedures, data analysis, and ethical considerations.

3.2 Research Philosophy

Research philosophy refers to the system of beliefs and assumptions about the development of knowledge (Saunders, Lewis, & Thornhill, 2015). It forms the foundation upon which the methodological choices of a study are based. This study adopted the pragmatism philosophy**,** which emphasizes that concepts are only meaningful when they support action (Kelemen & Rumens, 2008). Pragmatists value knowledge for its practical utility in solving real-world problems, focusing on what works in generating credible, reliable, and actionable insights (Elkjaer & Simpson, 2011).

The choice of pragmatism was guided by the objective of this research—to investigate the influence of county legal framework, public participation, tax diversification, and technology adoption on the performance of Own Source Revenue (OSR) among counties in the Lake Region Economic Bloc (LREB). By adopting pragmatism, the

study sought not only to test theoretical relationships but also to provide practical recommendations to enhance OSR mobilization.

3.2 Study Area

The research focuses on examining the influence of the county legal framework, public participation, tax diversification, and technology adoption on the own-source revenue of county governments within the Lake Region Economic Bloc in Kenya. The LREB represents one of the six economic blocs established in Kenya, encompassing 14 counties: Bomet, Bungoma, Busia, Homabay, Kakamega, Kericho, Kisii, Kisumu, Migori, Nandi, Nyamira, Siaya, Transnzoia, and Vihiga. Situated around Lake Victoria and its environs, the bloc was established to promote economic cooperation and harness economies of scale in service delivery. Despite its economic potential, no prior study has comprehensively examined OSR performance across LREB counties as a collective unit, providing a clear research gap that this study sought to address.

3.3 Research Design

As articulated by Sekaran and Roger (2011), research design constitutes a comprehensive framework that delineates the methodologies and procedures essential for the collection and analysis of requisite information. This investigation utilized a descriptive survey research framework. The primary objective of survey research design is to provide a detailed account of the current state of affairs (Kothari, 2011). The selection of the descriptive survey research design is predicated on the researcher's interest in the current state of affairs within the field, with the understanding that no variables will be manipulated in the process. This enables the researcher to extrapolate the findings to a broader population context.

3.4 Target Population

Kothari (2011) defines population as a collective of individuals who share a common characteristic. The target population is characterized as the entirety of individuals, occurrences, or entities—whether actual or theoretical—toward which a research study aims to extend its findings (Mackey & Gass, 2013). The study targeted 170 county officials directly involved in OSR mobilization within the 14 LREB counties. These included Sub-County Revenue Officers, Chief Officers of Finance and Trade, Chief Revenue Administrators, ICT Directors, and County Attorneys.

Table 3.1: Population distribution table

S/N	LREB County	Sub-county Revenue Officer	Chief Officer, Finance	Chief Officer, Trade	Chief Revenue Administrator	ICT Director	County Attorney	Totals
1	Kakamega	12	1	1	1	1	1	**17**
2	Busia	7	1	1	1	1	1	**12**
3	Kisumu	7	1	1	1	1	1	**12**
4	Bungoma	9	1	1	1	1	1	**14**
5	Trans-Nzoia	5	1	1	1	1	1	**10**
6	Migori	10	1	1	1	1	1	**15**
7	Siaya	6	1	1	1	1	1	**11**
8	Homa bay	8	1	1	1	1	1	**13**
9	Nandi	6	1	1	1	1	1	**11**
10	Kericho	6	1	1	1	1	1	**11**
11	Bomet	5	1	1	1	1	1	**10**
12	Vihiga	5	1	1	1	1	1	**10**
13	Nyamira	5	1	1	1	1	1	**10**
14	Kisii	9	1	1	1	1	1	**14**
	Totals	**100**	**14**	**14**	**14**	**14**	**14**	**170**

Researcher 2024

3.5 Sampling Design

Since the population was diverse, the study used a stratified sampling technique to ensure representation from each professional category, followed by simple random sampling within strata. Stratification reduced bias and improved generalizability.

The sample size was determined using Yamane's (1967) formula, as refined by Saunders et al. (2003

$$n = \frac{N}{1+N(e^2)} \ldots$$

Where, n=sample size,

N=population size,

e=the error of sampling.

While the sampling error of 0.05, the sample size was 120 respondents (71% of the population), ensuring representativeness and statistical validity.

$$n = \frac{170}{1+170(0.05^2)} = 120$$

A sample of respondents was chosen instead of surveying the complete target population of 170 due to statistical, logistical, and methodological factors. Moreover, surveying all 170 responders would necessitate increased time, money, and personnel, hence diminishing the efficiency of the operation. The chosen sample size was sufficiently large to encompass demographic variety, guaranteeing that the results would be generalizable while maintaining an acceptable margin of error (±5%). Additionally, survey fatigue and non-response concerns were acknowledged, as not all 170 individuals would be accessible or inclined to participate. The sample size being 71% of the target population, adhered to best practices in social science research to ensure valid, reliable,

and cost-effective data collecting, while achieving a confidence level of 95%. The Neyman allocation formula was employed to allocate respondents into the designated strata. The objective of the method is to optimize survey precision, given a predetermined sample size.

$$n_h = \left(\frac{N_h}{N}\right) n$$

Where,

n_h- The sample size for stratum h; n - Total sample size,

N_h -The population size for stratum h; N - The total population.

Hence, distribution was as follows;

Table 3.2: Sample Distribution Table

Population Category		Target Population	Sample **Size** $n_h = \left(\frac{N_h}{N}\right) n$
Chief Officers Finance	14	10	
Chief Officers Trade	14	10	
Chief Revenue Administrators	14	10	
Sub-County Revenue Officers	100	70	
ICT Directors	14	10	
County Attorneys	14	10	
Totals	**170**	**120**	

Source: (Researcher, 2024)

3.6. Data Collection.

Data collection refers to the systematic acquisition of information, evidence, and facts from a designated population, which enables the formulation of conclusions, informed decision-making on critical matters, and the dissemination of knowledge (Kothari,

2014). In this study, the target respondents comprised one hundred and twenty (120) officers in the County Revenue Administration Units, who directly influence the collection of own source revenue (OSR) from the 14 Lake Region Economic Bloc (LREB) counties.

The researcher employed both structured and unstructured questionnaires designed on a five-point Likert scale to collect primary data. This method was preferred because of its ease of administration, ability to capture both quantitative and qualitative perspectives, and efficiency in gathering data within a short timeframe (Mugenda & Mugenda, 2003).

In addition to primary data, the study utilized secondary data from authoritative national sources. Specifically, the Office of the Controller of Budget (OCOB) reports were reviewed to obtain official Figures on county-level revenue performance, while Gross County Product (GCP) data published by the Kenya National Bureau of Statistics (KNBS) was analyzed to contextualize the economic productivity and fiscal capacity of the 14 LREB counties. The integration of OCOB and KNBS datasets with survey responses allowed for triangulation of findings, thereby strengthening the validity, reliability, and robustness of the study.

3.7 Pilot Study

A pilot study is an initial investigation undertaken prior to the main study to assess the dependability of the research equipment (Sreevidya & Sunitha, 2011). A pilot study was conducted using a representative sample to ascertain whether the produced instruments or items aligned with the research questions' substance. Hirose and Creswell (2023) characterize a pilot test as a simulation and practice of the primary survey that determines the reliability and validity of the instruments. It records significant feedback

and recommendations from participants that allow the researcher to enhance the efficacy of the research instrument. A pilot study was conducted with 14 randomly selected respondents drawn proportionately across the strata in Uasin Gishu County, representing 11.7% of the total target sample size of 120. The relatively small pilot sample was sufficient to minimize the margin of error while providing valuable insights into the suitability of the research instrument (Ibrahim, Hami, & Abdulameer, 2020). The feedback obtained from the pilot study enhanced both the accuracy and dependability of the final instrument, thereby strengthening the credibility of the main study.

3.7.1 Validity Test

The validity of study pertains to the measurements utilized and if the research instrument accurately assesses the intended variables (Saunders, Lewis & Thornhill, 2009). Houston (2004) identifies four criteria for measuring validity: face validity, content validity, criterion-related validity, and concept validity. Validity was tested using Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity. KMO values should exceed 0.6 and Bartlett's test be significant ($p < 0.05$), to confirm sampling adequacy and construct validity.

Validity was tested using Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity as shown on Table 3.3

Table 3.3: KMO and Bartlett's Tests

Factors	**KMO test**	**Bartlett's test of Sphericity**		
		Chi-Square	**Df**	**Sig**
Legal Framework	0.700	103.120	15	0.000
Public Participation	0.756	218.950	28	0.000
Tax Diversification	0.840	213.523	15	0.000
Use of Technology	0.790	171.361	15	0.000

Source: (Researcher, 2024)

The KMO values for all four constructs exceeded the minimum accepTable threshold of 0.70 (Kaiser, 1974). Specifically, Legal Framework (0.700) indicated middling adequacy, Public Participation (0.756) and Use of Technology (0.790) reflected good adequacy, while Tax Diversification (0.840) achieved a meritorious level of adequacy. These results suggest that the variables within each construct share sufficient common variance to represent coherent latent factors, thereby supporting construct validity.

In addition, Bartlett's test of sphericity was highly significant for all constructs ($p < 0.05$. This means that the items were significantly intercorrelated within each construct, further affirming that they collectively measure the intended underlying dimensions.

Taken together, the results of the KMO and Bartlett's tests provide strong evidence of construct validity for the study variables. The findings demonstrate that the measurement items for Legal Framework, Public Participation, Tax Diversification, and Use of Technology are appropriate and statistically valid representations of their respective constructs in the context of own source revenue among LREB county governments

3.7.2 Reliability Test

Cronbach (1971) stated that reliability is a measure of how well a research instrument maintains its results or data consistency over multiple trials. An indicator of internal dependability, Cronbach's alpha (α), was utilized statistically. The questionnaire's internal reliability was assessed using it. According to Mugenda (2011), a reliability value of 0.7 or higher suggests that the data is very reliable. Reliability was assessed using Cronbach's Alpha, with values above 0.7 indicating accepTable internal consistency of the research instruments (Cohen, West, & Aiken, 2003).

Cronbach's alpha (α), was utilized statistically. The questionnaire's internal reliability was assessed using it.

Table 3.4: Reliability Test Results

	Number of items	**Cronbach's Alpha**
County Legal Framework	5	0.857
Public Participation	5	0.903
Tax Diversification	5	0.851
Use of Technology	5	0.816
Gross County Product	5	0.825

Source: (Researcher, 2024)

As presented in Table 3.4, all constructs met and exceeded the minimum threshold of 0.70, confirming that the scales used were reliable. The County Legal Framework recorded a Cronbach's alpha of 0.857, indicating good reliability and suggesting that the five items within this construct consistently measured aspects of legal frameworks influencing own source revenue performance . Public Participation achieved the highest reliability score of 0.903, which is classified as excellent, reflecting very strong internal consistency among the items measuring citizen involvement. Tax Diversification obtained a Cronbach's alpha of 0.851, signifying good reliability and confirming that the items adequately captured the dimensions of revenue diversification. Similarly, Use of Technology recorded a Cronbach's alpha of 0.816, also indicating good reliability, thereby affirming that the items consistently measured technological applications in revenue collection and management.

Overall, the Cronbach's alpha values across all constructs demonstrate that the measurement instruments were highly reliable. This consistency strengthens the

credibility of subsequent analyses, as the constructs were measured with minimal error and can be considered robust indicators of their respective concepts

3.8 Data Analysis

Upon receiving the completed questionnaires, the data was thoroughly reviewed to detect and address errors, omissions, exaggerations, and potential biases. Inconsistent or incomplete responses were cross-checked and, where necessary, omitted from further analysis to preserve data integrity. The questionnaires were then coded and entered into statistical software for processing. This process ensured that only clean, reliable, and valid data was subjected to quantitative analysis, thereby enhancing the accuracy and credibility of the study findings.

3.8.1 Diagnostic Tests

Prior to conducting inferential analysis, diagnostic tests were performed to assess whether the data met the fundamental assumptions of Pearson correlation and regression models. These assumptions are critical to ensuring the validity, reliability, and accuracy of the statistical results (Gujarati & Porter, 2009)

Linearity Test

Linearity between the independent and dependent variables was tested using scatterplots of standardized residuals against predicted values. The residuals were randomly distributed around zero, confirming linear relationships.

Normality Test

The normality of data was assessed using the Shapiro–Wilk tests, supplemented by Q–Q plots. Data with probability values above 0.05 were considered normally distributed (Saunders, Lewis, & Thornhill, 2012).

Multicollinearity Test

Variance Inflation Factor (VIF) and tolerance values were used to examine multicollinearity. All tolerance values exceeded 0.2 and VIF values were below 5, indicating the absence of significant multicollinearity (Ringle et al., 2015).

Homoscedasticity Test

The homogeneity of variance was examined using Levene's statistic at a 5% significance level. Result with p-values greater than 0.05 confirmed homoscedasticity, making the data suitable for regression analysis.

3.8.2 Quantitative Data Analysis

Quantitative data were analyzed using the Statistical Package for Social Sciences (SPSS, Version 22). The analysis focused on the main study variables, generating descriptive and inferential statistics such as means, standard deviations, variance, skewness, and kurtosis. Additionally, the Kruskal–Wallis rank-sum test was applied to examine category effects on responses, while correlation analysis assessed the relationships among variables. The following steps guided the analysis:

Correlation Analysis

Correlation coefficients were computed to examine the relationships between independent variables and the dependent variable, as well as interrelationships among independent variables. Significance level of 0.05 was applied.

Regression Analysis

Multiple regression analysis was conducted to establish the relationship between independent variables and own source performance. A multivariate regression model

was used to link the independent and dependent variables, enabling the identification of the predictors of Own Source Revenue performance.

$$\mathbf{Y= \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \varepsilon}$$

Where,

Y = Own source revenue performance

β_0 =Constant or coefficient of intercept

X_1 = County legal framework.

X_2 = Public Participation

X_3 = Tax Diversification.

