

**THE EFFECT OF REVENUE COLLECTION STRATEGIES ON VALUE ADDED
TAX PERFORMANCE: A CASE OF DOMESTIC TAXES DEPARTMENT IN EAST
OF NAIROBI REGION, KENYA**

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DECLARATION

This project is my original work and has not been presented for a degree in any other University

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This project has been submitted for examination with my approval as University Supervisor

Signature Date

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Dr. Bruce Ogaga

DEDICATION

This project paper is dedicated to my family who have always encouraged and supported me throughout my life. Finishing this project would have been impossible if it were not for your constant impetus in concluding this project. You have been, and still are, the pillar of strength in my life. I also wish to dedicate this paper to my friends for your wonderful support and great inputs, you are much appreciated.

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TABLE OF CONTENTS

DECLARATION	ii
DEDICATION	iii
ACKNOWLEDGEMENT	iv
TABLE OF CONTENTS.....	v
LIST OF TABLES	ix
LIST OF FIGURES	x
ABBREVIATIONS & ACRONYMS	xi
DEFINITION OF TERMS	xii
ABSTRACT.....	xiii
CHAPTER ONE	1
INTRODUCTION	1
1.1 Background of the Study	1
1.1.1 Revenue Collection Strategies	4
1.1.2 Value Added Tax Revenue Performance.....	6
1.1.3 Kenya Revenue Authority.....	8
1.2 Statement of the Problem.....	9
1.3 Objectives of the Study.....	10
1.3.1 Specific Objectives	10
1.3 Research Questions.....	11
1.4 Significance of the Study	11
1.4.1 Policy Makers in the Government	11
1.4.2 Domestic Taxes Department.....	11
1.4.3 Future Researchers.....	12
1.5 Scope of the Study	12
CHAPTER TWO	13

LITERATURE REVIEW	13
2.1 Introduction.....	13
2.2 Theoretical Review	13
2.2.1 System Theory	13
2.2.2 Optimal Taxation Theory.....	14
2.2.3 Economic Deterrence Theory	15
2.3 Empirical Literature Review.....	17
2.3.1Automation and VAT Revenue Performance	17
2.3.2 Staff Training and VAT Revenue Performance.....	19
2.3.3 Enforcement and VAT Revenue Performance	22
2.4 Conceptual Framework.....	25
2.5 Critique of Existing Literature	26
2.6 Research Gaps.....	27
2.7 Summary of Literature Review.....	28
CHAPTER THREE	29
RESEARCH METHODOLOGY	29
3.1 Introduction.....	29
3.2 Research Design	29
3.3 Target Population.....	29
3.4 Sample Size and Sampling Techniques	29
3.4 Data Collection Instruments	31
3.5 Data Collection Procedures	31
3.6 Pilot Test.....	31
3.6.1 Validity of the Instrument.....	31
3.6.2 Reliability of the Instrument	32
3.7 Data Analysis Methods.....	32

3.8 Operationalization and Measurement of Variables	33
Table 3.3: Operationalization and Measurement of Variables	33
CHAPTER FOUR.....	35
RESEARCH FINDINGS AND DISCUSSION.....	35
4.1 Introduction.....	35
4.2 Response Rate.....	35
4.3 Reliability.....	35
4.4 Demographic Characteristics	36
4.4.1 Gender	36
4.4.2 Age	36
4.4.3 Level of Education	37
4.4.4 Number of Years Worked in the Organization	37
Figure 4.2: Number of Years Worked	38
4.5 Diagnostic Tests.....	38
4.5.1 Test of Normality	38
4.5.2 Multicollinearity Test.....	38
4.6 Descriptive Statistics.....	39
4.6.1 Automation	39
4.6.2 Staff Training	40
4.6.3 Enforcement.....	41
Table 4.9: Enforcement.....	41
4.6.4 VAT Performance	42
Table 4.10: VAT Performance.....	42
4.7 Correlation Analysis	43
Table 4.11: Correlation Matrix	43
4.8 Multiple Linear Regression Analysis	43

Table 4.15: Overall Effect of Automation, Staff Training and Enforcement on Value.....	46
4.8.1 Analysis of Variance.....	47
4.8.2 Test of Research Questions.....	47
4.9 Discussion of the Findings.....	48
4.9.1 Effect of Automation on Value Added Tax Performance.....	48
4.9.2 Effect of Staff Training on Value Added Tax Performance	49
4.9.3 Effect of Enforcement on Value Added Tax Performance	49
CHAPTER FIVE	50
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	50
5.1 Introduction.....	50
5.2 Summary of Findings.....	50
5.2.1 Automation and VAT Performance	50
5.2.2 Staff Training and VAT Performance.....	51
5.2.3 Enforcement and VAT Performance.....	51
5.3 Conclusion	52
5.4 Recommendations.....	52
5.5 Limitations of the Study	53
5.6 Further Research	53
REFERENCES	54
APPENDICES	62
Appendix I: Introduction Letter	62
Appendix II: Questionnaire	63

LIST OF TABLES

Table 3.1: Sample Size	30
Table 4.1: Reliability	36
Table 4.2: Respondent Gender.....	36
Table 4.3: Respondents' Age Group.....	36
Table 4.4: Highest Level of Education	37
Table 4.5: Tests of Normality	38
Table 4.6: Multicollinearity Test	39
Table 4.7: Automation	40
Table 4.8: Staff Training.....	41
Table 4.12 : Effect of Automation on Value Added Tax Performance	44
Table 4.13: Effect of Staff Training on Value Added Tax Performance.....	44
Table 4.14: Effect of Enforcement on Value Added Tax Performance.....	45
Table 4.15: Overall Effect of Automation, Staff Training and Enforcement on Value Added Tax Performance.....	46

LIST OF FIGURES

Figure 2.1: Conceptual Framework	26
Figure 4.1: Response Rate	35
Figure 4.2: Number of Years Worked	38

ABBREVIATIONS & ACRONYMS

CBD	Central Business District
DPC	Document Processing Center
EACCMA	East African Community Customs Management Act
ICT	Information & Communications Technology
KRA	Kenya Revenue Authority
NACOSTI	National Commission for Science, Technology and Innovation
OECD	Organization for Economic Co-operation and Development
SMEs	Small and Medium Enterprises
SPSS	Statistical Package for Social Sciences
USA	United States of America
VAT	Value Added Tax

DEFINITION OF TERMS

- Automation** – Kenya Revenue Authority's technical upgrade as part of its efforts to increase tax collection and reduce tax loopholes induced by tax evasion in particular (Gituma, 2017).
- Enforcement** – In the context of this study, this is the application of laws that govern remission of tax and compliance (OECD, 2019).
- Revenue collection strategies** – This involves developing a strong collection unit with clearly defined, documented and consistent policies and procedures that guide staff through the tax collections process and instruct them on how to respond in particular situations (Kayaga, 2017).
- Revenue performance** – This is the effectiveness of a tax authority in fulfilling its mandate. For KRA, it refers to effective tax administration process which results in better revenue collection and increased tax compliance amongst tax payers (Mutua, 2012).
- Staff training** – This refers to programs that provide workers with information, new skills, or professional development opportunities (Elnaga & Imran, 2013).

ABSTRACT

Despite undertaking many tax reforms, KRA is yet to meet its target with regard to revenue collection. According to the KRA Sixth/Seventh Corporate plan, the authority has continually fallen short of meeting its revenue targets for the past five financial years. The general objective of the study was to establish the effect of the revenue collection strategies on value added tax performance, with a focus on domestic taxes department in East of Nairobi region, Kenya. The study particularly focused on automation, staff training and enforcement, and their effect on value added tax performance. The anchoring theories were system theory, economic deterrence theory and optimal taxation theory. The study adopted a descriptive research design with a study population of 200 managers at domestic taxes department in KRA, Nairobi East region. The target population used Fisher's formulae to calculate the sample of 132 respondents. This research used primary data collected using structured questionnaires which were self-administered. Secondary data was obtained from journals which for academic research purposes. After quantitative data was obtained through questionnaires, it was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and was finally keyed into Statistical Package for Social Sciences (SPSS version 22) computer software for analysis. The statistics generated were descriptive and inferential, and was analyzed using correlation and multiple linear regression. The study concluded that revenue collection strategies had a significant effect on VAT performance of the domestic taxes department in Nairobi East Region, Kenya. Specifically, the study concluded that automation, staff training and enforcement had a significant effect on VAT performance under the sampled region. Furthermore, the study concluded that the effect of revenue collection strategies on value added tax performance was positive, though there may be room for further research on the subject. Based on the findings, the study made several recommendations; firstly, that the KRA should consider scaling up the adoption of automated systems as this would not only reduce the costs of operation but also increase efficiency by making operations seamless. Secondly, the study recommended that KRA should consider allocating a larger budget to staff training through the human resource department as the staff ought to keep in step with the constant reforms that are being made in the taxation system in Kenya. This would ensure that there is no gap between formulation and implementation of tax reforms. Thirdly, the study recommends that KRA should look into restructuring their surveillance system, so as to identify tax evaders, as enforcement has proved to be very vital in enhancing VAT performance.

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Taxation is the major avenue of revenue collection by governments all over the world. Revenue collection is very important as it enables the government to acquire assets which are not liable to debt and which the government uses to develop its economy. As a result, revenue is collected by the government upon its citizens for support or for the purpose of facilitating the service delivery in a country. It is neither a voluntary payment by the taxpayer nor like a donation, but rather an enforced payment to the government (Aamir et al., 2011). A study by Edward (2009) revealed that revenue collection is a major challenge facing many countries worldwide, but the challenges are more in developing countries in comparison to developed countries. Beekes and Brown (2008) posited that developed nations have effective revenue collection systems hence minimizing revenue collection challenges.

Developed countries have advanced and successful tax policies which enhance revenue collection while developing countries often have inefficient tax systems which hamper their tax collection efforts. Nonetheless, the improvement in the sub-Saharan Africa tax structures in terms of tax types and rates in the recent past reflects an improvement in revenue performance. However, the increased overall budget deficits in countries to the south of Sahara reflect insignificant improvement on growth in domestic revenue mobilization after various reforms (Kayaga, 2017).