X_4 = Technology

β_1…. β_4 =Represents the corresponding coefficients for the respective independent variables

ε = Error term i.e disturbance factors which represent residual or values that are not captured within the regression model.

Moderated Regression Analysis

The moderating model investigates whether the association between an independent variable, X, and a dependent variable, Y, fluctuates based on varying levels of a third variable, Z. A moderating variable affects the strength and/or direction of the association between a predictor and an outcome, either enhancing, reducing, or modifying the predictor's impact. Moderating effects are defined as an interaction between factors or variables, where the impact of one variable depends on the levels of the other variable in the study. Aiken and West (1991) provide thorough elucidations of moderator effects along with a framework for their assessment and evaluation. Moderation effects were analyzed by moderated regression analysis, wherein all predictor variables and their

interaction term are centered prior to model estimate to improve the interpretation of regression coefficients.

$$\mathbf{Y= \beta_0 + \beta_1 X + \beta_2 Z + \beta_3 X{*}Z + \varepsilon}$$

Where Z – Moderator (Gross County Product)

X*Z –Interaction term that tests moderation

3.8.3 Hypothesis Testing.

The study adopted the criteria presented in table 3.5 for testing the hypothesis

Table 3.5: Hypothesis Testing Criteria

H_0	Statement	Test Statistics	Critical Point	Value/Decision
H_{01}	There is no significant influence of County Legal Framework on the Own Source revenue performance in LREB	β_1, P_1	$P \leq 0.05$	Significant
H_{02}	There is no significant influence of Public participation on the own source revenue performance in LREB.	β_2, P_2	$P \leq 0.05$	Significant
H_{03}	There is no significant influence of Tax diversification on the own source revenue performance in LREB.	β_3, P_3	$P \leq 0.05$	Significant

H_{04}	There is no significant influence of technology on own source revenue performance in LREB.	$\beta_{4,} P_4$	$P \leq 0.05$	Significant
H_{05}	Gross County Product does not moderate the influence of County Legal Framework, Public Participation, Tax Diversification, and Technology on Own Source Revenue in LREB.	$\beta_{Z1,2,3,4,} P_{Z1,2,3,4}$	$P \leq 0.05$	Significant

Source: (Researcher, 2024)

3.9 Ethical Considerations.

The research procedure involved obtaining authorization from the University, securing approval from the respective County Governments, and acquiring a research permit from the National Commission for Science, Technology, and Innovation (NACOSTI). Confidentiality and privacy were safeguarded by ensuring that all collected data remained strictly confidential and was used solely for academic purposes. Participants were informed that the study was intended for academic research, and that access to the questionnaires by unauthorized individuals was prohibited. Requests for anonymity were honored by ensuring that respondents' names were neither recorded nor disclosed in the surveys. Participation was voluntary, and respondents were invited to take part through an official research introduction letter. Data security was reinforced through password-protected files and restricted access, ensuring that only the researcher could handle raw data. The researcher further committed to reporting findings with honesty, accuracy, and transparency.

CHAPTER FOUR

DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This analysis is conducted based on the data collected through questionnaires distributed to 120 county officials in the County Revenue Administration Units. This chapter includes descriptive statistics, diagnostic tests, and inferential statistics, including regression analysis.

4.2 Response Rate

A total of 120 questionnaires were distributed to county officials, and 101 were returned fully filled, representing an 84.2% response rate. This high response rate can be attributed to the targeted follow-ups and the relevance of the study to the respondents' daily operations. The summary of the questionnaire return rate is as shown in Table 4.1 below.

Table 4.1: Questionnaire Return Rate

	Frequency	**Percentage (%)**
Returned	101	84.2
Not Returned	19	15.8
Total	**120**	**100.0**

Source: (Researcher, 2024)

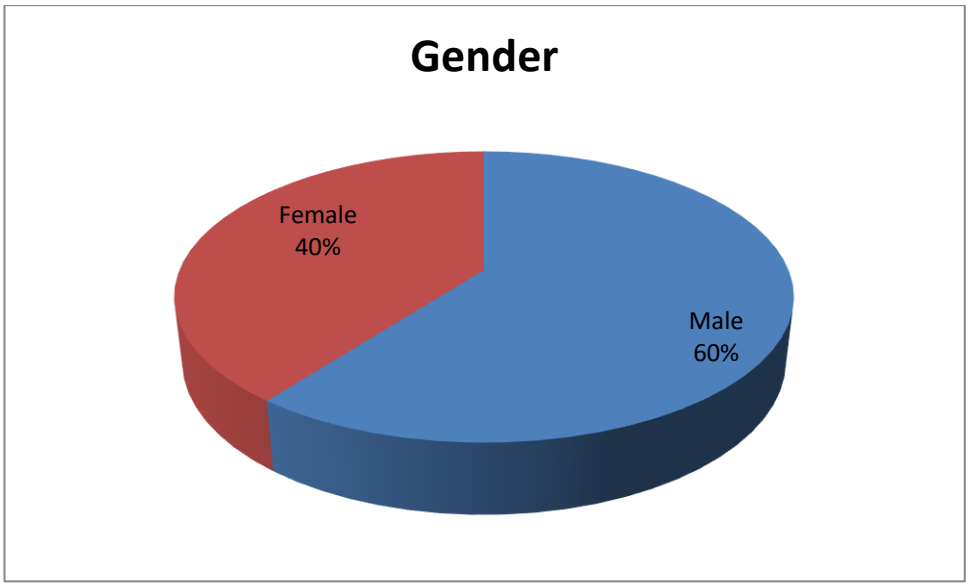
According to Edward et al. (2002), a response rate below 60% is considered poor, while a rate between 60% and 80% is deemed adequate. In this study, the achieved response rate of 84.2% was therefore considered excellent; aligning with the argument by Mugenda and Mugenda (2003) that response rates of 80% and above is both excellent and sufficient for research purposes.

4.3 Demographic Information

This section provides an overview of the demographic characteristics of the respondents, including their positions, years of experience, and education levels.

4.3.1 Gender of Respondents

The gender of respondents is summarized in figure 4.1



Source: (Researcher, 2024)

Figure 4.1: Gender of Respondents.

Figure 4.1 demonstrates that majority of the respondents (60%) were male, while respondents (40%) were female reflecting a relatively balanced distribution that enhances representativeness. Gender diversity in revenue administration improves accountability, problem-solving, and legitimacy of tax processes. Moreover, men and women are affected differently by OSR instruments incorporating gender perspectives in revenue mobilization therefore promotes equity, compliance, and transparency, ultimately strengthening OSR performance in counties.

4.3.2 Distribution of the Respondent According To Their Age Bracket

The research aimed to determine the age range of the participants. Table 4.2 presents the results:

Table 4.2: Age bracket of Respondents.

Age bracket	Frequency	Percentage (%)
18-30 years	20	19.8
31-40 years	35	34.7
41-50 years	30	29.7
Above 50 years	16	15.8
Total	**101**	**100.0**

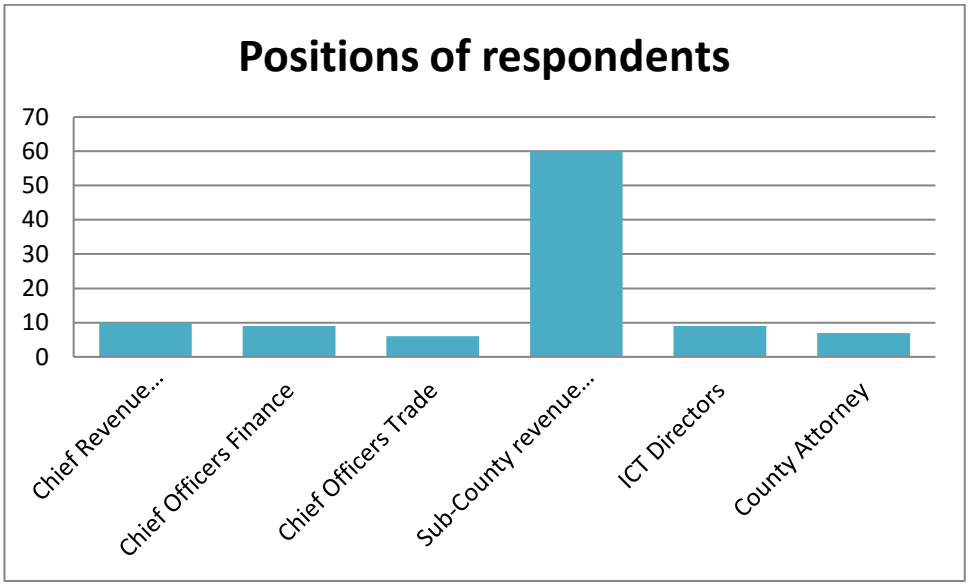
Source: (Researcher, 2024)

The study finding in Table 4.2, majority of the respondent, 35(34.7%) were aged between 31-40 years. The study also indicated that 30 (29.7%) of the respondents were aged between 41-50 years. 20 (19.8%) of the respondents were aged between 18-30 years and 16(15.8%) of the respondents were aged above 50 years. These results indicate that the sample had a fair distribution across different age brackets, minimizing age-related bias. Age plays an important role in Own Source Revenue (OSR) performance. Younger officers (18–30 years) are often more technologically adept, which enhances efficiency in revenue digitization and automation. Respondents in the 31–40 and 41–50 age groups bring both technical expertise and managerial experience, making them pivotal in policy implementation and enforcement of revenue measures. Older officers (50 years and above) contribute institutional memory, mentorship, and knowledge of local tax systems, which supports compliance and stability in OSR collection. A balanced age mix therefore

strengthens innovation, operational efficiency, and institutional continuity, all of which are critical for effective revenue mobilization.

4.3.3 Positions of Respondents

The positions of respondents are summarized in Figure 4.2



Source: (Researcher, 2024)

Figure 4.2: Positions of Respondents.

The findings in Figure 4.2 indicate that the majority of respondents, 59.5%, were Sub-County Revenue officers. The study noted that 9.9% respondents held the position of Chief Revenue Administrator, 8.9% were Chief Financial Officers, 6 5.9% were Chief Trade Officers, 8.9% were ICT Directors, and 6.9% were County Attorneys. This demonstrates that the study gathered perspectives from a diverse pool of individuals with direct and indirect roles in revenue management. Sub-County Revenue Officers, who form the frontline of revenue collection, directly influence compliance, enforcement, and efficiency in mobilizing local taxes and fees. Chief Revenue Administrators and Chief Financial Officers provide oversight, policy direction, and resource allocation, ensuring alignment with county revenue goals. Chief Trade Officers link revenue strategies with local business activities, which is

essential for expanding the tax base. ICT Directors drive the adoption of digital systems that enhance transparency and minimize leakages, while County Attorneys ensure legal compliance in revenue enforcement and dispute resolution. By incorporating insights from multiple positions, the study reflects a holistic understanding of how leadership, administration, technical capacity, and legal frameworks collectively shape OSR performance.

4.3.4 Years of Experience

The distribution of respondents by years of experience is presented in Table 4.3.

Table 4.3: Years of experience of Respondents.

Years of Experience	Frequency	Percentage (%)
1-5 years	25	24.8
6-10 years	40	39.6
11-15 years	24	23.7
16+ years	12	11.9
Total	**101**	**100.0**

Source: (Researcher, 2024)

The findings in Table 4.3 indicate that the majority of respondents, 40 (39.6%), have worked in the counties for a duration of 6 to 10 years. The survey noted that 25 respondents (24.8%) had 1-5 years of experience, while 24 respondents (23.7%) had 11-15 years of experience. Finally, 12 respondents (11.9%) possessed over 16 years of experience in the Counties. This demonstrates that the study captured perspectives from individuals with varying levels of exposure to county operations and revenue systems.

Years of experience significantly influence OSR performance. Respondents with longer experience (over 10 years) often possess deep institutional knowledge, historical insights into revenue trends, and familiarity with challenges such as

compliance gaps, enforcement weaknesses, and systemic inefficiencies. They can contribute valuable strategies for sustaining and improving revenue mobilization. On the other hand, those with fewer years of experience (1–5 years) bring fresh perspectives, adaptability, and openness to new technologies such as digital revenue systems, which are crucial for modernization. The balance between seasoned staff and newer employees creates a mix of continuity, innovation, and adaptability, which together enhance the overall performance of OSR systems.

4.3.5 Education Levels

The study sought to ascertain the academic qualifications of the individuals involved. This aimed to build a link between their qualifications. The results are encapsulated in Table 4.4.

Table 4.4: Education level of Respondents.

Education Level	Frequency	Percentage (%)
Diploma	13	12.8
Bachelor's Degree	50	49.5
Master's Degree	28	27.7
Doctorate	10	10.0
Total	**101**	**100.0**

Source: (Researcher, 2024)

Table 4.4 reveals that 13 (12.8%) of the respondents possessed diplomas, 50 (49.5%) held bachelor's degrees, 28 (27.7%) were master's degree holders, and 10 (10.0%) attained doctorate degrees. This indicates that the majority of respondents were highly educated, with most holding at least a bachelor's degree. Level of education plays a critical role in OSR performance. Highly educated staff, particularly those with bachelor's, master's, and doctorate qualifications, are better equipped with analytical, managerial, and policy formulation skills that enhance effective revenue

planning, compliance monitoring, and innovative resource mobilization strategies. They are also more likely to embrace technology-driven revenue systems, which improve efficiency and accountability. Meanwhile, diploma holders and those with relatively lower academic qualifications contribute practical, field-level insights and operational experience, ensuring that revenue collection processes are grounded in day-to-day realities. Therefore, a blend of education levels fosters both strategic oversight and effective implementation, ultimately boosting OSR performance.

4.4 Descriptive Statistics of the Variables.

4.4.1 Influence of County Legal Framework on OSR Performance.

This section will focuses on the influence of County Legal Framework on OSR Performance in LREB County governments. The summary of the descriptive statistic is as shown in Table 4.5 where the respondents rated various aspects of the county legal framework affecting OSR on a Likert scale.

In the scale of 1-5(where 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5 = Strongly Agree)

Table 4.5: County legal Framework Descriptive Results.