In Europe, revenue generation is from income tax, allowances, bands, rates, taxation on charitable, tax on bank interest, tax credits, land fill tax, climate change levy, aggregate levy, betting and gaming levies, capital gain taxes, inheritance tax, stamp duties, Value Added Tax, sea tax, bank levies, council or community tax and national (International Financial System, 2014). In India, revenue generation like other countries, is mainly through their tax regime. Taxation Powers in India's federal structure of Central Government constitute **direct taxes** – income tax, corporation and personal dividend distribution tax, wealth tax; **indirect taxes** – central excise, customs, service tax; **transaction tax** – securities transaction tax, value added tax. Other revenue generation in India comprises of excise on alcoholic liquor, luxury tax,

entry tax, electricity duty, entertainment tax, stamp duty, property tax, professional tax and agricultural income tax (International Monetary Fund, 2012).

Fisman and Gatti (2012) did a study on the disparity between revenue generation and expenditure in the United States and found that larger centralized removals are related to high rates of sentence for abuse of public office, which backs the philosophy that soft-budget constraints created by national government transfers are potentially problematic. A study by Rai (2014) discussed the challenges in tax collection faced by developing economies using India as a model. The study showed that in India small-scale industries are given a variety of tax exemptions, from income taxes to commodity taxes. The turnover limit for qualifying for small scale exemption is fairly high, resulting in mushrooming of small-scale units in the economy mainly for the purposes of tax avoidance and tax evasion by diverting income and production of other sources as income and production of small-scale units. Fjeldstad, (2011) in a study of the relations between local bureaucrats, politicians and donors in local government revenue enhancement in Tanzania found out that fiscal administrations in many counties are found to be highly corrupt, partly due to the extreme degree of discretionary fiscal power held by local officials, and poor or non-existent monitoring from above. Furthermore, the research demonstrated that the association of donors through engagements which provide development aid on the base of corresponding funds from the local government may encourage increased tax effort, but at the expense of accountability, responsibility and democratic development.

The foundation of revenue generation in Rwanda (PWC, 2015) is guided by the general provisions of law which demarcates taxation as a primary source of revenue generation to fund public expenditure. Rwanda has enacted tax laws to facilitate the collection of taxes and enhance compliance with tax laws. These laws include; Law on Direct Taxes on Income no. 16 of 2005 as amended, law on Value-added tax no. 37 of 2012, as amended, Law on Tax Procedures no. 25 of 2005, the Commissioner General's Rules and Ministerial orders.

Revenue generation in Tanzania is regulated by the country's tax guide. In this guide, the tax rate of 30% on corporations is levied on both resident and non-resident corporations. Equally, 25% tax is levied on newly listed companies as revenue generation to fund public expenditure. Capital deductions on building and plants on a

rate range of between 5% and 37.5 percent are part of revenue generation for the Tanzanian Administration (Tanzania Tax Guide, 2015).

A study by IMF (2015) revealed that the presence of a large black economy in developing countries results in loss of revenue to governments as a consequence of tax evasion, loss of useful productive activity on account of non-utilization of black money in a useful economy, and the development of a plethora of problems on account of illegal economic activities such as drug trafficking, terrorist attacks, and human trafficking. Since Governments are unable to stop leakages of revenue, they impose more taxes on commodities and services to fulfill their revenue needs. The result is a regressive tax structure putting more pressure on honest taxpayers and promoting inequality in the society. Further it leads to transfer of funds from developing countries to abroad, a situation paradoxical for countries where foreign exchange and capital is scarce.

Fjeldstad and Heggstad (2012) examined opportunities and constraints facing local revenue mobilization in Anglophone Africa. They addressed political and administrative limitations that various revenue instruments face and tax compliance by citizens. It was deduced that, as exemplified by numerous cases in Anglophone African countries, mobilization of revenue by local government authorities though necessary, is hitherto inadequate to develop and supply requisite services to the public. Chitembo (2009) noted that, the level of intergovernmental transfers varies widely amongst countries and between urban and rural councils in South and East African countries.

The state of revenue collection in Kenya is a good example whereby the revenue collection process has faced challenges with several forms of malpractice such as corruption, misallocation, low revenue collection, collusions by tax collectors and tax payers on revenue collections, evasions of revenue collections and disrespect of the rule of law on revenue collection. The government is facing serious limitations in their revenue collection as KRA is not able to collect sufficient funds to cover their budget expectations. This has led the government to turn to seek foreign debt to supplement its budget (Kamande, 2014).

Raising more domestic revenue is a priority for most Sub-Saharan African countries (Drummond et al. 2012). Developing countries used to rely heavily on trade taxes, seigniorage and financial repression as the main sources of fiscal revenue (Aizenman & Jinjark, 2015). Greater trade integration has implied a drastic cut in tariffs, reducing thereby the revenue of trade taxes. Most countries dealt with the new challenges by adopting new taxes, including Value Added Tax (VAT). However, worth to note is that the concept of value-added taxation is not new; it was first advanced for use in the United States in 1921 by T.S Adams. VAT is an indirect tax on consumption, charged on the supply of taxable goods and services, and is levied on transactions rather than directly on income or profit, as well as on the importation of goods and services. Theory and practice indicate that to be efficient, VAT must be consumption-typed, broad-based, and applied through to the retail stage (Oakland, 2007).

1.1.1 Revenue Collection Strategies

Revenue collection strategies are a fundamental segment of financial policy and organization in any economy due to its impact on national government operations. It is the fuel of each government as it is the fundamental instrument through which government financing is guaranteed (Komolo, 2014). There are conclusive explanations for improving tax collection. Culpeper (2008) posits that superior dependence on tax revenue collected is essential to monetary development, reduced poverty, and development. He further argues that collected revenue is more helpful for domestic proprietorship than outer funding and therefore external direct investment is focused towards the business targets of the investor and not the improvement needs of the host nation. Economic Commission for Africa Report (2014) revealed that enhanced domestic revenue collection increases the ability of governments to achieve long-term objectives.

In the United States, Economists generally caution that government leverage in excess of about 60 percent of the economy is problematic, and a rising debt level is simply unsustainable for an extended period of time. A rising debt level is ultimately unsustainable because its growth exceeds that of the overall economy. In China, taxes were levied 3000 years ago as the empire was being established (Aamir et al., 2011).

The tax system encompasses 35 different taxes many of which account for little revenue. A single tax agency collects both national and local taxes, with complex intra-governmental revenue sharing arrangements (Brondolo & Zhiyong, 2016). In South Africa, Value Added Taxation has played an increasing role for tax revenues. It is notable that corporate income tax contributes more as a share of GDP in South Africa than in most other countries. However, the high share of Value Added Tax revenues in South Africa limits the scope to increase the current tax rate on business. Additionally, the National Treasury notes that the increased tax morality could undermine tax compliance and hence revenue collection (Writer, 2018).

According to Murithi and Moyi (2013), like most developing countries, Kenya has had to contend and still contends with the common problems that plague tax systems of developing countries. These, they identify to include, the existence of tax systems, with rates and structures that are difficult to administer and comply with and that are unresponsive both to growth and discretionary tax measures hence offering low tax productivity. In addition, the tax collection strategies raise little revenue but introduce serious economic distortions as well as provide opportunities for differential treatment of individuals and businesses in similar circumstances, which are selective with regard to tax administration and enforcement, and are skewed in favor of those with the ability to defeat the system. This may indicate that for the country to increase its revenue collection, it needs to modernize its collection policy and carry out the necessary tax reforms that will yield an increased tax base.

Mugo (2011) identified that effective integration of information technology with revenue collection functions is major problem hindering the KRA from expand its revenue collection activities. According to Gatumbu (2011), insufficient financial resources hinder the KRA to expand its revenue collection functions and hence the government should allocate more funds to the KRA. Further, Christopher (2005) noted that corporate governance challenges affects formulation and the execution of key management decisions for strengthening revenue collection activities.

Bird (2013) contends that, shortcomings in revenue collections are mostly caused by inadequate administrative staff with mandatory skills, and ignorance among taxpayers and tax collectors. As indicated by Bird, hiring of tax officials who don't know the tax laws in governance and accounting that are necessary in order to analyze returns has

been a great obstruction in revenue collection. Tax administration requires qualified tax workforces with essential abilities needed in order to uphold these systems and work them to their fullest potential (Bird, 2013). Similarly, Awitta(2010) noted that training of staff involved in tax administration is key to effective revenue collection and that the training increases the employee's, skills. She recommended that there is need to create and maintain a training program, which can only be achieved if organization have adequate provision for the expense of training in its annual budget and develop a training plan.

Law enforcement also helps tax authorities to collect debt. The administration of tax laws ensures collection of revenue on time which helps to avoid shortfalls in government revenue or collection delays, significantly affecting the timeliness and level of financial resources available to government. Strong tax enforcement measures on collecting revenue from firms, as use of collection agents and issuance of distress warrants, contribute significantly to the attainment of the goal of revenue collection (OECD, 2013). Technological innovation has been significant matter in tax collection. The automation of systems helps to streamline the revenue collection process and seal the tax gap that emanates from tax administration inefficiencies. Since, information technology keeps changing rapidly, it is important that tax authorities keep on updating the existing fiscal systems to avoid obsolescence (Gituma, 2017).

1.1.2 Value Added Tax Revenue Performance

Value Added Tax is theoretically a tax paid by an economic unit for the value of which one adds to goods or services during the stages of production or the distribution of those goods or services. However, in effect, VAT is a tax on the amount expended by the final consumers of goods or services. It is collected whenever goods or services are transferred for value during the production or wholesale or retail processes respectively. Whenever a trader pays for any commodity liable to VAT, he must pay the supplier a price which includes the appropriate rate of VAT on the chargeable price. In turn, the trader when selling such item to his customers includes the charge on the taxable sales price (Ofurum & Ferry, 2009).

The design of the fiscal policies of nations has an impact on the amount of revenue these nations are able to amass. Addison and Levin (2014) show that the inclination

towards more emphasis in indirect taxes such as VAT has a positive impact on tax revenue. Some countries like Netherland, United Kingdom, Canada and the United States have substantially influenced their economic development through tax revenue generated from Value Added Tax, Company Income Tax and Personal Income Tax and have grew through tax revenue (Oluba, 2018). Canavire-Bacarreza et al. (2013) estimated the effects on growth of the most important taxes for Latin American countries. The study found that for the most part, personal income tax does not have the expected negative effect on economic growth in Latin America, which is largely explained by the small collections in the region. In Pakistan, General Sale Tax (GST) is essentially a Value Added Tax (VAT) and is an important source of revenue for balancing the government budgets (Hassan, 2015).

Countries in Sub Saharan Africa (SSA) have continuously shifted fiscal policy with an aim of broadening their economies and in essence tax revenue. Emmanuel (2013) investigated the effects of Value Added Tax (VAT) on economic growth (GDP) of Nigeria using time series data from 1994-2010 and found one per cent increase in VAT revenue causes 1.47% increase in economic growth (GDP). Ebeke & Ehrhart (2011) examined whether or not the adoption of value-added tax (VAT) in developing countries is an effective way of stabilizing tax revenues. Using a large panel of 103 developing countries observed over 1980-2008, they found robust evidence that the presence of VAT leads to significantly lower tax revenue instability. The study results showed that on average, countries with VAT experience 40-50% less tax revenue instability than countries which do not have a VAT system. These effects decrease with the level of economic development and the openness of trade.

In Kenya, taxation is the key source of revenue that the government uses to provide public goods and services to its citizenry. Kenya introduced VAT to replace the Sales Tax which had been in operation since 1973. VAT has been the choice instrument for unexpected expenditure by increasing VAT rates. Tax reforms were undertaken introducing a new Valued Added Tax (VAT) and external tariffs enhanced to match those of the neighbouring East African Nations. Kenya's tax structure is skewed towards income taxes and VAT since the two are the major source of tax revenue. (Mutua, 2012). Over the last decade the tax revenue has been growing steadily. Nonetheless, the tax gap as a result of underreporting, underpaying or non-paying of

taxes due has continued to grow. Hence, it is important for KRA to ensure that taxes are paid on time and that debt is recovered in order to increase on revenue performance (Mutua, 2012).

1.1.3 Kenya Revenue Authority

The Kenya Revenue Authority (KRA) was established by an Act of Parliament, Chapter 469 of the laws of Kenya, which became effective on July 1, 1995. The Authority is responsible for assessing, collecting and accounting for all revenues in accordance with specific laws, advising the Minister for Finance on matters relating to revenue administration and performing such other functions in relation to revenue as the Minister may direct. In fulfilling its mandate, KRA administers various revenue Acts, with the key ones (in terms of revenue importance) being the Value Added Tax (VAT) Act (Cap. 476), the East African Community Customs Management Act (EACCMA), the Income Tax Act (Cap. 470), the Customs and Excise Act (excise provisions) (Cap. 472) and the Traffic Act (Cap. 403).

The Kenya Revenue Authority is the principal government revenue collection agency and accounts for over 95% of Government Ordinary Revenues. Authority has several departments namely, Domestic Taxes Department, Customs Services Department, Road Transport Department, Investigation and Enforcement Department and the Support Services Department. Among these departments, three are revenue departments, directly involved in the administration of the Revenues Acts. These are Customs Services Department, Road Transport Department and the Domestic Taxes Department. The Domestic Taxes Department is mandated to administer the provisions of the Value Added Tax Act. KRA has strived to meet its revenue collection targets. The Kenya Revenue Authority plays a critical role of assessment of taxes, collection of revenue, administration and enforcement of Laws relating to revenue on behalf of the government of Kenya. In addition, according to the Act of Parliament Cap 469, KRA is also tasked with the role of enhancing and mobilization of government revenue, providing effective administration and sustainability of revenue collection (KRA, 2015).

1.2 Statement of the Problem

The challenge of failure to meet the set targeted budget has been experienced by many countries worldwide. For instance, the government of United Kingdom has continually had deficits in their budget attributed to high government expenditure. The outstanding deficit was at 1.7 billion pounds for the financial year 2018/2019 that ended in March (Bruce & Schomberg, 2019). In India's April-January fiscal deficit touched \$108.36 billion on account of lower revenue collections (The Economic Times, 2019). In Uganda, the tax deficit has been increasing gradually over time. They recorded a 4.7% budget deficit for the financial year 2017/2018. The fiscal deficit is significantly above the 3 per cent ceiling agreed with the International Monetary Fund (PwC, 2018).

Similarly, in Kenya Despite undertaking many tax reforms, KRA is yet to meet its target with regard to revenue collection. According to the KRA Sixth/Seventh Corporate plan, the authority has continually fallen short of meeting its target revenue for the past four financial years. Precisely, in the financial year 2015/2016 the authority revenue collection target was Kshs 1212.6 billion but only managed to collect Kshs 1200.2 billion falling short by Ksh 12.5 billion, in the financial year 2016/2017 the authority revenue collection target was Kshs 1431.8 billion but only managed to collect Kshs 1365.3 billion falling short by Ksh 66.6 billion, in the financial year 2017/2018 the authority revenue collection target was Kshs 1541.2 billion but only managed to collect Kshs 1435.3 billion falling short by Ksh 106 billion while in the financial 2018/2019 the authority revenue collection target was Kshs 4185.6 billion but only managed to collect Kshs 4000.88 billion falling short by Ksh 184.8 billion. This was attributed shocks in the economy and inefficiencies in the tax administration system as cited by the KRA Sixth/Seventh Corporate plan. This portrays that the authority's revenue collection strategies still requires improvement (Munda, 2019).

Precisely, the KRA Sixth/Seventh Corporate plan reveals that achieving the revenue target for VAT has also been a tall order for the Kenya Revenue Authority (KRA) for the past three financial years. In the financial year 2016/2017 the authority target for VAT/GDP was 5% but only managed to attain 4.5%, in the financial year 2017/2018

the authority target for VAT/GDP was 6% but only managed 4.5%, while in the financial 2018/2019 the authority target for VAT/GDP was 9% but only managed 4.21%. This portrays that the authority's VAT performance is still wanting (Munda, 2019).

Past studies on revenue collection strategies that exist reveal the existence of various research gaps. For instance, a conceptual gap exists as some studies focus on different revenue collection strategies compared to this study while other studies related revenue collection strategies to other aspects such as tax compliance and financial performance. For instance, Gitaru (2017) sought to examine the impact of system automation on revenue collection in Kenya revenue authority. Another study by Wambugu (2012) sought to investigate the effect of debt collection strategies on the financial performance of local authorities in Kenya while Ndumia (2015) sought to establish the effect of enforcement measures on corporate tax revenue for firms in the large corporate taxpayer category in Kenya. This study sought to fill in this gap and determine the effect of the revenue collection strategies on value added tax performance, a case of domestic taxes department in Nairobi East Region, Kenya.

1.3 Objectives of the Study

The general objective of the study was to determine the effect of the revenue collection strategies on value added tax performance, with a focus on the domestic taxes department in Nairobi East Region, Kenya.

1.3.1 Specific Objectives

The specific objectives of the study were;

- i. To determine the effect of automation on value added tax performance, with a focus on the domestic taxes department in Nairobi East Region, Kenya.
- ii. To establish the effect of staff training on value added tax performance, with a focus on the domestic taxes department in Nairobi East Region, Kenya.

- iii. To determine the effect of enforcement of law on value added tax performance all with a focus on the domestic taxes department of the Nairobi East Region, Kenya.

1.3 Research Questions

This study sought to answer the following research questions, also within the Nairobi East Region domestic taxes department sample: -

- i. What is the effect of automation on value added tax performance?
- ii. What is the effect of staff training on value added tax performance?
- iii. What is the effect of enforcement of law on value added tax performance?

1.4 Significance of the Study

The findings of this study are expected to be beneficial to various stakeholders policy makers in the government, tax managers at KRA and future researchers.

1.4.1 Policy Makers in the Government

The findings of the study are expected to be beneficial to policy makers in the government as the findings seek to give insight when formulating policies that govern VAT collection and collection of taxes in general. This will thus aid in instituting the right framework in the domestic taxes department and thereby enhancing the department's performance.

1.4.2 Domestic Taxes Department

Evidence from the study may provide management level staff at the domestic taxes department a deeper understanding of the effects of revenue collection strategies they have adopted on VAT performance, thus guiding them on the measures they need to take so as to enhance VAT performance. This could be in-form of increasing staff training, reinforce the enforcement process to ensure compliance and increase reliance on automation. The study will also help tax managers to make requisite adjustments with regard to revenue collection and thereby improve their performance.

1.4.3 Future Researchers

This study hopes to positively contribute to studies in the field of revenue collection, thereby adding to already existing resources in development of theory and further research in the area of revenue collection strategies.

1.5 Scope of the Study

The study was limited to determining the effect of the revenue collection strategies on value added tax performance, with the sample population as the domestic taxes department in Nairobi East Region, Kenya. Specifically, the study sought to establish the effect of automation, staff training and enforcement on value added tax performance. The unit of analysis was the domestic taxes department in Kenya Revenue Authority while the unit of observation was the employees at the domestic tax department. The study focused on the financial years 2016 to 2019.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter reviews the existing body of related literature on revenue collection strategies and VAT performance. It highlights a review of the underlying theories and empirical studies. Additionally, the chapter outlines the summary of literature review and research gaps.

2.2 Theoretical Review

A good research should be grounded in theory (Mentzer et al., 2008). The theories covered in this review include system theory, optimal taxation theory and economic deterrence theory. These theories clearly explain the research in line with the topic.

2.2.1 System Theory

Systems theory is an interdisciplinary theory about every system in nature, in society and in many scientific domains as well as a framework with which we can investigate phenomena from a holistic approach (Capra, 1997). Systems theory focuses on the relations between the parts. Rather than reducing an entity such as the human body into its parts or elements (e.g. organs or cells), systems theory focuses on the arrangement of and relations between the parts and how they work together as a whole. The way the parts are organized and how they interact with each other, determines the properties of that system. The behavior of the system is independent of the properties of the elements. This often referred to as a holistic approach to understanding phenomena (Chikere & Nwoka, 2015).

The history of systems theories includes contributions from such seminal thinkers as Al-fred North Whitehead, Ludwig von Bertalanffy, Anatol Rapoport, Kenneth Boulding, Paul A.Weiss, Ralph Gerard, Kurt Lewin, Roy R. Grinker, William Gray, Nicolas Rizzo, Karl Men-ninger, Silvano Arieti, and, in more recent years, the dynamical systems theorists, the family systems theorists, and those who deal with dissipative structures and holistic paradigms. Evolutionary systems design is also

introduced as one of the most recent advances in systems praxis (Laszlo & Krippner, 1998).