Description	N	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	S.D
Existing county by-laws provide a strong foundation for enhancing OSR collection.	101	2 (2.0)	8 (7.9)	15(14.9)	56(55.4)	20 (19.8)	3.87	0.91
The county's tax framework supports effective revenue mobilization.	101	21(20.8)	15(14.9)	23(22.8)	19(18.8)	23 (22.8)	3.11	1.45
County legal instruments are harmonized with national tax laws and policies.	101	8 (7.9)	4 (4.0)	28(27.7)	31(30.7)	30 (29.7)	3.74	1.30
Legal provisions adequately address revenue leakages and non-compliance.	101	6 (5.9)	5 (5.0)	15(14.9)	45(44.6)	30 (29.7)	3.91	1.08
Enforcement of county revenue laws is consistent and fair in practice	101	1 (1.0)	4 (4.0)	18(17.8)	54(53.5)	24 (23.8)	3.99	0.82

Source: (Researcher, 2024)

The descriptive statistics presented in Table 4.5 indicate that the county legal framework is an important determinant of OSR performance, though with varying levels of effectiveness across its components. The analysis is presented thematically under five sub-variables: county by-laws, tax frameworks, harmonization with national tax laws, legal provisions on revenue leakages, and enforcement practices.

Existing County By-Laws

The results show that respondents moderately agreed that existing county by-laws provide a strong foundation for enhancing OSR collection, with a mean of 3.87 and a

standard deviation of 0.91. This suggests that counties in the LREB region have enacted legal instruments that respondents generally perceive as supportive of revenue mobilization. The relatively low variability indicates consistency of opinion across counties. These findings are consistent with Oduor et al. (2021), who demonstrated that the establishment of clear and enforceable by-laws significantly reduced revenue leakages by up to 20 percent, thereby improving revenue outcomes.

County Tax Framework

The county tax framework recorded the lowest mean score of 3.11 and the highest standard deviation of 1.45. This indicates considerable divergence in respondents' perceptions regarding the ability of county tax frameworks to support revenue mobilization. In some counties, respondents considered the tax framework adequate, while in others it was viewed as weak and ineffective. The wide variation mirrors the findings of Njoroge and Omweri (2019), who established that inconsistencies and ambiguities in county tax frameworks weakened enforcement mechanisms, reduced compliance, and ultimately constrained OSR performance.

Harmonization with National Tax Laws and Policies

The harmonization of county legal instruments with national tax laws and policies yielded a mean of 3.74 and a standard deviation of 1.30. While respondents generally agreed that county legal instruments align with national statutes, the variability indicates uneven implementation across counties. This implies that some counties have made significant progress in aligning their legal frameworks, whereas others continue to face challenges of disjointed systems. Njoroge and Omweri (2019) similarly noted that a lack of consistency between county and national legislation

undermined compliance and weakened enforcement, thereby constraining OSR performance.

Legal Provisions Addressing Revenue Leakages and Non-Compliance

Respondents also agreed that legal provisions adequately address revenue leakages and non-compliance, with a mean score of 3.91 and a standard deviation of 1.08. This indicates that most counties have in place legal safeguards to minimize revenue losses, though their adequacy varies across jurisdictions. These findings corroborate Oduor et al. (2021), who emphasized that robust legal measures serve as an essential safeguard in sealing revenue loopholes, thereby contributing to stronger fiscal performance.

Enforcement of County Revenue Laws

Enforcement of county revenue laws emerged as the most positively rated sub-variable, with a mean score of 3.99 and the lowest standard deviation of 0.82. This reflects a strong consensus among respondents that enforcement practices are generally consistent and fair across counties. The findings underscore the importance of enforcement in enhancing compliance and revenue collection. Comparable evidence is presented by Olabisi (2012), who observed that inefficiencies in enforcement and tax administration in Lagos State had a detrimental effect on revenue performance, thereby highlighting enforcement as a critical determinant of OSR outcomes.

Generally, the findings suggest that county governments in the LREB region have made significant progress in establishing legal frameworks supportive of OSR performance, particularly through by-laws, legal safeguards, and enforcement mechanisms.

4.4.2 Influence of Public participation on OSR Performance.

This section focuses on the influence of public participation on OSR Performance in LREB County governments. The summary of the descriptive statistic is as shown in Table 4.6 where the respondents rated various aspects of the county legal framework affecting OSR on a Likert scale. In the scale of 1-5(where 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5 = Strongly Agree)

Table 4.6: Public Participation Descriptive Results.

Description	N	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	S.D
The public is actively engaged in discussions on tax administration.	101	1 (1.0)	4 (4.0)	18(17.8)	8 (7.9)	70 (69.3)	4.45	0.98
The county organizes revenue awareness forums to sensitize taxpayers.	101	21(20.8)	15(14.9)	23(22.8)	19 (18.8)	23 (22.8)	3.11	1.45
Citizens are involved in preparing key revenue-related policies such as the Finance Bill.	101	6 (5.9)	5 (5.0)	15(14.9)	45 (44.6)	30 (29.7)	3.91	1.08
Public participation has improved compliance with county taxes and fees.	101	3 (3.0)	23(22.8)	23(22.8)	32 (31.7)	20 (19.8)	3.46	1.14
Feedback from the public influences county revenue policies.	101	5 (5.0)	11(10.9)	18(17.8)	53 (53.5)	14 (13.9)	3.63	1.02

Source: (Researcher, 2024)

Descriptive results indicated in the Table 4.6 show that Public participation is a critical governance principle that influences Own Source Revenue (OSR) performance in county governments.

Public Engagement in Tax Administration

The findings indicate that the public is actively engaged in discussions on tax administration, with a high mean score of 4.45 and a standard deviation of 0.98. This result demonstrates strong agreement among respondents that citizen voices are integrated into tax-related deliberations, reflecting meaningful engagement. These results are consistent with Nayak and Samanta (2014), who found that citizen involvement in governance processes, such as attending meetings and voicing concerns, significantly enhanced accountability and service delivery. The implication is that effective engagement in tax administration fosters transparency and trust, thereby positively influencing OSR performance.

Revenue Awareness Forums.

Revenue awareness forums recorded the lowest mean score of 3.11, coupled with the highest standard deviation of 1.45. This suggests that respondents were sharply divided on whether counties regularly organize sensitization forums. Some respondents strongly agreed that such initiatives exist, while others disagreed or were unaware of them. The variability mirrors Mwangi's (2016) findings in Nakuru County, where limited awareness forums reduced taxpayer compliance. In the LREB context, the absence of widespread sensitization forums in some counties undermines tax morale and weakens voluntary compliance.

Participation in Policy Formulation

Respondents agreed that citizens are involved in preparing key revenue-related policies such as the Finance Bill, with a mean of 3.91 and a standard deviation of 1.08. This indicates that county governments have created avenues for citizen input in fiscal decision-making, though with variation in implementation. The results align with Kariuki and Wanjala (2018), who emphasized that genuine participation in policy formulation fosters taxpayer ownership and reduces resistance to taxation. Thus, counties that meaningfully involve citizens in drafting finance laws are likely to experience stronger compliance and improved OSR outcomes.

Influence on Compliance

Public participation was also perceived to improve compliance with county taxes and fees, with a mean of 3.46 and a standard deviation of 1.14. Although this reflects moderate agreement, the wide variability highlights differences across counties in how effectively public engagement translates into improved compliance. This finding resonates with Omolo (2022), who observed that the impact of participation is strongest when feedback is integrated into policy decisions, rather than when forums are symbolic or tokenistic. The implication is that counties must go beyond consultative meetings and ensure that citizen contributions directly shape fiscal strategies.

Feedback Integration in Revenue Policies

Finally, feedback from the public influencing county revenue policies registered a mean score of 3.63 with a standard deviation of 1.02. Respondents generally acknowledged that public feedback plays a role in shaping policies, although

variations suggest that integration remains inconsistent. These findings further reinforce Omolo's (2022) observation that the transformative potential of participation lies in the degree to which citizen voices are embedded into fiscal policy outcomes.

The descriptive results indicate that public participation exerts a significant influence on OSR performance across LREB counties. Strong citizen engagement in tax administration and participation in policy formulation emerged as key drivers of compliance and trust in county fiscal systems. However, weaknesses remain, particularly in the organization of revenue awareness forums and the systematic integration of public feedback into policy. The study findings emphasize that meaningful public participation builds transparency, enhances accountability, and improves compliance, thereby strengthening OSR performance.

4.4.3 Influence of Tax Diversification on OSR Performance.

This section focuses on the influence of tax diversification on OSR Performance in LREB County Governments. The summary of the descriptive is as shown in Table 4.7.

In the scale of 1-5(where 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5 = Strongly Agree)

Table 4.7: Tax Diversification Descriptive Results.

Description	N	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	S.D
The county has diversified into several revenue streams other than Property rates.	101	3 (3.0)	23(22.8)	23(22.8)	32 (31.7)	20 (19.8)	3.46	1.14
The county has introduced new innovative revenue streams e.g., levies	101	8 (7.9)	9 (8.9)	18(17.8)	39 (38.6)	27 (26.7)	3.71	1.20
Compliance levels are consistent across different revenue streams.	101	1 (1.0)	4 (4.0)	18(17.8)	54 (53.5)	24 (23.8)	3.99	0.82
Reliance on a few major revenue sources has reduced due to diversification	101	2 (2.0)	8 (7.9)	15(14.9)	56 (55.4)	20 (19.8)	3.87	0.91
Revenue diversification has improved financial sustainability of my county	101	8 (7.9)	4 (4.0)	28(27.7)	31 (30.7)	30 (29.7)	3.74	1.30

Source: (Researcher, 2024)

The finding in table 4.7 depicts the extent to which tax diversification influences OSR performance in LREB County Governments. The descriptive results are summarized and interpreted thematically across five sub-variables.

Diversification beyond Property Rates

The results indicate that counties have made some effort to diversify revenue sources beyond property rates. Specifically, 31.7% of respondents agreed and 19.8% strongly agreed that LREB counties have diversified into several streams other than property rates, yielding a mean of 3.46 (SD = 1.14). This finding implies that although

property rates remain a key source, counties are expanding into alternative streams to enhance OSR. Hendrick (2002) emphasizes that such diversification helps stabilize local finances by reducing reliance on a single volatile source of revenue.

Introduction of Innovative Revenue Streams

Innovation in revenue generation emerged as a significant dimension of diversification. About 38.6% of respondents agreed and 26.7% strongly agreed that counties have introduced new streams such as levies, resulting in a mean score of 3.71 (SD = 1.20). This reflects progressive adoption of novel mechanisms of resource mobilization, particularly in urbanized contexts. Bird (2015) argues that in emerging economies, innovation in taxation is vital for broadening fiscal capacity and improving resilience.

Consistency of Compliance across Revenue Streams

The highest level of agreement was observed in relation to compliance across revenue streams. More than half of the respondents (53.5%) agreed and 23.8% strongly agreed that compliance levels are consistent across diversified sources, producing the highest mean of 3.99 (SD = 0.82). This suggests that diversification efforts have been matched by mechanisms that ensure compliance and revenue realization. Waweru and Riro (2013) caution, however, that inconsistent enforcement in certain counties may undermine the effectiveness of revenue diversification as a fiscal strategy.

Reduction of Reliance on a Few Revenue Sources

The study further established that reliance on a few major sources has reduced, as 55.4% of respondents agreed and 19.8% strongly agreed with this assertion, yielding a mean of 3.87 (SD = 0.91). This demonstrates that diversification has contributed to a more balanced revenue structure in several counties. Such findings support Hendrick's (2002) observation that diversification mitigates fiscal stress, particularly in contexts vulnerable to fluctuations in narrow revenue bases.

Contribution to Financial Sustainability

Finally, respondents acknowledged that revenue diversification has improved financial sustainability within counties. While 30.7% agreed and 29.7% strongly agreed with this assertion, a significant proportion (27.7%) remained undecided, resulting in a mean of 3.74 (SD = 1.30). The relatively high standard deviation reflects uneven adoption across counties, with urbanized counties reporting stronger sustainability gains compared to agrarian counterparts. This outcome resonates with Mintzberg, Ahlstrand, and Lampel (2009), who contend that diversification, as a strategic orientation, fosters long-term organizational resilience and success.

Overall, the findings demonstrate that tax diversification plays a pivotal role in enhancing OSR performance in LREB counties, though its impact varies across contexts. Evidence from both empirical data and prior scholarship confirms that diversification enhances financial stability, reduces overdependence, and promotes fiscal resilience. However, uneven implementation across counties suggests the need for deliberate strategies to expand innovative revenue streams, strengthen compliance, and ensure equitable fiscal performance across the LREB region.

4.4.4 Influence of Technology Adoption on OSR Performance.

This section focuses on the influence of technology adoption on OSR Performance in LREB County Governments. The summary of the descriptive is as shown in Table 4.8.

In the scale of 1-5(where 1=Strongly Disagree, 2=Disagree, 3=Undecided, 4=Agree, 5 = Strongly Agree)

Table 4.8: Technology Adoption Descriptive Results.

Description	N	SD (%)	D (%)	U (%)	A (%)	SA (%)	Mean	S.D
Generally, automation of revenue collection has improved OSR Performance in the County	101	0 (0.0)	8 (7.9)	38(37.6)	21 (20.8)	34 (33.7)	3.84	1.00
There is electronic monitoring& evaluation of all collected revenues.	101	5 (5.0)	11(10.9)	18(17.8)	53 (53.5)	14 (13.9)	3.63	1.02
There is an effective ICT platform to support e-revenue mobilization in the county.	101	9 (8.9)	11(10.9)	23(22.8)	28 (27.7)	30 (29.7)	3.62	1.25
Integration with mobile payment platforms (e.g., M-Pesa) has enhanced collections.	101	2 (2.0)	8 (7.9)	15(14.9)	56 (55.4)	20 (19.8)	3.87	0.91
Technology has minimized corruption and revenue leakages in the county.	101	1 (1.0)	4 (4.0)	18(17.8)	8 (7.9)	70 (69.3)	4.45	0.98

Source: (Researcher, 2024)

The descriptive findings in Table 4.8 are discussed thematically along five dimensions of technology adoption.