In this more recent tradition, systems theory in organizational studies is considered by some as a humanistic extension of the natural sciences. The systems in an organization rely heavily on achieving negative entropy through openness and feedback. A systemic view on organizations is trans disciplinary and integrative. In other words, it transcends the perspectives of individual disciplines, integrating them on the basis of a common "code", or more exactly, on the basis of the formal apparatus provided by systems theory. The systems approach gives primacy to the interrelationships, not to the elements of the system. It is from these dynamic interrelationships that new properties of the system emerge. In recent years, a system thinking has been developed to provide techniques for studying systems in holistic ways to supplement traditional reductionist methods (Rudolf, 2011).

The theory was relevant as it links the application of various organizational systems to achieve efficiency in an organization. In the context of KRA and fulfilling its mandate of revenue and tax debt collection requires cohesion between the various department as well as other external organizations such as collection agencies and taxpayers. Automation of systems streamlines the entire process and ensures that the operations of the tax authority are effective and efficient.

2.2.2 Optimal Taxation Theory

The optimum income taxation theory was pioneered by Mirrlees (1971) though in the recent past there are a number of theorists who have examined it including Creedy (2009), O'Brien (2009) and Sorensen (2010). Optimal taxation theory is concerned with the designing and implementation of a tax system that reduces inefficiency and distortion in the market under given economic constraints. Though inequality will always exist within even the most efficient markets, the goal of taxation is to eliminate as much inefficiency as possible and to raise revenue to fund government expenditures. With any tax, there will be an excess burden, or additional cost, to the consumer and the producer (Mankiw, Weinzierl & Yagan, 2009).

Optimal taxation theory is based largely on the foundational work of Ramsey (1927) and Mirrlees (1971). Optimal taxation theory has developed over time in the recent

decades to constitute the following attributes: Optimal marginal tax rate schedules depend on the distribution of ability; the optimal marginal tax schedule could decline at high incomes; a flat tax, with a universal lump-sum transfer, could be close to optimal; the optimal extent of redistribution rises with wage inequality; taxes should depend on personal characteristics as well as income; only final goods ought to be taxed, and typically they ought to be taxed uniformly; capital income ought to be untaxed, at least in expectation; and in stochastic, dynamic economies, optimal tax policy requires increased sophistication (Mankiw, Weinzierl & Yagan, 2009).

However, this theory has been criticized for being of little practical policy relevance, due to a lack of robust theoretical results. Much of the optimal tax literature building on Mirrlees' (1971) contribution has been highly technical and abstract, and for many years this body of theory seemed to offer few robust results (Sorensen, 2010). The theory of optimal taxation has yet to deliver clear guidance on a general system of history-dependent, coordinated labor and capital taxation for a realistically-calibrated economy. Instead, it has supplied more limited recommendations (Gentry, 2003).

Recent advances in optimal tax theory have made the theory far much easier to apply and could possibly facilitate to explain some of the current trends in international tax policy (Sorensen, 2010). According to O'Brien (2009), the classical political economists came up with a normative analysis of tax policy which tended to follow a principles-oriented approach where it was stated that a good tax system ought to satisfy certain desirable criteria. According to this theory, tax system should be productive, computable, popular, equal, frugal, divisible, and incorruptible. This theory was relevant to this study as it probed and outlined the key aspects that tax authority should consider for it to be effective in fulfill its mandate and have a positive revenue performance.

2.2.3 Economic Deterrence Theory

The proponent of this theory was Bentham, (1988). The theory argues that people choose to obey or violate the law after calculating the gains and consequences of their actions. Based on the rational choice view of human behavior, the theory predicts that

illicit behavior can be controlled by the threat of sanctions that are certain, severe, and swift. Overall, however, it is difficult to prove the effectiveness of

deterrence since only those offenders not deterred come to the notice of law enforcement (Crawell, 1998).

There are two basic types of deterrence, general and specific. General deterrence is designed to prevent crime in the general population. Thus, the state's punishment of offenders serves as an example for others in the general population who has not yet participated in criminal events. It is meant to make them aware of the horrors of official sanctions in order to put them off committing crimes. Examples include the application of the death penalty and the use of corporal punishment. On the other hand, Specific deterrence is designed, by the nature of the proscribed sanctions, to deter only the individual offender from committing that crime in the future. Proponents of specific deterrence also believe that punishing offenders severely will make them unwilling to reoffend in the future. A drunk driver, for example, would be deterred from drinking and driving because of the unpleasant experience he or she suffered from being arrested, or having his or her license taken away or his or her car impounded (Mannheim, 1972).

The deterrence theory of punishment can be traced to the early works of classical philosophers such as Thomas Hobbes (1588–1678), Cesare Beccaria(1738–1794), and Jeremy Bentham (1748–1832). Together, these theorists protested against the legal policies that had dominated European thought for more than a thousand years, and against the spiritualistic explanations of crime on which they were founded. In addition, these social contract thinkers provided the foundation for modern deterrence theory in criminology. Books and articles about deterrence continue to be published by the best academic presses and the major security studies journals. Among the significant book-length manuscripts on deterrence that have appeared since the turn of the century are Crawford (2003); Freedman (2004); Gray (2003); Paul, Morgan, and Wirtz (2009); Quackenbush (2011b); and Zagare (2011). Taken as a unit, these works demonstrate that the core debates about deterrence's theoretical underpinnings, its empirical robustness, its conceptual clarity, and its policy relevance continue. All of which is to say that deterrence, and the theories that seek to understand it, stand at the very center of the discipline of international politics.

This theory was relevant to this study as it posits that enforcement of law to law breakers result to improved compliance to the law in the future by the present lawbreakers and acts as a warning to others who may want to break the law in the future. In the context of this study, enforcement of law helps to enhance compliance and thus result to improved revenue performance. This is due to the fact that defaulters are afraid to default again in the future and those who have never defaulted are afraid of ever defaulting in the future for fear of the consequences.

2.3 Empirical Literature Review

The review of empirical studies focused mainly on the themes drawn from the research questions and they include; automation, staff training and enforcement.

2.3.1 Automation and VAT Revenue Performance

Information and Technology (ICT) on revenue collection through Electronic tax management applications started in USA, and then spread to the developing nations (Muthama, 2013). Value Added Tax (VAT) revenue collection in India has been boosted through the use of ICT as a tool for collecting revenue. ICT adoption addresses the loopholes and seals the leakages of corruption in revenue collection and thus it is efficient and effective to use. ICT adoption replaces inefficient production on revenue collection. Through harnessing the power of ICT for the revenue collection; the new system enhances effectiveness of the revenue collection and seal the leakages and increase revenue collection (Githinji, 2014). The UK moved into a new era of digital tax collection to allow for automated payment of value added tax. However, there have been challenges of companies are proving slow to sign up. The automation of the tax collection process aims to automate returns and payments for companies and households for all the main taxes. This has led to simplification of tax administration through the introduction of powerful tools to combat errors and tax evasion (Giles, 2019).

The collector-general for Canada Revenue Authority observes that Information Technology (IT) can be used to consolidate all information of the taxpayer. A key feature of their approach to enhance compliance (Canada, 2013). In Germany, Seelmann et al., (2011) did a study on the benefits of a computerized integrated

system for taxation (iTax). They found out that iTax system has cost saving and service improvement effects induced by e-Government. Floropoulos et al (2010) on the success of taxation information systems in Greece. They sought to look at the constructs of user satisfaction, usefulness and quality of service as measures of success of information systems in tax administration. A sample of employees in the Greek tax authority was taken. Their study found that information systems enhance efficiency in tax administration and improved quality of services offered by Greek tax authorities.

Hodzic and Celebi (2017) analyzed value-added tax (VAT), with special emphasis on efficiency in the EU-28 Member States and Turkey, over the period from 2009 to 2013. From the results of the analysis, the study concluded that, the highest efficiency ratio (50.8) was recorded in Croatia in 2013. This indicated that Croatia's value-added tax revenues as percentage of gross domestic product in the state budget were very high (12.7) in comparison to Turkey's (9.0) in 2013. This was attributed to the fact that existing VAT system in EU-28 Member States and Turkey is quite complex for the growing number of businesses operating cross-border. The study recommended that a single VAT area be created so as to increase investment, competitiveness and growth. This is only achievable through automation of the VAT system.

Chen (2010) carried on a study on the impact of antecedents of quality on the satisfaction of taxpayers with online tax system in Taiwan. He made use of hierarchical factor analysis to support evidence of user satisfaction in online tax filing systems. The study found that information and system quality to be the key factors in determining user satisfaction in online tax systems. Azmi et al (2016) made use of questionnaires to determine factors influencing adoption of e-filing tax systems by small and medium size businesses in Malaysia. The study made use of technology acceptance model to gauge perceived risk of adoption of e-filing systems. Samples were taken from the Malaysian public who were taxpayers. Study findings showed that a mixture of regulatory requirements and system complexity and compatibility were the main drivers to adoption of such systems.

Gidisu (2012) did a study on the automation system procedure of the Ghana Revenue Authority on the effectiveness of revenue collection using a case study of Customs Division. The study established a positive impact of automation system usage and the

cost of tax administration, automation and effectiveness of revenue collection. Barako (2015) conducted a study on the efficacy of iTax on tax administration in Kenya. The study collected secondary revenue data and made use of correlational research design to establish a relationship between the variables under study. The study concluded there is a significant correlation between the revenue collected and implementation of iTax. Therefore, Barako concluded that iTax is efficient in revenue collection.

Gitaru (2017) sought to examine the impact of system automation on revenue collection in Kenya revenue authority. This study employed descriptive study design. The study used secondary data collection. The study utilized KRA Customs data for ten financial years after Simba System. The period selected was from July 2007 to June 2016. The data was analyzed using Gretl and presented in figures and tables. The study findings established that the number of transactions, increased significantly after the implementation process this means that due to revenue systems automation a high number of imported consignments were processed and passed through the centralized Document Processing Center (DPC).

Kiptoo and Omondi (2017) examined the contribution of i-Tax system as a strategy for revenue collection at Kenya Revenue Authority, Rift Valley Region, Kenya. The study was guided by Resource Based Theory. The study employed correlational research design. The target population was the 114 Domestic Taxes Department employees at KRA Rift Valley Region. Stratified random sampling technique was used to select 76 respondents for the study. The study established that online taxpayer registration, online tax return processing, online compliance and monitoring activities; and electronic tax payments have a significant contribution on revenue collection at KRA, Rift Valley Region. The study concluded that when all these i-Tax components were embraced, revenue collection, accounting for taxes paid, monitoring of taxpayers, service delivery to taxpayers and compliance improved.

2.3.2 Staff Training and VAT Revenue Performance

Employees are the most valuable asset of every company as they can make or break a company's reputation and can adversely affect profitability. Employees often are responsible for the great bulk of necessary work to be done as well as customer satisfaction and the quality of products and events. Without proper training,

employees both new and current do not receive the information and develop the skill sets necessary for accomplishing their tasks at their maximum potential. Employees who undergo proper training tend to keep their jobs longer than those who do not. Training is a necessity in the workplace. Without it, employees don't have a firm grasp on their responsibilities or duties (Elnaga & Imran, 2013).

Staff training is mainly apprehensive of development of approaches for the establishment of learning, development and teaching opportunities in order to advance individual, team and managerial performance. It is progress that arises from a clear dream about people's capacities and potential and operates within a corporate framework (Harrison, 2007). It takes a lengthy to view how human resource expansion policies and practices can be of advantage to the business plans or approaches. Deviations in staff activities do not occur spontaneously or overnight, so a series of targeted interferences must be made into every group. These may include workshops, preparation sessions, peer appraisals and joint forecasting and implementation, as well as parties (Gituma, 2017). According to Bird (2013), developing states face a problem of incompetent tax supervision. The preceding problem is attributed to inadequate administrative work with necessary skills, and high level of illiteracy among taxpayers and tax collectors. Kayaga (2010) further notes that, financial constraints has led to hiring of tax officials who lack understanding of the tax laws they are administering, and the concept of the concepts of accounting that are requisite to analyzing returns.

A study by Sultana, Irum, Ahmed and Mehmood. (2012) examined the impact of employee training on performance of Telecommunication Sector in Pakistan. Based on a combination of literature review and questionnaire surveys, the study observed that for any organization to succeed in achieving the objectives of its training program, the design and implementation must be planned and systematic, tailored towards enhancing performance and productivity. The study also showed that most organizations meet their needs for training in an ad hoc and haphazard way while others set about identifying their training needs, then design training activities in a rational manner and finally assess the results of training. The study concluded that if organizations invest in right type of employee training it can enhance employee performance as well as competencies and skills. In addition, training is seen as a

useful means of coping with changes fostered by technological innovation; market competition, organizational structuring and most importantly it plays a key role to enhance employee performance.

Jerene (2016) investigated the challenges of Value Added Tax (VAT) collection performance in case of Hawassa City Revenue Authority. The study adopted a mixed research method approach to answer the research questions. A survey data was collected from 94 VAT registered businesses of which 78 were addressed through distribution of self-administered questionnaires and an in-depth interview was conducted with tax officials. The interview was conducted with three tax officials at different time to check the consistency of information. Beside to primary source secondary source of data collected from the annual report of Hawassa City Revenue Authority from the year 2008 up to 2013. Findings from mixed approach portrayed that both tax payer community and customers misunderstanding VAT in combination with administrative incapability challenging the effective collection of VAT in Hawassa city. Failure to issue invoices after selling and customers` lack of initiative to ask for receipts after shopping and getting services also increasing the prevalence of un-collectability of VAT in the city.

Nassazi (2013) sought to evaluate the effects of training on employee performance, using the telecommunication industry in Uganda as case study. In order to understand the study aim, four goals were developed and these focused particularly on identifying the training programs` existing in the industry, the objective of the training offered, and the methods employed and finally the effects of training and development on employee performance. The study was based on three case studies of the biggest telecommunication companies operating in Uganda. A qualitative research approach of the data collection was adopted using a questionnaire comprising of 18 questions distributed to 120 respondents. Based on this sample the results obtained indicate that training have a clear effect on the performance of employees.

A study by Hassan, Waiganjo and Mugambi (2012) investigated the effect of training on hotel performance in Kenya. The study concentrated on large high standard hotels. A sample of 146 respondents comprising of senior managers including Chief Executive Officers, Line Managers (ICT, HR, Marketing, Food and Beverage and Room) out 234 target population in 39 hotels were aimed at but only 105

questionnaires were returned. Data was collected in Nairobi, classified and tabulated according to research objective. Afterwards, descriptive statistics using central tendency, measure of variability and standard deviation was utilized. Inferential statistics was used to find out level of association between independent and dependent variables. The findings show training has significant and positive effect on the performance of hotels in Nairobi.

Biwott (2017) sought to determine influence of training in revenue mobilization on County socio-economic development in north rift region. The study was guided by Resource-Based Theory and adopted a descriptive survey research design. A sample of 321 respondents was randomly selected from a population of 1640 employees from revenue and planning departments in 6 County Governments in North Rift region. Findings from the regression analysis revealed that training has a significant effect on socio-economic development ($\beta = 0.644$, $p < 0.05$). The study therefore suggested that it is utmost important for County employees to have some form of training on revenue collection approaches.

2.3.3 Enforcement and VAT Revenue Performance

Legislation should provide tax authorities with effective debt recovery powers as tax administrations derive their collection enforcement powers from their countries' tax laws. In most cases, tax authorities follow a set process towards enforcement through various forms of reminders, warning and enforcement actions which include possible precautionary measures (OECD, 2019). An audit by Michigan office on Tax Compliance Bureau reported that the Discovery and Tax Enforcement Division did not sufficiently pursue taxpayer with potential tax deficiencies. Their Law authorizes the Department of Treasury to determine and notify the taxpayer of a tax liability based on examination of a tax return, a payment, or an audit. The lapse by an authority in following up the already defaulting taxpayers leads to growth in tax debt that would have otherwise been contained in early stages of their discovery (McTavish, 2013).

Recently there are efforts to collect comparative information about tax administrations in many countries. One of them is the study conducted by OECD (2013) which covered 52 countries. One of the key findings in the study noted the wide ranging

institutional and organizational reforms implemented in the effort to improve efficiency and effectiveness of revenue bodies. Other cross-country empirical study by Robinson and Slemrod (2012) concluded, among others, that the extent of tax administration and enforcement may partly explained differences in tax collection performance between countries.

Martinez-Vazquez and Bird (2010) argued that political decisions on the determination of VAT base may considerably affect the potential revenue from VAT in any country. Further, how fully this potential base could actually be reached may affect the actual revenues collected. How close this potential base could be reached may in turns depend on the interaction between the level of tax compliance (or tax morale) and the effectiveness of the tax administration. Thus, Martinez-Vazquez and Bird (2010) suggested that the revenue productivity of VAT could be improved in two ways. First, strengthens the VAT structure through base-broadening measures; second, strengthens the VAT administration and compliance.

Aizenman and Jinjark (2008) studied the collection efficiency of the VAT taking into account the political and structural factors of the economy. They identified that countries with greater polarization and political instability tended to have lower tax collection performance; in other words, political economy considerations could affect the efficiency of tax collection. Further, structural factors (such as the level of urbanization, share of agriculture in economy, and degree of economic openness) were also found to have affected collection performance through their impact on the degree of difficulty to evade taxes.

A study by Wambugu (2012) sought to investigate the effect of debt collection strategies on the financial performance of local authorities in Kenya. A descriptive analysis and correlation and regression analysis was undertaken. Data was collected through the use of a questionnaire that was distributed to a sample of 40 local authorities selected from the population. The study found out that the popular debt collection strategies that are employed by the councils are, subcontracting of debt collection to third party agents that work on commission and this is also supplemented by use of internal debt collection unit in the councils, adoption of both enforcement and proactive debt collection strategies. The results show that the council's internal debt collection strategies are updated frequently to cope with the challenges that arise

in the operating environment since the market will always develop mechanism to evade paying the rates and levies. The study found that the subcontracting of the debt collection to third parties and the enforcement strategies had a positive relationship with the level of debts while pro-active debt collection strategies and the use of internal debt collection units were found to have a negative relationship with the level of debt collection in the councils.

Ndumia (2015) to establish the effect of enforcement measures on Value Added Tax revenue for firms in the large Value Added Taxpayer category in Kenya. The total population consisted of all 1052 large firms operating in Kenya as categorized by KRA. Since the population of the study was large, sampling was necessary. The sample size consisted of 106 firms in the Large Taxpayers' Office. The study used secondary data which was readily available from the Kenya Revenue Authority and the Kenya National Bureau of Statistics. The study adopted a descriptive survey of the firms in the large taxpayer category. It has been thought strong tax enforcement measures on the VAT revenue for firms can contribute significantly to the attainment of the goal of revenue collection. Secondary data was collected from KRA annual reports on VAT revenue from 2008 to 2014. Regression analysis was conducted in order to establish the effect of enforcement measures on Value Added Tax revenue for firms in the large Value Added Taxpayer category in Kenya. The findings from the study showed that enforcement measures such as audit rate, imposition of penalties, criminal sanctions and another determinant of VAT revenue; the contribution of imports to VAT revenue, had varying degrees of relationship to the Value Added Tax revenue for firms in the large Value Added Taxpayer category. The study revealed that audit rate, penalties and contribution of imports to VAT revenue positively influenced Value Added Tax revenue for firms in the large Value Added Taxpayer category, whereas criminal sanctions negatively affected Value Added Tax revenue for these firms. The study recommended that more emphasis should be on conducting VAT audits by the tax agency and also impose penalties on non-compliant taxpayers as this will yield to more VAT revenue.

Kiame (2019) sought to establish the effect of enforcement measures on tax debt realization in Kenya. The study adopted a descriptive research design. The study relied on secondary data that was obtained from the monthly, quarterly and yearly

debt reports from Kenya Revenue Authority spanning for the last 11 years from 2006 to 2016. Correlation and regression analysis showed a statistically significant positive relationship between the enforcement measures and debt realization. The use of Agency notice as an enforcement measures had strong positive relationship ($r= 0.662$, $p>0.05$). The regression model was significance with p-value of 0.000b which is less than 0.05 significance level. In line with fostering compliance, the study recommended the use of Agency notice efficiently to improve debt realization since it had the highest positive coefficient.

Revenue authorities adopt different models of collecting accrued tax debt. These models include use of collection agencies, use of account managers and issuance of distress warrants. Collection agencies assist to collect tax debt from large taxpayers on behalf of the tax authority and in return get a commission based on the amount of money collected (Fedaseyeu, 2015). Use of account managers entails assigning a specific person to take charge of managing a taxpayer who has defaulted. The person acts as a point of contact between the taxpayer and the tax authority including making negotiations and making decisions on debt settlement plans (Zadoorian, LaManna, & Golden, 2011). Distress warrants are issued by the court giving the tax authority the power to engage the police to collect tax arrears on its behalf (Hynes, 2008).