Automation of Revenue Collection

The results indicate that automation has significantly enhanced OSR performance. Approximately 20.8% of respondents agreed and 33.7% strongly agreed that automation improved county revenue performance, yielding a mean score of 3.84 (SD = 1.00). This finding implies that automation reduces manual inefficiencies, speeds up transactions, and broadens the tax base. According to Githinji (2017), the automation of revenue systems in Kiambu County substantially increased efficiency and minimized collection leakages, reinforcing the present study's evidence.

Electronic Monitoring and Evaluation

The majority of respondents (53.5% agreed; 13.9% strongly agreed) acknowledged that electronic monitoring and evaluation systems are employed in tracking collected revenues, producing a mean of 3.63 (SD = 1.02). These findings suggest that technology strengthens accountability and reduces revenue pilferage. Odoyo et al. (2013) similarly emphasized that ICT-based monitoring frameworks enhance both the efficiency and transparency of revenue collection processes in devolved government contexts.

ICT Infrastructure for E-Revenue Mobilization

A considerable proportion of respondents (27.7% agreed; 29.7% strongly agreed) reported that their counties possess ICT platforms to facilitate e-revenue mobilization, with a mean of 3.62 (SD = 1.25). Although this reflects moderate

agreement, the relatively higher standard deviation reveals uneven adoption across counties. Urban counties appear more advanced in ICT integration, while rural counties lag due to infrastructural constraints. This disparity aligns with World Bank (2019) findings that ICT adoption in fiscal systems requires sustained investment in digital infrastructure and capacity-building.

Integration with Mobile Payment Platforms

Mobile payment systems, particularly M-Pesa, were identified as a key enabler of efficient revenue collection. About 55.4% of respondents agreed and 19.8% strongly agreed that mobile integration has enhanced revenue collections, with a mean of 3.87 (SD = 0.91). This confirms that mobile platforms improve convenience and compliance by reducing transaction barriers. Mwaura and Karanja (2022) documented similar evidence, showing a 25% increase in compliance across Kenyan counties following the adoption of mobile money channels.

Minimization of Corruption and Leakages

Technology adoption was also found to substantially reduce corruption and revenue leakages. A striking 69.3% of respondents strongly agreed that technology has curbed leakages, producing the highest mean score of 4.45 (SD = 0.98). This reflects a strong consensus that ICT tools enhance transparency and limit opportunities for rent-seeking. These results resonate with Githinji (2017), who observed reduced corruption through automated systems, and Odoyo et al. (2013), who confirmed that ICT platforms enhance revenue integrity in public financial management.

Overall, the results establish that technology adoption is a critical driver of OSR performance in LREB counties. By automating processes, strengthening monitoring

systems, deploying ICT infrastructure, integrating mobile payments, and minimizing corruption, counties have significantly improved transparency and compliance. The findings align with previous scholarship underscoring the transformative role of technology in enhancing fiscal performance and sustainability.

4.4.5: OSR Performance.

This section focuses on OSR Performance in LREB County Governments. The summary of the descriptive is as shown in Table 4.9.

Table 4.9: OSR Performance Results.

LREB COUNTY	**GCP (Million)**	**OSR COLLECTIONS (Million)**					**FIVE YEAR GROWTH RATE**
	2023	**2019/2020**	**2020/2021**	**2021/2022**	**2022/2023**	**2023/2024**	**%**
KISUMU	**343,264**	804.39	1,248.06	1,199.15	1,153.46	1,443.61	**79.47%**
KAKAMEGA	**291,817**	1,180.33	1,111.11	1,221.67	1,309.68	1,347.83	**14.19%**
BUNGOMA	**268,684**	975.13	758.25	983.30	1,177.33	1,120.91	**14.95%**
KISII	**268,484**	719.00	702.00	898.00	1,019.00	1,180.00	**64.12%**
TRANS NZOIA	**231,741**	356.08	340.45	379.99	477.28	476.64	**33.86%**
KERICHO	**230,560**	473.73	595.98	566.82	501.35	841.93	**77.72%**
NANDI	**218,809**	-	-	-	200.74	630.73	
BOMET	**211,774**	201.51	183.01	201.51	242.40	238.93	**18.57%**
HOMA BAY	**184,466**	274.60	233.87	337.40	491.50	1,200.50	**337.18%**
MIGORI	**161,556**	305.69	288.54	386.87	406.36	512.57	**67.68%**
NYAMIRA	**150,928**	185.57	162.56	166.05	284.59	369.80	**99.28%**
SIAYA	**144,288**	179.43	332.88	434.38	508.04	610.74	**240.38%**
BUSIA	**123,819**	226.17	322.60	292.74	343.92	369.20	**63.24%**
VIHIGA	**109,075**	148.20	169.11	240.89	241.35	338.06	**128.11%**
TOTAL	**2,939,265**	**6,029.83**	**6,448.42**	**7,308.77**	**8,357.00**	**10,681.45**	**77.14%**
GROWTH RATE		**-**	**6.9%**	**13.3%**	**14.3%**	**27.8%**	

Source: (Office of the Controller of Budget, 2024) (KNBS, 2024)

Table 4.9 presents OSR collections for the 14 LREB counties between FY 2019/2020 and FY 2023/2024. The results indicate that total OSR mobilization rose steadily

from KSh 6.03 billion in 2019/2020 to KSh 10.68 billion in 2023/2024, representing a 77.3% cumulative increase over five years. Annual growth fluctuated, recording 6.9 percent in 2020/2021, 13.3 percent in 2021/2022, 14.3 percent in 2022/2023, and peaking at 27.8 percent in 2023/2024. This upward trend demonstrates progressive improvements in counties' capacity to mobilize local revenue, though performance remained uneven across the bloc.

Counties such as Kakamega, Kisumu, and Bungoma consistently mobilized more than KSh 1 billion annually, reflecting relatively stronger legal frameworks, broader tax bases, and earlier adoption of automated systems. These results confirm the arguments by Oduor et al. (2021), who observed that institutional capacity and legal clarity significantly reduce revenue leakages. On the other hand, medium-performing counties such as Kericho, Migori, and Kisii displayed progressive but fluctuating revenue collections, often reflecting challenges in enforcement and limited diversification. For example, Kericho experienced a decline in 2022/2023 before rebounding strongly in 2023/2024. Low-performing counties, including Busia, Vihiga, and Nyamira, continued to collect below KSh 400 million annually despite modest improvements, echoing Mwangi's (2016) findings that weak public participation undermines compliance in smaller counties. A notable case was Homa Bay, which recorded a sharp increase from KSh 491.5 million in 2022/2023 to KSh 1.2 billion in 2023/2024, suggesting the success of reforms in diversification and technology adoption.

Two patterns emerge from these results. First, counties with higher Gross County Product (GCP) tended to achieve stronger OSR growth, consistent with Bird's (2015) assertion that economic bases expand the tax net and enhance fiscal resilience. Second, the sharp acceleration in growth in the final year may reflect the cumulative

effects of enhanced automation, structured enforcement, and greater compliance, consistent with Mwaura and Karanja's (2022) findings on the transformative role of mobile payment platforms. Overall, while OSR performance in the LREB has improved significantly, disparities remain across counties.

4.5 Diagnostic Tests

Before conducting inferential analysis, diagnostic tests were carried out to evaluate whether the data satisfied the key assumptions underlying Pearson correlation and regression models. Meeting these assumptions is essential for ensuring the validity, reliability, and accuracy of the statistical findings.

4.5.1 Linearity Tests

Linearity tests assess whether the connection between independent and dependent variables is linear. This is essential for regression analysis.

Table 4.10: Linearity Test Results

			Sum of Squares	**Df**	**Mean Square**	**F**	**Sig.**
Determinants OSR Performance	Between Groups	(Combined)	1320.774	124	4.627	9.34	0.997
		Linearity	0.730	1	0.731	7.05	0.942
		Deviation from Linearity	1634.207	123	4.802	4.35	0.995
	Within Groups		1592.410	101	13.502		
	Totals		**4548.121**	**226**			

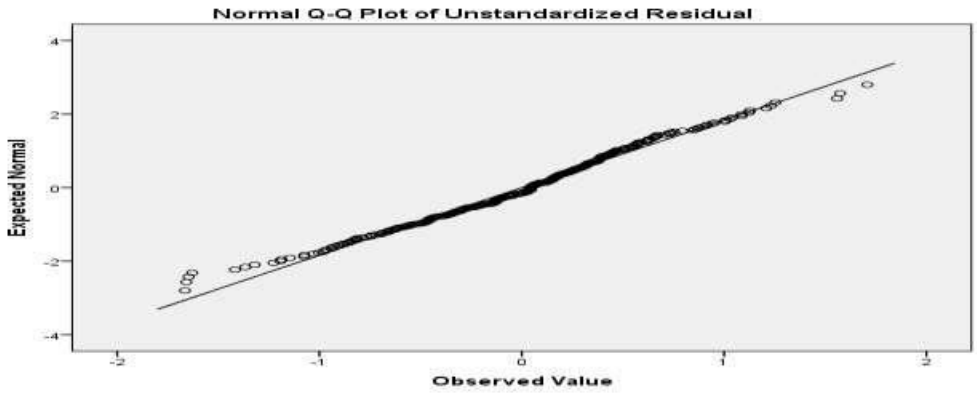
Source: (Researcher, 2024)

The results presented in Table 4.10 demonstrate that the significant deviation from linearity is 0.995, exceeding 0.05. This indicated that there was no substantial

variation from linearity, suggesting evidence of a linear link between operational factors and OSR performance in LREB counties.

4.5.2 Normality Tests

Normality tests ascertain whether the data distribution significantly deviates from a normal distribution, a fundamental assumption in several statistical analyses. Linear regression models assume that residuals follow a normal distribution. To assess this assumption, a normal Q-Q plot was generated, as shown in Figure 4.3.



Source: (Researcher, 2024)

Figure 4.3: Normal Q-Q plot for the residuals.

In a Q-Q plot, normality is evaluated by examining how closely the residuals align with the diagonal reference line, which represents the theoretical normal distribution. The closer the data points lie along this line, the stronger the evidence of normality. In this study, most of the residuals in the Q-Q plot were positioned close to the diagonal line, with only minimal deviations and few outliers. This indicates no significant departure from normality, thereby confirming that the residuals of the fitted model are approximately normally distributed.

Normality of residuals was also assessed using both the Kolmogorov-Smirnov and Shapiro-Wilk tests, as presented in Table 4.11.

Table 4.11: Normality Test Results Kolmogorov-Smirnov ad Shapiro-Wilk Test

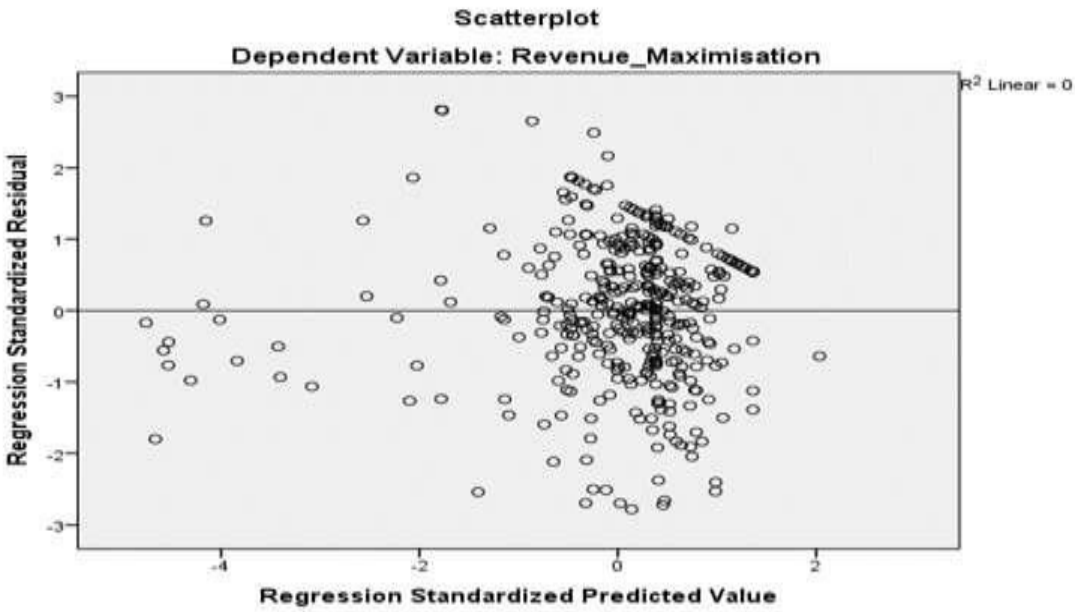
	Kolmogorov-Smirnov			Shapiro-Wilk Statistic		
	Statistic	**Df**	**Sig.**	**Statistic**	**Df**	**Sig**
Residuals	0.094	100	0.201	0.894	100	0.335

Source: (Researcher, 2024)

The Kolmogorov-Smirnov test produced a p-value of 0.201, which exceeds the 0.05 threshold, indicating that the residuals did not significantly deviate from normality. Similarly, the Shapiro-Wilk test yielded a p-value of 0.335, also greater than 0.05, confirming no significant departure from a normal distribution. These results suggest that the normality assumption of the residuals was upheld.

4.5.3 Homoscedasticity Test

Homoscedasticity refers to the condition where the variance of a variable remains constant, also known as homogeneity of variance. Conversely, when the variance is not constant, the situation is referred to as heteroscedasticity. In linear regression models, one of the key assumptions is that the residuals have constant variance. To assess this assumption, a scatter plot of standardized residuals against predicted values—such as the one shown in Figure 4.4—is commonly used.