2.4 Conceptual Framework

A conceptual framework is defined by Nonaka and Konno (2009) as an obstruction, a symbol, a representation of independent and dependent variables or of a behavioural phenomenon. The conceptual framework in figure 2.1 show the relationship between the dependent variable and the independent variables. In this study the dependent variable is revenue performance while the independent variables are automation, staff training and enforcement of law.

Independent Variable

Dependent Variable

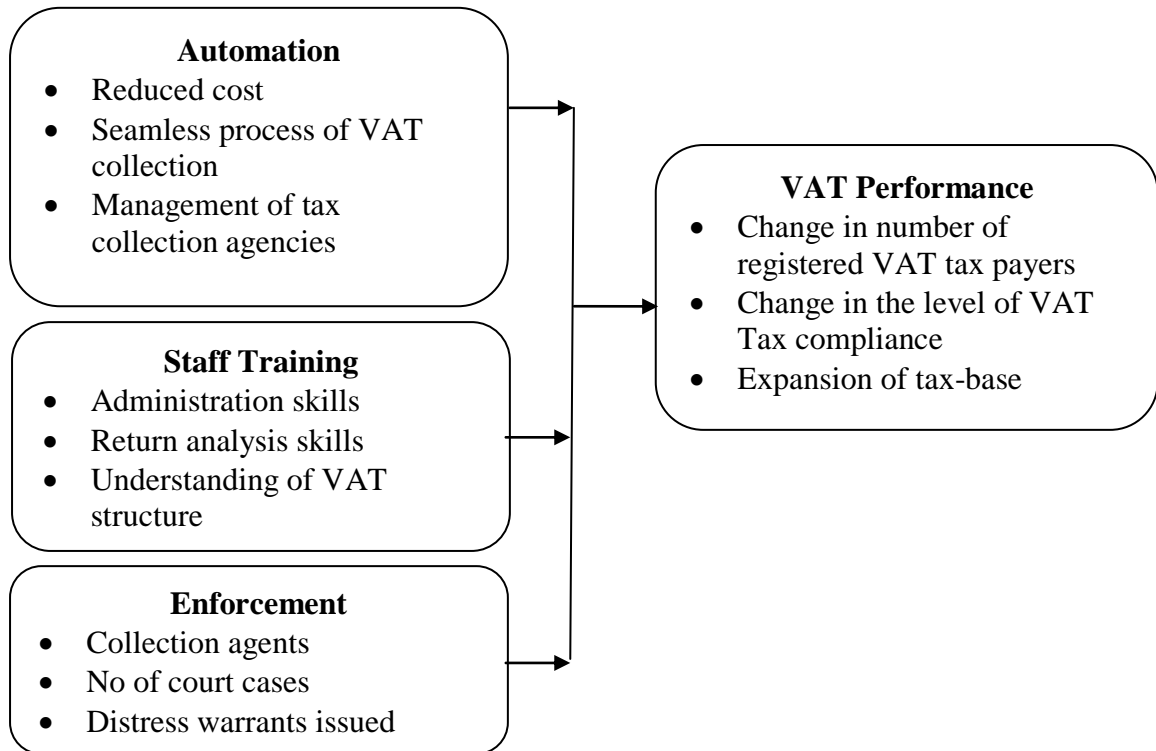


Figure 2.1: Conceptual Framework

2.5 Critique of Existing Literature

VAT is a major worldwide tax instrument which enhances economic growth. Being a tax levied on the final consumption of goods and services, VAT is collected at each stage of production and distributions when value is added up on them. VAT is up to and including, at least, the manufacturing stage, with systematic offsetting of tax charged on commodities purchased as inputs-except perhaps on capital goods-against that due on outputs (Ebrill, 2011).

The aim of the above literature review was to analyze the studies that were carried out on VAT performance with a special focus on, automation, staff training and enforcement. Available literature was skewed towards revenue collection in general with only few studies focusing on VAT. Additionally, the studies that focused on VAT looked into other aspects of such as efficiency of collection and challenges of collection. Focusing on the independent variables, the existing literature is also skewed and relating automation and staff training to general performance. Similarly, there are some studies that have related enforcement to VAT collection of large tax

payers. The lack of a study seeking to establish the relation between revenue collection strategies and VAT performance formed the gap that this study sought to fill in.

Revenue collection strategies impact VAT performance at KRA directly. The realization of expected results in-terms of improved VAT performance would depend on effective execution of these strategies by the employees in the VAT department at KRA. This is owing to VAT collection complexity as it is collected at each stage of production and distributions. Thus, the respondents in this study were the middle, senior level managers and team leaders at the KRA East of Nairobi region offices.

2.6 Research Gaps

Literature review revealed various conceptual and methodological gaps. For instance, a study by Gitaru (2017) sought to examine the impact of system automation on revenue collection in Kenya revenue authority. The study used secondary data collection while this study will use primary data. Additionally, the study focused on automation alone while this study will focus on automation, staff training and enforcement. Another study by Kiptoo and Omondi (2017) examined the contribution of i- Tax system as a strategy for revenue collection at Kenya Revenue Authority, Rift Valley Region, Kenya. The study employed correlational research design while this study will use a descriptive research design.

Further, studies by Kiame (2019) who sought to establish the effect of enforcement measures on tax debt realization in Kenya, Wambugu (2012) who sought to investigate the effect of debt collection strategies on the financial performance of local authorities in Kenya and Ndumia (2015) who sought to establish the effect of enforcement measures on Value Added Tax revenue for firms in the large Value Added Taxpayer category in Kenya reveal a conceptual gap as this study will relate debt collection strategies (automation, enforcement and staff training) on revenue collection. It is on the basis of these contextual gaps, methodological differences and deviations in key findings that this study sought to examine the effect of the revenue collection strategies on revenue collection, a case of KRA, East of Nairobi region.

2.7 Summary of Literature Review

The above chapter reviewed the various theories that explain the independent variables. This chapter also gives an overview of the similar study findings that were done by various researchers before and it addresses each research question. Past studies have attempted to establish the relationship between debt collection strategies and revenue collection. The chapter also explored the conceptualization of the independent and the dependent variables by analyzing the relationships between the two set of variables. In addition, the chapter outlines the research gaps emanating from reviewed literature.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The research methodology in this chapter describes the approach that was taken to achieve the study objectives. It describes the research design, study population and study sample size and sampling procedure. The data collection tools and procedures are also discussed, in addition to the procedures and statistical techniques that were utilized for the final analysis of the data generated from this study.

3.2 Research Design

This study adopted a descriptive survey research design, since it is capable of presenting detailed information about a given social system. A descriptive study aims at determining the what, when and how of a phenomenon which is the concern of this study (Donald &Theresa, 2013). It thus allowed for an in-depth explanation of the relationship between revenue collections strategies and VAT revenue performance.

3.3 Target Population

According to Borg and Gall (2007), target population consists of all members of a real or hypothetical set of people, events or objects from which a researcher wishes to generalize the results of their research while accessible population consists of all the individuals who realistically could be included in the sample. Target population according to Ngechu (2004) is a well-defined or set of people, services, elements, and events, group of things or households that are being investigated. The study target population was 200 middle, senior level managers and team leaders at the KRA East of Nairobi region offices (KRA Human Resource Department, 2019).

3.4 Sample Size and Sampling Techniques

Sampling is the process of selecting units (people, organizations) from accessible population so as to fairly generalize results to the target population (Orodho, 2009). A sample is a subset of a population (Kothari, 2004). This study used Fisher's formula

to calculate the sample size. The formula for calculating the sample size for a large population is as shown below:

$$n = \frac{z^2 qp}{e^2}$$

Where;

z = standard normal deviate for α at 95% confidence, $Z_{1-\alpha/2} = 1.96$

p = estimated proportion of (0.5)

$q = 1 - p$ (0.5)

e = level of precision (margin of error) at 0.1

n = sample size=384

Since the target population is not large the formula for adjusting the sample size was

$$n_0 = n / (1 + ((n - 1) / N))$$

$n_0 = 132$ desired sample sizes.

$n = 384.16$ (Sample Size when population is more than ten thousand)

$N = 200$ (Total population size)

% Sample = 66 %

Hence, the sample size was 132 domestic taxes department managers at the KRA Nairobi East region offices. The respondents were sampled using simple random sampling.

Table 3.1: Sample Size

Category	Target Population	Sample Size (66% of the target population)
Senior Level Managers	68	45
Middle Level Managers	132	87
Total	200	132

3.4 Data Collection Instruments

Burns and Grove (2003) define data collection as the precise, systematic gathering of information relevant to the research sub-problems, using methods such as interviews, participant observations, focus group discussion, narratives and case histories. This study used primary data collected using structured questionnaires. The questionnaires contained close ended questions. The close-ended questions guided the respondents' answers within the choices given.

3.5 Data Collection Procedures

Kombo and Tromp (2009), states that data collection is important in research because it allows for dissemination of accurate information and development of meaningful programmes. The questionnaires were self-administered. The researcher informed the respondents that the instruments being administered were for research purposes only and the response from the respondents would be kept confidential. The researcher also obtained an introductory letter from the University in order to collect data from the field.

3.6 Pilot Test

According to Cooper *et al.*, (2002) a pre-test is a small-scale kind of research projects that collects data from respondents similar to those that used in the future survey. The aim of a pre-test is to act as a guide to examine specific aspects of research to see if the selected procedures will work as intended. A pre-test is meant to test the reliability of the research instrument (Cooper &Schindler, 2006).

3.6.1 Validity of the Instrument

This study used both construct validity and content validity. For construct validity, the questionnaire was divided into several sections to ensure that each section assesses information for a specific objective, and also ensures that the same closely ties to the conceptual framework for this study. To ensure content validity, the questionnaire was subjected to thorough examination by the supervisor. This helped to adjust the questionnaire appropriately before subjecting it to the final data collection exercise.

3.6.2 Reliability of the Instrument

The questionnaire was subjected to overall reliability analysis of internal consistency. This was measured using Cronbach alpha as a coefficient of internal consistency. Internal consistency measures the correlations between different items on the same test (or the same subscale on a larger test) and whether several items that propose to measure the same general construct produce similar scores. The acceptable value of 0.7 was used as a cut-off of reliability for this study.

3.7 Data Analysis Methods

According to Hyndman (2008), data processing involves translating the answers on a questionnaire into a form that can be manipulated to produce statistics. This involves coding, editing, data entry, and monitoring the whole data processing procedure. After quantitative data is obtained through questionnaires, it was prepared in readiness for analysis by editing, handling blank responses, coding, categorizing and keyed into statistical package for social sciences (SPSS version 22) computer software for analysis. The statistics generated were descriptive and inferential statistics. The specific descriptive statistics included frequencies and percentages while the inferential statistics included correlation and a multiple linear regression. Microsoft excel was also used to complement SPSS especially in production of diagrams and tables.

The multiple linear regression model is as follows;

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

Where;

Y = Value Added Tax Performance

β_0 = the constant term

$\beta_1, \beta_2, \beta_3$ = Beta Coefficients

X_1 = Automation

X_2 = Staff Training

$X_3 = \text{Enforcement}$

$e = \text{error term}$

In the model, the coefficient $\beta_i, i= 1....3$ was used to measure the sensitivity of the dependent variable (Y) to unit change in the predictor variables. e is the error term which captures the unexplained variations in the model. The findings of the study were presented inform of tables and charts.

3.8 Operationalization and Measurement of Variables

The operationalization framework serves a significant purpose since it tries to explain how each of the variables mentioned in the study were measured (Table 3.3).

Table 3.3: Operationalization and Measurement of Variables

Objectives	Type of Variable	Indicators	Data collection instrument	Type of Analysis
To determine the effect of automation on value added tax performance, a case of domestic taxes department in Kenya.	Independent Variable Automation	Electronic tax registers E-filling Githinji (2014), Kiptoo and Omondi (2017)	5-point likert scale questionnaire	<u>Quantitative</u> Multiple linear regression analysis
To determine the effect of staff training on value added tax performance, a case of domestic taxes department in Kenya.	Independent Variable Staff training	Tax Collection Skills Seminars attended Benchmarking forums Elnaga and Imran, (2013), Biwott (2017)	5-point likert scale questionnaire	<u>Quantitative</u> Multiple linear regression analysis
To determine the effect of enforcement of law on value added tax performance, a case of domestic taxes department	Independent Variable Enforcement	Collection agents Court cases filed Distress warrants issued OECD (2019), Wambugu (2012), Ndumia (2015)	5-point likert scale questionnaire	<u>Quantitative</u> Multiple linear regression analysis

in Kenya.				
To establish the value added tax performance in Kenya.	Dependent Variable Value added tax performance	Registration Tax payment Returns filed Mutua (2012), Kayaga (2017)	5-point likert scale questionnaire	<u>Quantitative</u> Multiple linear regression analysis

CHAPTER FOUR

RESEARCH FINDINGS AND DISCUSSION

4.1 Introduction

This chapter comprises of research findings and discussions, presenting the results and discussions of the collected data. The chapter encompasses the response rate, demographic characteristics, descriptive statistics and the inferential statistics. Results are presented in tables and diagrams. The data is in line with the research objectives.

4.2 Response Rate

The study administered 132 questionnaires. Of the total, 115 questionnaires were dully filled and returned, which reveals an overall successful response rate of 87.1% as shown on Figure 4.1 below. According to Babbie (2004), return rates of 50% are acceptable to analyze and publish, 60% is good and 70% is very good. Based on these 87% response rate was considered adequate for the study.

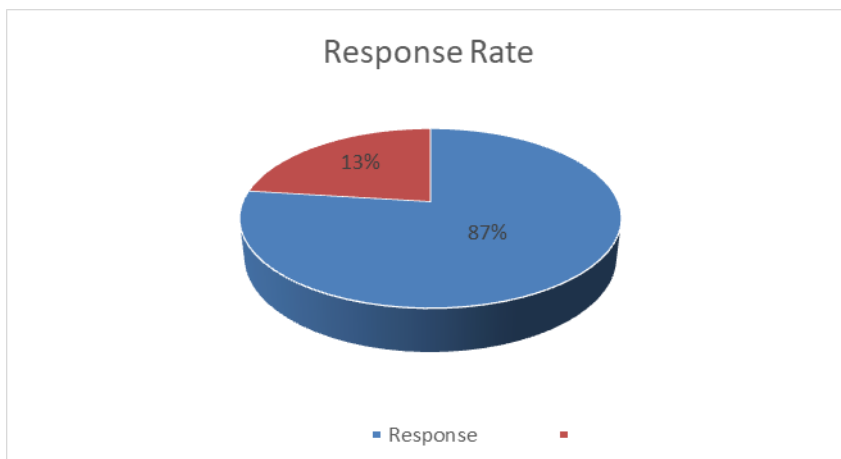


Figure 4.1: Response Rate

Source: Survey Data (2019)

4.3 Reliability

All the variables were reliable since their cronbach alpha was above 0.7, which was used as a cut-off of reliability for the study. Table 3.2 shows the reliability results.

Table 4.1: Reliability

Variable	No of Items	α=Alpha	Comment
VAT Performance	5	0.707	Reliable
Automation	8	0.802	Reliable
Staff Training	5	0.731	Reliable
Enforcement	7	0.817	Reliable

4.4 Demographic Characteristics

This section provides information that posits the basic characteristics such as gender, age, level of education, and number of years worked at KRA.

4.4.1 Gender

The study sought to establish the gender of the respondents. Results revealed that 68.2% were male, while 47% were female. The results demonstrate that KRA upholds gender diversity since the number of female managers is almost equal to that of male managers.

Table 4.2: Respondent Gender

Gender	Frequency	Percentage
Male	68	59.1
Female	47	40.8
Total	115	100

4.4.2 Age

The study also implored the respondents to state their age bracket. Results in table below reveal that majority (33.9%) were aged between 35-40 years, 27.8% were aged above 50 years, 20.8% were aged below 35 years, while 17.4% were between 40-50 years. The results depict that majority of the managers at KRA are middle aged.

Table 4.3: Respondents' Age Group

Age Group	Frequency	Percentage
Below 35 years	24	20.8
35 – 40years	39	33.9
40 – 50years	20	17.4
Above 50years	32	27.8

4.4.3 Level of Education

Further, the study sought to determine the extent to which the respondents had pursued education. Results in below show that majority (49.5%) had acquired education up to degree level, 28.7% had studied up to the college level and attained diploma, and 12.2% had acquired education up to certificate level, while the rest (9.5%) had pursued education up to the master's degree level. The results show that most of the managers at KRA are educated and thus they are equipped with requisite skills for their various roles at KRA.

Table 4.4: Highest Level of Education

Professional qualification	Frequency	Percentage
Certificate	14	12.2
Diploma	33	28.7
Degree	57	49.5
Master	11	9.5
Total	115	100

4.4.4 Number of Years Worked in the Organization

The study sought to establish the number of years worked in the organization by the respondents. Results in Figure 4.2 show that 53% had worked for KRA for 6 – 10 years, 18.3% had worked for KRA for a period of between 11-17 years, 15.7% had worked for KRA for less than 5 years while 13% had worked for KRA for a period of between 17-25 years. The results depict that most of the managers at KRA had worked for a commendable number of years to accrue the necessary expertise to execute their duties.

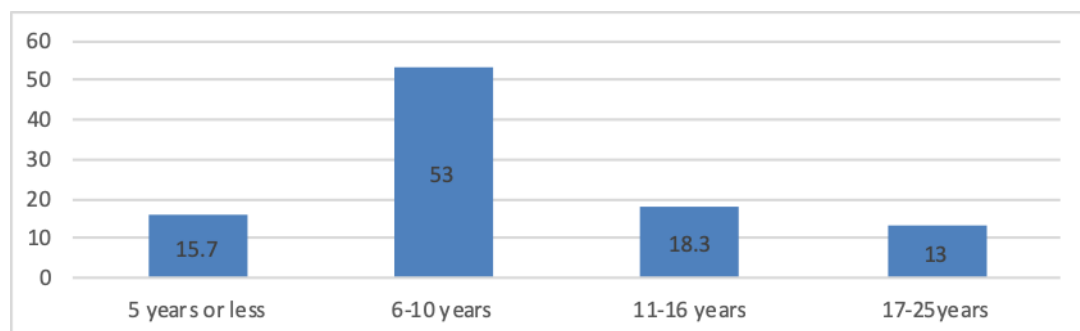


Figure 4.2: Number of Years Worked

4.5 Diagnostic Tests

Before undertaking regression analysis, diagnostic tests were done. They included: multi-collinearity and measures of normality.

4.5.1 Test of Normality

According to Razali and Wah (2011), the Shapiro-Wilk statistical test is arguably the most powerful normality test. This was the selected normality test for this study, with its findings presented in Table 4.5. In practice, Shapiro-Wilk tests of less than 0.05 alpha value imply significant deviation of data from a normal distribution. The data presented was normally distributed as shown below and the results for the Shapiro-Wilk test had p-values greater than 0.05, indicating the assumption of normality was not violated.

Table 4.5: Tests of Normality

	Kolmogorov-Smirnov ^a	Shapiro-Wilk		
	Statistic	Sig.	Statistic	Sig.
Automation	0.079	.005	0.976	0.53
Staff training	0.065	.006	0.867	0.63
Enforcement of law	0.082	.004	0.981	0.28
VAT performance	0.052	.000	0.850	0.74

a. Lilliefors Significance Correction

Source: Research Data, 2019

4.5.2 Multicollinearity Test

Multicollinearity is the undesirable situation where correlation between independent variables is high. It increases the standard errors of the coefficients using collinearity statistics to derive tolerance and the variance inflation factor (VIF), and thus makes

some variables statistically not significant while they should otherwise be significant (Osborne and Waters, 2014). In order to test for multicollinearity, VIF was computed using SPSS.

Tolerance is the amount of variance in an independent variable that is not explained by other independent variables. Bowerman and Connell (2006) stated that lower levels of VIF are better while higher levels of VIF are known to affect adversely the result associated with a multiple regression analysis. The authors argue that VIF above 2.50 start to indicate relatively high levels of multicollinearity. The Variance Inflation Factor in the study’s regression model ranged between 1.390 and 1.672, which are both lower than the 2.50 ceiling. Thus, the study findings were able to fulfill the threshold as shown in the table below.