Source: (Researcher, 2024)

Figure 4.4: Homoscedasticity Test Results

Homoscedasticity is indicated when the residuals are randomly scattered around the horizontal reference line at zero, without forming a distinct pattern. In contrast, heteroscedasticity is suggested when the residuals display a systematic pattern, such as an increasing or decreasing spread. The scatter plot in Figure 4.4, generated from the fitted model in this study, shows no evident patterns, suggesting that the residuals are homoscedastic

4.5.4 Multicollinearity Test

The study conducted a multicollinearity test to ascertain whether the variables were highly correlated, indicating that one variable could be accurately predicted from another. The assessment was conducted utilizing Tolerance and Variance Inflation Factor (VIF) values for the four variables. Tolerance quantifies the extent of variability in one independent variable that remains unexplained by other independent variables.

Table 4.12: Multi-collinearity Test Results

	Tolerance	VIF
Legal Framework	0.387	2.585
Public Participation	0.252	3.961
Tax Diversification	0.282	3.545
Use of Technology	0.327	3.059

Source: (Researcher, 2024)

According to the results in Table 4.12, the VIF value lies between 1 and 4, and tolerance values were above 0.2 for all predictors implying there were no multicollinearity issues in the study that could have potential impact on regression analysis.

4.6 Correlation Analysis

Correlation analysis measures the strength and direction of the relationship between two variables. The Pearson correlation coefficient was used to assess the linear relationships between the independent variables and OSR performance.

Table 4.13: Correlation Matrix

		OSR Performance	Legal Framework	Public Participation	Tax Diversification	Technology
OSR Performance	Pearson Correlation Sig. (1-Tailed)	1				
Legal Framework	Pearson Correlation Sig. (1-Tailed)	0.375* 0.001	1			
Public Participation	Pearson Correlation Sig. (1-Tailed)	0.452* 0.008	0.271* 0.022	1		
Tax Diversification	Pearson Correlation Sig. (1-Tailed)	0.304* 0.036	0.050* 0.009	0.100* 0.056	1	
Technology Adoption	Pearson Correlation Sig. (1-Tailed)	0.426* 0.001	0.250* 0.060	0.325* 0.068	0.375* 0.017	1

*. Correlation is significant at the 0.05 level (1-tailed).

Source: (Researcher, 2024)

OSR Performance and Legal Framework (r = 0.375, p = 0.001)

The results show a positive and significant relationship between legal frameworks and OSR performance. This implies that counties with clearer by-laws, stronger enforcement, and better harmonization with national laws mobilize higher revenues. These findings align with Muriithi and Moyi (2003), who showed that weak enforcement and exemptions undermine long-term revenue productivity, and with Oduor et al. (2021), who established that clear by-laws reduced revenue leakages by 20%. Similarly, Njoroge and Omweri (2019) found that inconsistencies in county laws led to poor compliance.

OSR Performance and Public Participation (r = 0.452, p = 0.008)

The results indicate a moderate positive and significant relationship between public participation and OSR performance. Citizen involvement in budgeting and revenue decision-making builds trust, reduces resistance, and improves compliance. This

supports Mwangi (2016), who showed that weak awareness forums reduced compliance in Nakuru County, and Kariuki and Wanjala (2018), who found that participation enhanced ownership and reduced resistance in Machakos County. Similarly, Kariisa and Nsamba (2019) found that structured public forums in Uganda strengthened OSR mobilization, while Omolo (2022) observed that participatory forums in Western Kenya improved compliance when citizen feedback was integrated.

OSR Performance and Tax Diversification (r = 0.304, p = 0.036)

A significant positive correlation was found between tax diversification and OSR performance. This implies that counties with varied revenue sources (permits, service charges, property rates) are more resilient and fiscally sustainable. Waweru and Riro (2013) showed that overreliance on property rates in Nairobi created instability and recommended diversification. Similarly, Hendrick (2002) demonstrated that diversified revenue sources stabilized U.S. municipalities during downturns, while Bird (2015) concluded that diversification reduces fiscal crises. These findings confirm the importance of broadening the county revenue base to minimize risks.

OSR Performance and Technology Adoption (r = 0.426, p = 0.001)

Technology adoption exhibited a strong and significant positive correlation with OSR performance. Counties that embraced e-payment systems, automated billing, and integrated revenue platforms experienced greater efficiency, transparency, and compliance. Githinji (2017) found that e-payment systems in Kiambu improved compliance and reduced leakages. Njuguna and Moronge (2020) similarly established that Nairobi's IRMS enhanced accountability, while Mwaura and Karanja (2022) found that mobile payment platforms increased compliance by 25%

across 10 counties. These results reinforce the argument that ICT use is a critical enabler of county fiscal sustainability.

4.7 Regression Analysis

Regression analysis was performed to evaluate the ability of the independent variables to predict the outcome of the dependent variable, under the assumption of a linear relationship, employing ANOVA and model coefficients.

Table 4:14: Model Summary of determinants and OSR Performance

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.773[a]	0.598	0.580	0.7101

a. Predictors: (Constant), County legal framework, Public participation, Tax diversification, Use of technology

b. Dependent Variable: OSR Performance

Source: (Researcher, 2024)

Table 4.14 indicates that the regression model exhibits a robust fit, accounting for 59.8% of the variance in OSR Performance as explained by the predictors (County legal framework, Public engagement, Tax diversification, and Use of technology). The robust correlation (R = 0.773) and minimal standard error of estimate (0.7101) suggest that the model is dependable and the predictors substantially aid in elucidating the variance in OSR Performance.

As shown in Table 4.15, the researcher used ANOVA analysis to determine how well the regression equation predicted the dependent variable and fit the data.

Table 4:15: ANOVA Test results

Model		Sum of Squares	Df	Mean Square	F	Sig
1	Regression	40.100	4	10.025	19.890	0.000[b]
	Residual	48.412	96	0.504		
	Total	88.511	100			

a. Dependent Variable: OSR Performance

b. Predictors: (Constant): Predictors: (Constant), County legal framework, Public participation, Tax diversification, Use of technology

Source: (Researcher, 2024)

According to Table 4.15, the ANOVA test results demonstrate that the regression model is very significant (p-value = 0.000). The model accounts for a significant percentage of the variance in OSR Performance (Sum of Squares Regression = 40.100), and the F-statistic of 19.890 indicates that the model fits considerably better than one without predictors. This indicates that the determinants (County legal framework, Public engagement, Tax diversification, and Use of technology) combined play a significant role in elucidating the diversity in OSR Performance.

Regression Coefficients

A multiple regression analysis was performed to forecast the impact of County Legal Framework, Public Participation, Tax Diversification, and Technology on OSR performance and to determine the degree of correlation among the studied variables. The outcomes of the regression tests are presented in Table 4.16.

Table 4.16: Coefficients of the Model

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig
1	Constant	13.290	2.218		5.992	0.000
	County Legal Framework, CLF	0.198	0.102	0.209	1.941	0.004
	Public Participation, PP	0.142	0.066	0.153	2.152	0.034
	Tax Diversification, TD	0.211	0.065	0.215	3.246	0.002
	Technology Adoption, TA	0.338	0.083	0.332	4.072	0.000

a. Dependent Variable: OSR Performance

Source: (Researcher, 2024)

Table 4.16 presents the regression coefficients of the model assessing the influence of county legal framework, public participation, tax diversification, and technology adoption on Own Source Revenue (OSR) performance. The overall regression model was statistically significant, confirming that the determinants jointly explain a substantial proportion of the variation in OSR performance. The constant term (13.290, $p = 0.000$) represents the baseline level of OSR performance when all predictors are equal to zero.

The standardized coefficients allow for comparison of the relative strength of the predictors. Among the four determinants, use of technology ($\beta = 0.332$) had the strongest influence, followed by tax diversification ($\beta = 0.215$), county legal framework ($\beta = 0.209$), and public participation ($\beta = 0.153$). All predictors were statistically significant at the 5 percent level, meaning each variable contributed uniquely to explaining OSR performance.

The fitted multivariate regression model is

$$\mathbf{Y= \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4}$$

$$\mathbf{Y= 13.290 + 0.198X_1 + 0.142X_2 + 0.211X_3 + 0.338X}$$

Interpretation of the Model by Research Objectives

Objective 1: To evaluate the influence of county legal frameworks on OSR performance.

The regression results indicate that county legal framework has a positive and significant effect on OSR performance ($\beta = 0.198$, $p = 0.004$). This implies that a one-unit improvement in the clarity, enforcement, or consistency of revenue-related by-laws leads to a 0.198 unit increase in OSR performance. The standardized beta of 0.209 further shows that the legal framework makes a meaningful contribution to explaining OSR outcomes. These findings are consistent with Oduor et al. (2021), who observed that clear and enforceable fiscal regulations reduce leakages and improve compliance.

Objective 2: To establish the influence of public participation on OSR performance

Public participation also significantly predicted OSR performance ($\beta = 0.145$ $p = 0.034$). This result suggests that a one-unit improvement in public involvement mechanisms—such as civic education, forums, and stakeholder consultations—raises OSR performance by 0.142 units. The standardized beta of 0.153 further shows that the public participation makes a significant contribution to explaining OSR outcomes. Although its influence size is smaller compared to other determinants, the significance demonstrates that citizen engagement contributes to stronger compliance and trust in county revenue systems. This supports findings by Kariuki and Wanjala

(2018), who emphasized that inclusive participation, reduces resistance to county taxation.

Objective 3: To determine the influence of tax diversification on OSR performance.

The results show that tax diversification significantly enhances OSR performance (β = 0.211, p = 0.002). This means that expanding and balancing revenue streams increases OSR by 0.211 units for every unit improvement in diversification. The standardized beta of 0.215 indicates that tax diversification was the second most influential determinant after technology. This finding aligns with Hendrick (2002), who argued that diversified fiscal portfolios stabilize local finances by reducing dependence on narrow revenue sources.

Objective 4: To examine the influence of technology on OSR performance.

Technology adoption had the strongest effect on OSR performance (β = 0.338, p = 0.000). A one-unit increase in technology use, such as automation, e-payment systems, and integrated ICT platforms, is associated with a 0.338 unit rise in OSR performance. Its standardized beta coefficient of 0.332 shows it is the most powerful predictor, underscoring the central role of digital systems in improving efficiency, transparency, and compliance. This result echoes Mwaura and Karanja (2022), who reported significant compliance gains from ICT-based revenue collection systems.

In summary, all the four determinants—county legal framework, public participation, tax diversification, and technology—were significant predictors of OSR performance. Technology emerged as the strongest driver, followed by tax diversification, legal framework, and public participation. These findings confirm that a combination of institutional reforms, participatory mechanisms, revenue

diversification strategies, and ICT adoption is essential for enhancing county OSR performance.

4.8 Test of Moderating influence of GCP on Determinants.

Objective 5: To establish the moderating influence of Gross County Product on the Legal Framework, Public Participation, Tax Diversification, and Technology on Own Source Revenue performance.

To examine the influence of moderation, Frucot and Shearon (1991) devised a regression model, the absolute difference value model of the independent variables. Table 4.17 shows the result of the model with moderating variable GCP.

Table 4.17: Moderated Regression Analysis.

Indicators	B	Std Error	Beta	t	Sig
County Legal Framework, CLF	0.185	0.063	0.196	2.941	0.004
Public Participation, PP	0.132	0.061	0.142	2.152	0.034
Tax Diversification, TD	0.203	0.063	0.207	3.246	0.002
Technology Adoption, TA	0.300	0.074	0.294	4.072	0.000
Gross County Product, GCP	0.233	0.091	0.235	2.560	0.045
CLF_GCP	0.118	0.039	0.125	3.063	0.031
PP_GCP	0.091	0.036	0.098	2.529	0.013
TD_GCP	0.128	0.025	0.130	5.128	0.001
TA_GCP	0.232	0.036	0.228	6.370	0.002
Constant		13.290			
Prob F-Value		30.625			
Significant		0.000			
R square		0.591			
Adj R square		0.582			

Source: (Researcher, 2024)

The moderated regression analysis presented in Table 4.17 examined the influence of Gross County Product (GCP) on the relationship between determinants and Own Source Revenue (OSR) performance. The overall model was statistically significant ($F = 30.625$, $p = 0.000$) and explained 59.1 percent of the variance in OSR performance ($R^2 = 0.591$; Adjusted $R^2 = 0.582$). This finding confirms that economic prosperity not only contributes directly to OSR performance but also strengthens the

influence of county legal framework, public participation, tax diversification and technology adoption

The interaction between county legal frameworks and GCP was positive and significant (β = 0.125, p = 0.031). This result suggests that improvements in legal frameworks contribute more strongly to OSR in counties with higher levels of economic activity. Public participation also interacted significantly with GCP (β = 0.098, t = 2.529, p = 0.013), indicating that citizen involvement has a more pronounced effect in wealthier counties.

Tax diversification exhibited one of the stronger moderation effects, with a standardized beta β =0.130, p = 0.001). This demonstrates that counties with more vibrant economies are better able to expand and sustain diverse revenue sources such as property rates, service charges, and licenses. The strongest moderation influence was observed in the interaction between technology adoption and GCP (β = 0.228, p = 0.002). This indicates that while ICT systems improve revenue performance across all counties, their influence is magnified in economically prosperous ones, where digital infrastructure and broader economic activity enhance compliance and transparency.

Summarily, the results demonstrate that GCP significantly moderates the relationship between all four determinants and OSR performance, with varying degrees of influence. The relative strength of the interaction influences shows that economic prosperity most strongly amplifies the benefits of technology adoption and tax diversification, followed by legal frameworks, and lastly public participation. These results are in line with Bird (2015) and Nguyen et al. (2021), who established that

stronger economic contexts enhance fiscal capacity and magnify the effectiveness of institutional and technological reforms.

The fitted moderation model is:

$$\mathbf{Y= \beta_0 + \beta_1X_1 + \beta_2X_2 + \beta_3X_3 + \beta_4X_4 + \beta_5GCP + \beta_6X_1*GCP + \beta_7X_2*GCP + \beta_8X_3*GCP+ \beta_9X_4*GCP}$$

$$\mathbf{Y= 13.290 + 0.185X_1 + 0.132X_2 + 0.203X_3 + 0.300X_4 + 0.233GCP + 0.118X_1*GCP + 0.091X_2*GCP + 0.128X_3*GCP+ 0.232\ X_4*GCP}$$

The main-effect coefficients show the direct influence of each determinant of OSR performance when GCP is held at zero. Specifically, a one-unit increase in the county legal framework **(X_1)** increases OSR performance by 0.185 units, while a similar increase in public participation (X_2) raises OSR by 0.132 units. Likewise, a one-unit rise in tax diversification (X_3) improves OSR by 0.203 units, and an increase in the use of technology (X_4) improves OSR by 0.300 units. These coefficients reflect the contribution of each determinant under baseline economic conditions. The coefficient for GCP shows that a one-unit increase in county economic prosperity independently improves OSR performance by 0.233 units. This indicates that counties with stronger economies are, on average, better able to generate their own revenues.

The interaction terms are particularly important, as they show how GCP moderates the effect of each determinant. The positive coefficient of 0.118 for CLF×GCP indicates that the contribution of the legal framework to OSR increases by 0.118 units for every additional unit of GCP. In other words, legal reforms are more effective in wealthier counties. Similarly, the PP×GCP coefficient of 0.091 suggests

that the effectiveness of public participation on OSR rises by 0.091 units as GCP increases, showing that citizen engagement has greater payoff in stronger economies.

Tax diversification also benefits substantially from higher GCP. The coefficient of 0.128 for TD×GCP shows that the positive effect of diversifying revenue sources on OSR is strengthened by 0.128 units with each additional unit of GCP. Finally, the strongest moderation effect is observed in technology (TA×GCP = 0.232). This means that the contribution of ICT systems to OSR performance increases by nearly a quarter of a unit for every additional unit of GCP, making technology adoption especially impactful in wealthier counties.

In conclusion, this equation demonstrates that Gross County Product has a moderating influence on the four determinants to the OSR Performance. While legal frameworks, public participation, tax diversification, and technology all improve OSR independently, their influences become stronger in counties with higher levels of economic prosperity. Among these, technology shows the largest moderated influence, followed by tax diversification, legal frameworks, and public participation.

4.9 Hypothesis Testing

The multiple regression model testing the determinants of Own Source Revenue (OSR) performance was statistically significant ($F = 19.890$, $p = 0.000$) and explained 59.8% of the variance in OSR performance ($R^2 = 0.598$)**,** as presented in Table 4.18. The regression coefficients (Table 4.19) and moderated regression results (Table 4.20) were used to test the hypotheses. Figures 3 and 4 illustrate the fitted models. The results are interpreted below.

$H0_1$: County Legal Framework has no significant influence on OSR performance.

The regression results indicated that the legal framework had a positive and significant effect on OSR performance ($\beta = 0.198$, $p = 0.004$). The null hypothesis was rejected. This means that strengthening county by-laws, compliance mechanisms, and enforcement significantly improves OSR. These findings are consistent with Oduor et al. (2021), who found that clearer county by-laws reduce leakages by 20%, and Njoroge & Omweri (2019), who demonstrated that inconsistencies in laws weaken enforcement and reduce compliance.

$H0_2$: Public Participation has no significant influence on OSR performance

Public participation significantly predicted OSR performance ($\beta = 0.142$, $p = 0.034$), leading to rejection of the null hypothesis. This supports Mwangi (2016), who found that limited awareness forums weaken compliance, and Kariuki & Wanjala (2018), who reported that structured citizen involvement reduces resistance to county taxation.

$H0_3$: Tax Diversification has no significant influence on OSR performance

Regression results confirmed a significant influence of tax diversification on OSR ($\beta = 0.211$, $p = 0.002$). The null hypothesis was rejected. This indicates that counties with broader revenue sources achieve better OSR outcomes. These results align with Hendrick (2002), who showed that diversified revenue stabilizes local budgets, and Waweru & Riro (2013), who highlighted that overreliance on property rates creates fiscal instability in Nairobi County.

$H0_4$: Technology has no significant influence on OSR performance

Technology adoption was the strongest predictor of OSR ($\beta = 0.338$, $p = 0.000$). The

null hypothesis was rejected. The coefficient shows that automation and ICT systems significantly improve revenue performance by reducing leakages and enhancing transparency. This finding supports Mwaura & Karanja (2022), who found that mobile payments increased compliance by 25% across counties, and Njuguna & Moronge (2020), who showed that integrated ICT systems improve accountability in county revenue collection.

$H0_5$: Gross County Product does not moderate the relationship between determinants and OSR performance.

The moderated regression model was significant ($F = 30.625$, $p = 0.000$; $R^2 = 0.591$). Interaction terms showed that GCP significantly moderated the effects of legal framework ($p = 0.031$), public participation ($p = 0.013$), and tax diversification ($p = 0.000$). Its influence on technology, though significant ($p = 0.002$), was weaker compared to the other predictors. Thus, the null hypothesis was rejected. These results are consistent with Bird (2015), who argued that stronger economic bases expand the tax net and reduce fiscal crises, and Nguyen et al. (2021), who showed that economic growth enhances fiscal capacity in developed economies.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter presents the summary of findings, conclusions, contributions, and recommendations derived from the study. The research was motivated by the persistent challenge of low Own Source Revenue (OSR) performance among county governments in Kenya despite constitutional provisions for devolved financing. The chapter is structured around the study objectives and concludes with contributions to knowledge, recommendations for policy and practice, and suggestions for future research.

5.2 Summary of Findings by Specific Objectives

The study set out to examine the influence of determinants of OSR - county legal frameworks, public participation, tax diversification, and technology on Own Source Revenue (OSR) performance in the Lake Region Economic Bloc (LREB), while also assessing the moderating effect of Gross County Product (GCP). Both descriptive and inferential analyses were conducted to capture how respondents perceived these determinants and to test their actual influence through regression modeling. The descriptive results provided insights into stakeholder perceptions, while the regression results offered evidence of the statistical significance and relative strength of each determinant. The following section summarizes the findings according to the study's five specific objectives.

5.2. 1 County Legal Frameworks and OSR Performance

Descriptive findings showed that respondents moderately endorsed county legal frameworks, with a moderate mean rating , suggesting that legal structures exist but

are not always consistently enforced. Regression analysis confirmed their significance, with legal frameworks positively influencing OSR performance. Counties with clearer, harmonized, and enforceable by-laws reduced leakages, enhanced compliance, and mobilized more revenue. This demonstrates that strong institutional frameworks are a cornerstone of fiscal governance.

5.2.2 Public Participation and OSR Performance

Respondents rated public participation highly, reflecting recognition of its importance in revenue planning, budgeting, and decision-making. Regression analysis supported this, showing a positive but weaker influence compared to other determinants. Counties that engaged citizens built legitimacy for tax policies and improved compliance, though participation alone was insufficient to drive major revenue gains. This highlights the catalytic role of trust and inclusivity in fiscal systems.

5.2.3 Tax Diversification and OSR Performance

Descriptive statistics showed that respondents valued tax diversification positively indicating recognition that multiple revenue sources strengthen county finances. Regression results reinforced this perception, showing diversification as a significant driver of OSR. Counties relying on broad revenue streams such as property tax, business permits, and tourism levies enjoyed more stable and predictable revenue performance. This suggests that diversification is essential to reducing fiscal vulnerability.

5.2.4 Technology and OSR Performance

Respondents strongly acknowledged the importance of technology. Regression analysis confirmed technology as the most influential determinant of OSR

performance. Counties that adopted ICT-based platforms, automated revenue collection, and e-payment systems reported reduced leakages, enhanced efficiency, and improved compliance. This underlines technology as a transformative enabler of revenue modernization.

5.2.5 Moderating Role of Gross County Product (GCP)

The study established that economic prosperity amplified the effects of the four determinants on OSR performance. Regression analysis revealed that counties with higher GCP achieved stronger revenue outcomes from legal reforms, public participation, diversification, and technology adoption. The strongest moderation was observed for technology, followed by tax diversification, legal frameworks, and public participation. This finding underscores the role of local economic growth as a multiplier of fiscal reforms.

5.3 Conclusions

The study concludes that improving OSR performance requires a multifaceted approach that combines institutional, participatory, fiscal, and technological reforms, with outcomes further shaped by the local economic context.

First, the findings demonstrate that effective legal frameworks are indispensable for strengthening revenue collection. Counties that invest in robust and enforceable fiscal laws are able to minimize leakages, improve compliance, and build stronger financial foundations.

Secondly, while public participation was not the strongest determinant, its role in legitimizing tax policies and strengthening trust in county governments cannot be

understated. Citizen engagement serves as a catalyst for voluntary compliance, thereby supporting long-term sustainability in revenue mobilization.

Thirdly, diversification of revenue sources is a critical strategy for financial stability. Counties that expand their tax bases beyond a few predictable streams achieve greater resilience and sustainability, reflecting the study's motivation to highlight innovative pathways for counties to reduce dependency on national transfers.

Fourthly, technology adoption is transformative. It emerged as the strongest determinant of OSR performance, confirming the expectation outlined that ICT-driven reforms hold the greatest potential for improving efficiency, transparency, and accountability in county revenue systems.

Finally, the moderating role of GCP underscores that reforms are not equally effective across all counties. Economic prosperity amplifies the benefits of legal, participatory, fiscal, and technological reforms. This insight contributes to the understanding that counties must not only pursue governance and fiscal reforms but also foster local economic growth to maximize revenue outcomes.

Collectively, these conclusions affirm the study's contribution to addressing the motivation by the persistent challenge of low Own Source Revenue (OSR) performance among county governments in Kenya despite constitutional provisions for devolved financing and provide actionable strategies for enhancing county-level revenue sustainability in the context of Kenya's devolved governance.

5.4 Contribution to Knowledge

This study makes several contributions to theory, policy, and practice. The study extends the sequential theory of decentralization by integrating technology and public participation as critical determinants of OSR performance, alongside traditional institutional and fiscal factors. It also introduces Gross County Product as a moderating factor, demonstrating that economic context shapes the effectiveness of revenue reforms—a dimension not sufficiently explored in existing literature.

The study provides county-level evidence from the LREB, offering region-specific insights into the dynamics of revenue mobilization under devolution in Kenya. The findings provide an evidence-based framework for prioritizing reforms.

The findings generate actionable knowledge for county governments on how to strengthen OSR systems through legal, participatory, fiscal, and technological reforms, while recognizing that these reforms are most effective in counties with higher levels of economic activity.

5.5. Recommendations.

Based on the findings of the study, the following recommendations are proposed at policy, practice and theoretical levels.

At the policy level, county governments should review and harmonize their revenue-related laws to ensure clarity, fairness, and enforceability, supported by strong compliance mechanisms. National government agencies, particularly the Commission on Revenue Allocation (CRA), should provide oversight and technical guidance to counties in developing standardized fiscal frameworks and revenue policies. In addition, county governments should prioritize the adoption of ICT-based

revenue systems as a policy imperative to digitize all revenue collection points and minimize human discretion. Finally, deliberate policies that stimulate local economic growth and attract investment should be advanced, given that stronger Gross County Product (GCP) amplifies the effectiveness of fiscal and governance reforms.

At the practice level, county treasuries should invest in continuous staff training to build competence in managing ICT-driven revenue systems and data-based administration. Counties should also institutionalize structured citizen engagement forums and civic education programs to strengthen trust, enhance transparency, and encourage voluntary compliance. Practical efforts to diversify revenue sources are necessary, including stricter enforcement of property tax, the broadening of user fees, and the exploration of emerging streams such as digital taxation. Moreover, revenue collection processes should be subjected to regular audits and strengthened monitoring mechanisms to minimize inefficiencies and curb revenue leakages.

At the theoretical level, the study recommends that future research to further develop sequential theory of decentralization theory by explicitly incorporating moderating factors such as economic prosperity into models of subnational revenue performance. Comparative studies should be conducted across different regional blocs in Kenya and other African contexts to assess the generalizability of the model tested in this study. In addition, longitudinal research would be valuable in establishing causal relationships between governance reforms, economic conditions, and revenue performance over time. These efforts would enrich the theoretical understanding of how local institutional and economic contexts interact to shape fiscal outcomes.

5.6 Areas for Future Research

While this study provides significant insights into the Influence of County Legal Framework, Public Participation, Tax Diversification, and Technology on OSR performance in the LREB counties, further research is recommended in the following areas:

Comparative Studies: Compare OSR performance between LREB counties and other economic blocs in Kenya to identify best practices and unique challenges.

Impact of Socio-Economic Factors: Investigate the influence of socio-economic factors such as population density, economic activities, and education levels on OSR performance.

Detailed Case Studies: Conduct detailed case studies of individual counties to explore specific challenges and successful strategies in revenue collection.

REFERENCES.

Alm, J., McClelland, G., & Schulze, W. D. (1992). Why do people pay taxes? Journal of Public Economics, 48, 21–48.

African Union. (2015). *Agenda 2063: The Africa we want*. African Union Commission.

Ahmad, E., & Brosio, G. (2015). *Handbook of multilevel finance*. Edward Elgar Publishing.

Alm, J., McClelland, G., & Schulze, W. D. (1992). Why do people pay taxes? *Journal of Public Economics, 48*(1), 21–48.

Bagozzi, R. P. (2007). The legacy of the Technology Acceptance Model and a proposal for a paradigm shift. *Journal of the Association for Information Systems, 8*(4), 244–254. https://doi.org/10.17705/1jais.00122

Bird, R. (2015). Improving tax administration in developing countries. *Journal of Tax Administration, 1*(1), 23–45.

Bird, R. M. (2015). *Fiscal decentralization and local finance in developing countries*. Edward Elgar Publishing.

Bird, R., & Bahl, R. (2008). Subnational taxes in developing countries: The way forward. *Public Budgeting & Finance, 28*(4), 1–25.

Bird, R., & Shah, A. (2009). *Fiscal federalism: Principles and practice of multiorder governance*. Cambridge University Press.

Bird, R., & Slack, E. (2020). *Financing urban government in developing countries through property taxation*. Lincoln Institute of Land Policy.

Blöchliger, H. (2015). The challenge of measuring fiscal decentralization. In E. Ahmad & G. Brosio (Eds.), *Handbook of multilevel finance* (pp. 37–57). Edward Elgar Publishing.

Boadway, R., & Shah, A. (2009). *Fiscal federalism: Principles and practice of multiorder governance*. Cambridge University Press.

Bordignon, M. (1993). A fairness approach to income tax evasion. *Journal of Public Economics, 52*(3), 345–362.

Bowler, S., & Donovan, T. (1995). Popular responsiveness to taxation. *Political Research Quarterly, 48*(1), 79–99.

Brodie, E., Cowling, E., & Nissen, N. (2009). *Understanding participation: A literature review*. Institute for Volunteering Research, NCVO, IVR, and INVOLVE.

Carroll, D. A. (2009). Diversifying municipal revenue structures: Fiscal policy trends and challenges. *Public Budgeting & Finance, 29*(1), 27–51.

Carroll, D. A., & Stater, K. J. (2009). Revenue diversification in nonprofit organizations: Does it lead to financial stability? *Journal of Public Administration Research and Theory, 19*(4), 947–966. https://doi.org/10.1093/jopart/mun025

Chatama, Y. J. (2013). The impact of ICT on taxation: The case of the large taxpayer department of Tanzania Revenue Authority. *Developing Country Studies, 3*(2), 91–100.

Cheeseman, N., Lynch, G., & Willis, J. (2016). Decentralization in Kenya: The governance of governors. *Journal of Modern African Studies, 54*(1), 1–35.

Commission on Revenue Allocation (CRA). (2019). *County own source revenue report*. Government Printer.

Commission on Revenue Allocation (CRA). (2023). *County own source revenue performance report 2013/14–2022/23*. Government Printer.

Commission on Revenue Allocation (CRA). (2024). Annual report and recommendations on equiTable share and county financing 2024. Government Printer.

Constitution of Kenya (CoK). (2010). *The Constitution of Kenya*. Government Printer.

Controller of Budget (CoB). (2015). *Annual county budget implementation review report 2013/2014*. Government Printer.

Crawford, V. P., & Sobel, J. (1982). Strategic information transmission. *Econometrica, 50*(6), 1431–1451.

Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly, 13*(3), 319–340. https://doi.org/10.2307/249008

Ebdon, C., & Franklin, A. L. (2006). Citizen participation in budgeting theory.*Public Administration Review, 66*(3), 437–447. https://doi.org/10.1111/j.1540-6210.2006.00600.x

Elton, E. J., Gruber, M. J., Brown, S. J., & Goetzmann, W. N. (2017). *Modern portfolio theory and investment analysis* (9th ed.). Wiley.

Fabozzi, F. J., Gupta, F., & Markowitz, H. M. (2014). The legacy of modern portfolio theory. *The Journal of Investing, 23*(1), 7–22. https://doi.org/10.3905/joi.2014.23.1.007

Falleti, G. T. (2004). A sequential theory of decentralisation and its influences on the intergovernmental balance of power: Latin American cases in comparative perspective. *Kellogg Institute Working Paper*.

Fjeldstad, O.-H. (2001). Taxation, coercion, and donors: Local government tax enforcement in Tanzania. *Journal of Modern African Studies, 39*(2), 289–306.

Fjeldstad, O.-H. (2009). New challenges for local government revenue enhancement in Tanzania. *ICTD Working Paper No. 4*. International Centre for Tax and Development.

Fjeldstad, O.-H. (2016). Revenue mobilization and tax administration in sub-Saharan Africa. *Journal of African Economies, 25*(4), 389–410. https://doi.org/10.1093/jae/ejw009

Fjeldstad, O.-H., & Heggstad, K. (2012). *Local government revenue mobilisation in Anglophone Africa* (Working Paper). Chr. Michelsen Institute.

Gil-García, J. R., & Pardo, T. A. (2015). E-government success factors: Mapping practical tools to theoretical foundations. *Government Information Quarterly, 22*(2), 187–216.

Gondo, E. M. (2010). *Fiscal management in Dangila Municipality, Ethiopia: Performance and policy implications*. Research Center in Public Administration and Public Services.

Government of Kenya. (2010). *The Constitution of Kenya*. Government Printer.

Gujarati, D. N., & Porter, D. C. (2009). *Basic econometrics* (5th ed.). McGraw-Hill

Gunter, S., Riera-Crichton, D., Végh, C. A., & Vuletin, G. (2019). Non-linear effects of taxation on growth. *Journal of Economic Growth, 24*(4), 397–420. https://doi.org/10.1007/s10887-019-09165-7

Gupta, S., Keen, M., & Shah, A. (2017). *Digital governance and revenue mobilization* (IMF Working Paper). International Monetary Fund.

Hendrick, R. (2002). Revenue diversification: Fiscal illusion or flexible financial management? *Public Budgeting & Finance, 22*(4), 52–72. https://doi.org/10.1111/1540-5850.00091

International Monetary Fund (IMF). (2020). *Enhancing domestic revenue mobilization in Sub-Saharan Africa*. IMF Publications.

Jordan, J. S., & Radner, R. (1982). Rational expectations in microeconomic models: An overview. *Journal of Economic Theory, 26*(2), 201–223.

Jorion, P. (2007). *Value at risk: The new benchmark for managing financial risk*. McGraw-Hill.

Kahneman, D., & Tversky, A. (1979). Prospect theory: An analysis of decision under risk. *Econometrica, 47*(2), 263–292. https://doi.org/10.2307/1914185

Kaiser, K., Eaton, K., & Smoke, P. (2010). *The political economy of decentralization reforms: Implications for aid effectiveness*. World Bank. https://doi.org/10.1596/978-0-8213-8490-3

Kariisa, M., & Nsamba, A. (2019). Public participation and revenue mobilization in Uganda's local governments. *African Journal of Public Administration and Management, 30*(1), 55–74.

Kariuki, J., & Sang, P. (2022). Digital revenue collection and efficiency in Kenyan counties. *International Journal of Public Administration, 45*(3), 420–437. https://doi.org/10.1080/01900692.2021.1884697

Kariuki, J., & Wanjala, B. (2018). Citizen participation and tax compliance in Machakos County, Kenya. *International Journal of Economics, Commerce and Management, 6*(4), 121–135.

Kariuki, P., & Sang, R. (2022). Challenges in county revenue collection: A case study of selected Kenyan counties. *African Journal of Public Administration, 14*(2), 45–63.

Kenya Institute for Public Policy Research and Analysis (KIPPRA). (2019). *Improving county own source revenue in Kenya*. KIPPRA.

Kenya National Bureau of Statistics (KNBS). (2024). *Gross County Product report 2022/2023*. KNBS.

Khaunya, M. F., Wawire, B. P., & Chepng'eno, V. (2015). Devolution in Kenya: Prospects, challenges, and the future. *International Journal of Research in Humanities and Social Studies, 2*(6), 23–35.

Kihehere, M. A. (2013). Citizen participation and health service delivery: The case of Itojo Hospital Ntungamo District Local Government, Uganda [Unpublished master's thesis]. University of the Western Cape.

Klein, P., & Lasse, L. (2009). Diversification, industry structure, and firm strategy: An organizational economics perspective. In J. A. Nickerson & B. S. Silverman (Eds.), *Economic institutions of strategy* (Vol. 26, pp. 289–312). Emerald Group Publishing.

Kotler, P., & Keller, K. L. (2016). *Marketing management* (15th ed.). Pearson.

Lake Region Economic Bloc (LREB). (2020). *Lake Region Economic Bloc strategy*. LREB Secretariat.

Ljungqvist, A., & Smolyansky, M. (2018). To cut or not to cut? On the impact of corporate taxes on employment and income. *Finance and Economics Discussion Series 2018-006*. Board of Governors of the Federal Reserve System. https://doi.org/10.17016/FEDS.2018.006

Lusigi, B.(2021, December 23). Kakamega County surpasses revenue target by Shs. 26M.https://www.standardmedia.co.ke/western/article/2001432563/kakamegacountysurpasses-revenue-target-by-sh26m-now-eyeing-hospitals

Mandelbrot, B. B., & Hudson, R. L. (2004). *The (mis)behavior of markets: A fractal view of risk, ruin, and reward*. Basic Books.

Markowitz, H. (1952). Portfolio selection. *The Journal of Finance, 7*(1), 77–91. https://doi.org/10.1111/j.1540-6261.1952.tb01525.x

Martin, F., Smith, K., & Williams, J. (2012). Revenue diversification and fiscal stability: An empirical analysis of local governments. *Public Finance Review, 40*(5), 600–627. https://doi.org/10.1177/1091142112446840

Montgomery, C. A., & Wernerfelt, B. (1988). Diversification, Ricardian rents, and Tobin's q. *RAND Journal of Economics, 19*(4), 623–632.

Moore, M. (2015). Tax and the governance dividend. *World Development, 67*, 403–417. https://doi.org/10.1016/j.worlddev.2014.01.012

Morisset, J., & Izquierdo, A. (1993). Influences of tax reforms on Argentina's revenue (Policy Research Working Paper No. 1192). World Bank.

Muchira, J. (2018). The impact of legal frameworks on county revenue collection in Kenya. *East African Journal of Economics, 6*(1), 78–92.

Mugambi, M., & Kamau, J. (2019). Digital finance and county revenue collection in Kenya. *African Journal of Economic Policy, 6*(2), 112–128.

Muriithi, K. M., & Moyi, E. D. (2003). *Tax reforms and revenue mobilization in Kenya* (AERC Research Paper No. 131). African Economic Research Consortium.

Muriu, A. R. (2014). How does citizen participation impact decentralized service delivery? Lessons from the Kenya local authority service delivery action plan

(LASDAP, 2002–2010). *International Journal of Social Science Tomorrow, 2*(2), 1–28.

Muth, J. F. (1961). Rational expectations and the theory of price movements. *Econometrica, 29*(3), 315–335. https://doi.org/10.2307/1909635

Mwesigye, E. K. (2013). Citizen participation and democratic development policies: A perspective of NAADS programme in Uganda [Unpublished doctoral dissertation]. University of Cape Town.

National Treasury of Kenya. (2018). *National policy to support enhancement of county governments' own-source revenue*. National Treasury.

Nayak, N. C., & Samanta, D. (2014). Understanding the role of participation in public service delivery: Evidence from rural West Bengal, India. *International Journal of Public Administration, 37*(12), 875–884. https://doi.org/10.1080/01900692.2014.903270

Ndunda, J. M., Ngahu, S. T., & Wanyoike, D. (2015). Analysis of factors influencing optimal revenue collection by county governments in Kenya: A case of Nakuru County. *International Journal of Economics, Commerce and Management, 3*(5), 25–45.

Ndung'u, N. (2021). Economic capacity and fiscal performance in Kenyan counties: Evidence from Gross County Product. *Journal of African Economies, 30*(2), 199–218. https://doi.org/10.1093/jae/ejaa024

Neave, G. (2000). Diversity, differentiation, and the market: The debate we never had but ought to have done. *Higher Education Policy, 13*(1), 7–21. https://doi.org/10.1016/S0952-8733(99)00028-7

Ngicuru, J. (2017). *Revenue diversification and its influence on county revenue collection: A case study of Nairobi County* [Master's thesis, University of Nairobi]. University of Nairobi Repository.

Nguyen, T., Onnis, L., & Rossi, R. (2021). The macroeconomic effects of income tax changes: Evidence from the United Kingdom. *European Economic Review, 132*, 103647. https://doi.org/10.1016/j.euroecorev.2020.103647

Njoroge, J., & Kinuthia, P. (2020). Fiscal decentralization and revenue mobilization in Kenyan counties. *International Journal of Economics and Finance, 12*(5), 155–167. https://doi.org/10.5539/ijef.v12n5p155

Njoroge, S., & Omweri, C. (2019). County legal frameworks and revenue mobilization: Evidence from Nairobi City County. *International Journal of Economics, Commerce and Management, 7*(6), 211–227.

Njuguna, E., & Moronge, M. (2020). Effect of integrated revenue management system on revenue collection in Nairobi County, Kenya. *International Academic Journal of Information Systems and Technology, 2*(1), 1–17.

Nyanumba, A., Rotich, G., Gekara, M., Keraro, V., & Okari, H. (2017). Influence of revenue diversification on the performance of counties in Kenya. *International Journal of Finance and Economics, 8*(2), 55–71.

Nyanumba, E., Nyamita, M., & Omwenga, J. (2017). Revenue diversification and sustainability of county governments in Kenya. *Journal of Economics and Finance, 8*(4), 12–22.

Oates, W. E. (2005). On the nature and measurement of fiscal illusion: A survey. *University of Maryland, Department of Economics Working Paper*.

Oates, W. E., & Schwab, R. M. (2015). The theory of regulatory federalism: The case of environmental management. *Annual Review of Resource Economics, 7*, 227–244. https://doi.org/10.1146/annurev-resource-100814-125018

Odhiambo, P. (2021). GIS mapping for revenue collection in Kenyan counties. *African Policy Institute*.

Odhiambo, R. (2021). Manual systems and revenue leakages in county governments: A Kenyan perspective. *African Journal of Public Finance, 13*(2), 64–79.

Odhiambo, T. (2021). Adoption of technology in county revenue collection: Benefits and challenges. *African Journal of Digital Governance, 10*(3), 77–101.

Odoyo, C. O., Oginda, M., Mark, O. J., Fredrick, O. A., Patrick, B. O., & Elijah, M. S. (2013). Influence of information systems on revenue collection by local authorities in Homa Bay County, Kenya. *Universal Journal of Accounting and Finance, 1*(1), 29–33. https://doi.org/10.13189/ujaf.2013.010104

Oduor, C., Wanjala, B., & Chege, P. (2021). Legal frameworks and own source revenue performance in Kenyan counties. *Journal of African Public Administration and Management, 32*(2), 89–107.

OECD. (2020). *Revenue statistics in Africa 2020*. OECD Publishing. https://doi.org/10.1787/africa_rev-2020-en

Office of the Controller of Budget. (2024, August). *County governments budget implementation review report for the financial year 2023/24*. Office of the Controller of Budget-Kenya.

Okafor, J. C. (2010). Local government financial autonomy in Nigeria: The state joint local government account. *Commonwealth Journal of Local Governance, 6*, 127–135.

Olabisi, J. (2012). Tax administration and revenue generation in Lagos State, Nigeria. *International Journal of Business and Social Science, 3*(8), 99–113.

Olken, B. A. (2010). Direct democracy and local public goods: Evidence from a field experiment in Indonesia. *American Political Science Review, 104*(2), 243–267. https://doi.org/10.1017/S0003055410000079

Omolo, J. (2022). Citizen participation and fiscal accountability in devolved governments: Evidence from six counties in western Kenya. *African Journal of Governance and Development, 11*(1), 45–63.

Omollo, A. (2020). Public participation and county budgeting in Kenya. *African Governance Review, 9*(4), 231–248.

Omollo, B. (2020). Political interference and its impact on county revenue administration. *Kenya Policy Review Journal, 7*(2), 129–145.

Ooko, J. (2021). Legal frameworks and tax compliance in devolved governments in Kenya. *Journal of African Public Policy, 6*(1), 34–49.

Organisation for Economic Co-operation and Development (OECD). (2020). *Revenue statistics in Africa 2020*. OECD Publishing. https://doi.org/10.1787/africa_rev-2020-en

Oyedijo, A. (2012). Strategic agility and corporate performance in the Nigerian telecommunication industry: An empirical investigation. *American International Journal of Contemporary Research, 2*(3), 227–237.

Peter, I. (2023). *Financial economics*. Boston College Press.

Philip, N., & Rotich, G. (2017). Influence of revenue diversification on performance of counties in Kenya. *International Journal of Innovative Finance and Economics Research, 5*(4), 45–56.

Republic of Kenya. (2010). *The Constitution of Kenya, 2010*. Government Printer.

Rezaei, M., Zare, M., Akbarzadeh, H., & Zare, F. (2014). The influences of information technology (IT) on employee productivity in Shahr Bank: Case study of Shiraz, Iran. *Applied Mathematics in Engineering, Management, and Technology, Special Issue in Management and Technology*, 1208–1214.

Riedl, B. M., & Ferguson, K. F. (1991). The limitations of modern portfolio theory: A critical review. *Financial Review, 26*(2), 1–12. https://doi.org/10.1111/j.1540-6288.1991.tb00364.x

Sander, C. (2003). *Less is more: Better compliance and increased revenues by streamlining business registration in Uganda* (Africa Region Working Paper Series No. 58). UK Department for International Development.

Sargent, T. J. (1993). *Bounded rationality in macroeconomics*. Oxford University Press.

Slemrod, J. (1990). Optimal taxation and optimal tax systems. *Journal of Economic Perspectives, 4*(1), 157–178. https://doi.org/10.1257/jep.4.1.157

Slemrod, J. (2002). *Trust in public finance* (NBER Working Paper No. 9187). National Bureau of Economic Research. https://doi.org/10.3386/w9187

Smoke, P. (2013). Why theory and practice are different: The gap between principles and reality in subnational revenue systems (Working Paper No. 13-13). Andrew Young School of Policy Studies, Georgia State University.

Sortino, F. A., & Price, L. N. (1994). Performance measurement in a downside risk framework. *Journal of Investing, 3*(3), 59–64. https://doi.org/10.3905/joi.3.3.59

Tanzi, V., & Zee, H. (2001). Tax policy for developing countries. *IMF Economic Issues, 27*, 1–30. International Monetary Fund.

Tsai, H.-F. (2018). *Value for money*. ANU Press.

Tuckman, H. P., & Chang, C. F. (1991). A methodology for measuring the financial vulnerability of chariTable nonprofit organizations. *Nonprofit and Voluntary Sector Quarterly, 20*(4), 445–460.

Venkatesh, V., & Davis, F. D. (2000). A theoretical extension of the Technology Acceptance Model: Four longitudinal field studies. *Management Science, 46*(2), 186–204. https://doi.org/10.1287/mnsc.46.2.186.11926

World Bank. (2015). *Kenya devolution: Building public participation in Kenya's devolved government*. World Bank. http://hdl.handle.net/10986/21663

World Bank. (2020). *Enhancing domestic resource mobilization: The role of revenue diversification in fiscal sustainability*. World Bank Publications.

World Bank. (2021). *Kenya public expenditure review 2021: From recovery to better spending for inclusive growth*. World Bank.

APPENDICES.

Appendix I: Letter of Introduction

Date: 2024

Dear Sir/Madam,

RE: DATA COLLECTION

I am a post graduate student at Masinde Muliro University of Science and Technology currently undertaking a research study to fulfill the requirements of the Award of Master in Business Administration. I am conducting a research study titled **"Determinants of Own Source Revenue Performance among the Lake Region Economic Bloc (LREB) Counties, Kenya: The Moderating Influence of Gross County Product".**

You have been selected to form part of the study, kindly assist by filling in the attached questionnaire. The information given will be treated in strict confidence, and will be purely used for academic purposes. Do not indicate your name or unwanted details on the questionnaire.

Your assistance and cooperation will be highly appreciated.

Yours sincerely,

Cleophas Juma Kisaka

MBA/G/01-70385/2021, Researcher

Appendix II: Questionnaire

Introduction.

This research is meant for academic purpose. It will try to find out "**Determinants of Own Source Revenue Performance among the Lake Region Economic Bloc (LREB) Counties, Kenya: The Moderating Influence of Gross County Product**". Please tick [√] where appropriate or fill in the required information on the spaces provided.

SECTION A: RESPONDENTS BIO DATA

1. What is your gender? Male [ ] Female [ ]

2. What is your age?

18-30 years [ ] 31-40 years [ ] 41-50 years [ ] Over 50 years [ ]

3. Which position do you hold?

4. What is your level of education? Diploma [ ] College [ ] Bachelor's degree [ ]

Master's degree [ ] Doctorate [ ]

5. For how long have you worked in the county government?

1-5 years [ ] 6-10 years [ ] 11-15 years [ ] Over 16 years [ ]

SECTION B: INFLUENCE OF COUNTY LEGAL FRAMEWORK ON OSR PERFORMANCE

6. State the extent to which you agree with the following statements with regard to the influence of County Legal Framework on OSR Performance on the scale of 1-5 where 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree and 5-Strongly Agree.

	1	2	3	4	5
1 Existing county by-laws provide a strong foundation for enhancing OSR collection.					
2. The county's tax framework supports effective revenue mobilization.					
3. County legal instruments are harmonized with national tax laws and policies.					
4. Legal provisions adequately address revenue leakages and non-compliance.					
5. Enforcement of county revenue laws is consistent and fair in practice					

SECTION C: INFLUENCE OF PUBLIC PARTICIPATION ON OSR PERFORMANCE.

7. State the extent to which you agree with the following statements with regard to the influence of public participation on OSR Performance on the scale of 1-5 where 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree and 5-Strongly Agree.

	1	2	3	4	5
1. The public is actively engaged in discussions on tax administration.					
2. The county organizes revenue awareness forums to sensitize taxpayers.					
3. Citizens are involved in preparing key revenue-related policies such as the Finance Bill.					
4. Public participation has improved compliance with county taxes and fees.					
5. Feedback from the public influences county revenue policies.					

SECTION D: INFLUENCE OF TAX DIVERSIFICATION ON OSR PERFORMANCE

8. State the extent to which you agree with the following statements with regard to the influence of Tax diversification on OSR Performance on the scale of 1-5 where 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree and 5-Strongly Agree.

	1	2	3	4	5
1. The county has diversified into several revenue streams other than Property rates.					
2. The county has introduced new innovative revenue streams e.g., levies.					
3. Compliance levels are consistent across different revenue streams.					
4. Reliance on a few major revenue sources has reduced due to diversification					
5. Revenue diversification has improved financial sustainability of my county					

SECTION E: INFLUENCE OF TECHNOLOGY ON OSR PERFORMANCE

9. State the extent to which you agree with the following statements with regard to the influence of Technology on OSR Performance on the scale of 1-5 where 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree and 5-Strongly Agree.

	1	2	3	4	5
1. Generally, automation of revenue collection has improved OSR Performance in the County					
2. There is electronic monitoring& evaluation of all collected revenues.					
3. There is an effective ICT platform to support e-revenue mobilization in the county.					
4. Integration with mobile payment platforms (e.g., M-Pesa) has enhanced collections.					
5. Technology has minimized corruption and revenue leakages in the county.					

SECTION F: GROSS COUNTY PRODUCT

10. State the extent to which you agree with the following statements with regard to the GCP in the county on the scale of 1-5(where 1-Strongly Disagree, 2-Disagree, 3-Undecided, 4-Agree and 5-Strongly Agree)

	1	2	3	4	5
1. OSR collections in the county have grown in proportion to local economic activities.					
2. The county's OSR performance is largely determined by its Gross County Product.					
3. Increases in GCP have directly boosted OSR collections between FY 2019/20–2023/24					
4. Growth in local businesses has been a major driver of OSR collections.					
5. Economic shocks negatively affected OSR performance in the county.					

Appendix III: Approval of the Research

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MASINDE MULIRO UNIVERSITY OF SCIENCE AND TECHNOLOGY (MMUST)
SCHOOL OF BUSINESS AND ECONOMICS (SOBE)

REF: MBA/G/01-70385/2021 **DATE:** 2nd October, 2023

TO: MR. CLEOPHAS JUMA KISAKA

SUBJECT: SUCCESSFUL DEFENCE OF RESEARCH PROPOSAL, CLEOPHAS JUMA KISAKA REG. NO. MBA/G/01-70385/2021

The above subject refers.

Following your successful defense of your research proposal titled "***Determinants of Own Source Revenue Performance in Selected Lake Region Economic Bloc(LREB) Counties, Kenya***" before the School of Business and Economics Graduate Studies Committee, your research proposal is hereby submitted to Director School of Graduate Studies for documentation and processing. Your supervisors are **Dr. Muli Maingi, Dr. Fredrick Kiongera.**

On behalf of the School of Business and Economics Graduate Studies Committee, you are hereby permitted to proceed and collect the data needed to complete your thesis.

By copy of this letter, relevant institutions/bodies are humbly requested to assist you in achieving your endeavor.

Dean
School of Business & Economics(SOBE)
Masinde Muliro University of Science & Technology

PROF. ROBERT K.W. EGESSA
Associate Professor and Dean
School of Business and Economics
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Appendix IV: Research Permit NACOSTI

REPUBLIC OF KENYA

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

Ref No: **998300**

Date of Issue: **09/November/2023**

RESEARCH LICENSE



This is to Certify that Mr.. Cleophas Juma Kisaka of Masinde Muliro University of Science and Technology, has been licensed to conduct research as per the provision of the Science, Technology and Innovation Act, 2013 (Rev.2014) in Bomet, Busia, Kakamega, Kisumu, Nandi, Transnzoia, Vihiga on the topic: DETERMINANTS OF OWN SOURCE REVENUE IN LAKE REGION ECONOMIC BLOC (LREB) COUNTIES, KENYA for the period ending : 09/November/2024.

License No: **NACOSTI/P/23/31245**

998300

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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See overleaf for conditions

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013 (Rev. 2014)
Legal Notice No. 108: The Science, Technology and Innovation (Research Licensing) Regulations, 2014

The National Commission for Science, Technology and Innovation, hereafter referred to as the Commission, was the established under the Science, Technology and Innovation Act 2013 (Revised 2014) herein after referred to as the Act. The objective of the Commission shall be to regulate and assure quality in the science, technology and innovation sector and advise the Government in matters related thereto.

CONDITIONS OF THE RESEARCH LICENSE

1. The License is granted subject to provisions of the Constitution of Kenya, the Science, Technology and Innovation Act, and other relevant laws, policies and regulations. Accordingly, the licensee shall adhere to such procedures, standards, code of ethics and guidelines as may be prescribed by regulations made under the Act, or prescribed by provisions of International treaties of which Kenya is a signatory to
2. The research and its related activities as well as outcomes shall be beneficial to the country and shall not in any way;
    i. Endanger national security
    ii. Adversely affect the lives of Kenyans
    iii. Be in contravention of Kenya's international obligations including Biological Weapons Convention (BWC), Comprehensive Nuclear-Test-Ban Treaty Organization (CTBTO), Chemical, Biological, Radiological and Nuclear (CBRN).
    iv. Result in exploitation of intellectual property rights of communities in Kenya
    v. Adversely affect the environment
    vi. Adversely affect the rights of communities
    vii. Endanger public safety and national cohesion
    viii. Plagiarize someone else's work
3. The License is valid for the proposed research, location and specified period.
4. The license any rights thereunder are non-transferable
5. The Commission reserves the right to cancel the research at any time during the research period if in the opinion of the Commission the research is not implemented in conformity with the provisions of the Act or any other written law.
6. The Licensee shall inform the relevant County Director of Education, County Commissioner and County Governor before commencement of the research.
7. Excavation, filming, movement, and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
8. The License does not give authority to transfer research materials.
9. The Commission may monitor and evaluate the licensed research project for the purpose of assessing and evaluating compliance with the conditions of the License.
10. The Licensee shall submit one hard copy, and upload a soft copy of their final report (thesis) onto a platform designated by the Commission within one year of completion of the research.
11. The Commission reserves the right to modify the conditions of the License including cancellation without prior notice.
12. Research, findings and information regarding research systems shall be stored or disseminated, utilized or applied in such a manner as may be prescribed by the Commission from time to time.
13. The Licensee shall disclose to the Commission, the relevant Institutional Scientific and Ethical Review Committee, and the relevant national agencies any inventions and discoveries that are of National strategic importance.
14. The Commission shall have powers to acquire from any person the right in, or to, any scientific innovation, invention or patent of strategic importance to the country.
15. Relevant Institutional Scientific and Ethical Review Committee shall monitor and evaluate the research periodically, and make a report of its findings to the Commission for necessary action.

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