Table 4.6: Multicollinearity Test

Coefficients^a	Collinearity Statistics	
	Tolerance	VIF
Model		
(Constant)		
Automation	0.835	1.672
Staff training	0.706	1.564
Enforcement of law	0.572	1.390

a. Dependent Variable: VAT

4.6 Descriptive Statistics

This section presents the descriptive results on automation, staff training, enforcement and VAT performance.

4.6.1 Automation

The study sought to establish the effect of automation on value added tax performance with a focus on the domestic taxes department in East of Nairobi region, Kenya. Results in the table below suggest that automation makes the process of VAT collection simpler, as shown from the responses which had a mean score of 4.4 ($n = 115$). Results also indicate that respondents believe automation helps to cut costs incurred during value added tax collection, from the mean score of 4.2 ($n = 115$) for

that category. Additionally, respondents were of the opinion that automation helps in monitoring the value added tax collection process (mean = 4.7, $n = 115$) and that automation helps to update the VAT tax payers registry (mean = 4.1, $n = 115$). Other findings of interest under the automation category were that the automation process helps in management of private collection agencies (mean = 3.8, $n = 115$), it aids in elimination of redundant activities that dampen VAT collection (mean = 3.9, $n = 115$) and assists in consolidation of data (mean = 4.6, $n = 115$). The overall mean for this category was 4.2 ($n = 115$).

Table 4.7: Automation

Statement	Mean	SD
Automation makes the process of value added tax collection easy.	4.4	0.79
Automation help to cut cost incurred during value added tax collection.	4.2	1.08
Automation helps to monitor the value added tax collection process.	4.7	1.30
Automation helps to updated value added tax payers registry	4.1	1.05
Automation helps in the management of private collection agencies	3.8	0.87
Automation aids in the elimination of redundant activities that dampen value added tax collection.	3.9	0.75
Automation assists to consolidation of data.	4.6	1.32
Average	4.2	

4.6.2 Staff Training

Results under the staff training category show that the respondents in the KRA department sampled believe they have been empowered with relevant VAT administration skills (mean = 4.0, $n = 115$), that the employees in their department have deep understanding of VAT structure (mean = 2.9, $n = 115$) and that the employees in their department understand the tax law in Kenya (mean = 3.6, $n = 115$).

The results also illustrated that the respondents believe that employees in their department have tax return analysis skills (mean = 3.8, $n = 115$), while agreement that the employees in their department know how to use the automated tax administration systems had a mean score of 3.7 ($n = 115$). The category mean was 3.6 ($n = 115$).

Table 4.8: Staff Training

Statement	Mean	SD
The employees in our department have value added tax administration skills.	4.0	0.26
The employees in our department have deep understanding of value added tax structure.	2.9	0.52
The employees in our department understand the tax law in Kenya.	3.6	0.11
The employees in our department have return analysis skills.	3.8	0.27
The employees in our department know how to use the automated tax administration systems.	3.7	0.18
Average	3.6	

4.6.3 Enforcement

Results below additionally showed that enforcement contributed to curbing non-compliance (mean = 4.0, $n = 115$). Respondents also agreed that the domestic taxes department uses restraining orders against defaulters (mean = 4.6, $n = 115$), that the domestic taxes department uses collection agencies (mean = 3.9, $n = 115$) and that the domestic taxes department uses audit rates (mean = 3.7, $n = 115$). The results also illustrated that the domestic taxes department imposes penalties on non-compliant taxpayers (mean = 4.4, $n = 115$). Respondents posited that the domestic taxes department imposes criminal sanctions on non-compliant taxpayers (mean = 3.5, $n = 115$) and that the domestic taxes department assigns account managers to specific large non-compliant taxpayers (mean = 4.2, $n = 115$). The overall mean for this category was 4.0.

Table 4.9: Enforcement

Statement	Mean	SD
Enforcement helps to curb non-compliance	4.0	0.71
The domestic taxes department uses	4.6	0.19

restraining orders against defaulters		
The domestic taxes department uses collection agencies	3.9	0.14
The domestic taxes department uses audit rate	3.7	0.76
The domestic taxes department imposes penalties on non-compliant taxpayers.	4.4	0.97
The domestic taxes department imposes criminal sanctions on non-compliant taxpayers.	3.5	0.15
The domestic taxes department assigns account managers to specific large non-compliant taxpayers.	4.2	0.27
Average	4.0	

4.6.4 VAT Performance

Results in Table 4.10 below indicate that 98.3% (113/115) of respondents were confident the number of registered VAT taxpayers has increased, 95.7% (110/115) agreed that the level of reporting compliance among value added taxpayers has increased while 95.7% (110/115) agreed that the level of payment compliance among value added taxpayers has gone up. The results also illustrated that 95.7% (110/115) affirmed that the number of value-added taxpayers who have filed their returns on time has increased while 92.2% (106/115) were in agreement that the tax base of value-added taxpayers has expanded. The overall mean was 4.5 for this category.

Table 4.10: VAT Performance

Statement	Mean	SD
The number of registered value-added taxpayers has increased.	4.7	0.84
The level of reporting compliance among value added taxpayers has gone up.	4.1	0.78
The level of payment compliance among value added taxpayers has gone up.	4.4	0.71
The number of value-added taxpayers who have filed their returns on time has increased.	4.5	0.82
The tax base of value-added taxpayers has expanded.	3.4	0.63
Average	4.5	

4.7 Correlation Analysis

Table 4.11 below presents the results of the correlation analysis. The results presented in the table show that automation and VAT performance have a strong positive and significant correlation ($r=0.914$, $p=0.000$). The results also show that staff training and VAT performance have a strong positive and significant correlation ($r=0.883$, $p=0.000$). Further, results show that enforcement and VAT performance have a strong positive and significantly correlation ($r=0.823$, $p=0.000$).

Table 4.11: Correlation Matrix

Variable		VAT Performance	Automat ion	Staff Training	Enforce ment
VAT Performance	Pearson Correlation	1			
Automation	Pearson Correlation	0.914	1		
Staff Training	Pearson Correlation	0.883	0.894	1	
Enforcement	Pearson Correlation	0.823	0.794	0.849	1

4.8 Multiple Linear Regression Analysis

The broad objective of the study was to investigate the effect of revenue collection strategies on VAT performance, a case study of the domestic tax department in East Nairobi region, Kenya. To achieve this, three specific objectives and three corresponding questions were set and formulated respectively. To achieve the set objectives and to answer the questions, the study used various inferential statistical tools and multiple linear regression.

Model Summary

The results in the table below indicated that Automation had a positive correlation with VAT performance up to 45.3% or ($R= 0.453$). The results reveal that automation caused a variation of 20.5% or ($R^2=0.205$ and adjusted $R^2 =0.200$) on VAT

performance. This implies that the remaining 79.5% of the change was caused by other factors not included in the model. (F value = 32.985, $p=0.00 < 0.05$).

Table 4.12 : Effect of Automation on Value Added Tax Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.453 ^a	.205	.200	.41531

a. Predictors: (Constant), AUTOMATION

ANOVA^a

Model	Sum of Squares	Mean Square	F	Sig.
1Regression	7.109	3.158	32.985	0.000
Residual	12.937	0.786		
Total	20.046			

a. Dependent Variable: VAT performance

b. Predictors: (Constant), Automation

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	T	Sig.
1	(Constant)	6.784	.252		4.439	.000
	Automation	.438	.095	.453	7.081	.000

a. Dependent Variable: VAT Performance

Model Summary

The results in the table below indicated that staff training had a positive correlation with VAT performance up to 78.8% or (R= 0.788). The results reveal that staff training caused a variation of 62% or ($R^2=0.620$ and adjusted $R^2 =0.616$) on VAT performance. This implies that the remaining 38% of the change was caused by other factors not included in the model. (F value = 34.189, $P=0.009 < 0.05$).

Table 4.13: Effect of Staff Training on Value Added Tax Performance

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
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1	.788 ^a	.620	.616	.73617
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a. Predictors: (Constant), STAFF TRAINING

ANOVA ^a				
Model	Sum of Squares	Mean Square	F	Sig.
Regression	7.131	1.541	34.189	0.000
¹ Residual	38.047	0.347		
Total	9.178			

a. Dependent Variable: VAT Performance

b. Predictors: (Constant), STAFF TRAINING

Coefficients ^a						
Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.	
	B	Std. Error	Beta			
1	(Constant)	.864	.234		1.149	.000
	Staff Training	.410	0.349	.788	2.951	.009

a. Dependent Variable: VAT Performance

The results in the table below indicated that enforcement had a positive correlation with VAT performance up to 51.9% or (R= 0.519). The results reveal that enforcement caused a variation of 26.9% or (R²=0.269 and adjusted R² =0.264) on VAT performance. This implies that the remaining 73.1% of the change was caused by other factors not included in the model. (F value = 42.217, P=0.000< 0.05).

Table 4.14: Effect of Enforcement on Value Added Tax Performance

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.519 ^a	.269	.264	.83610

a. Predictors: (Constant), Enforcement

ANOVA ^a				
Model	Sum of Squares	Mean Square	F	Sig.
Regression	5.711	1.307	42.217	0.000
¹ Residual	9.679	0.155		
Total	15.390			

a. Dependent Variable: VAT Performance

b. Predictors: (Constant), Enforcement

Coefficients ^a					
Model	Unstandardized Coefficients		Standardized Coefficients		Sig.
	B	Std. Error	Beta	T	
¹ (Constant)	1.768	.789		3.032	.000
¹ Enforcement	.393	0.023	.519	1.219	.000

a. Dependent Variable: VAT Performance

Model Summary

Results in Table 4.15 below show that automation, staff training and enforcement were considered significant in explaining changes in VAT performance. Automation, staff training and enforcement had a strong positive correlation with VAT performance up to 93.1% ($R = 0.931$), and caused a variation of 86.6% ($R^2 = 0.866$ and adjusted $R^2 = 0.863$) on VAT performance. This implies that the remaining 13.4% of the change was caused by other factors not included in the model.

Table 4.15: Overall Effect of Automation, Staff Training and Enforcement on Value Added Tax Performance

Coefficients

Model	Unstandardized coefficients		Standardized coefficients		
	B	Std.Error	Beta	T	Sig
(Constant)	2.516	0.095		26.531	0.006
Automation	0.313	1.042	0.214	2.479	0.000
Staff training	0.279	0.036	0.297	2.194	0.004
Enforcement	0.292	0.032	0.356	2.873	0.000
R	0.931				
R Square	0.866				
Adjusted R Square	0.863				
F	23.965				
Sig	0.000				

Dependent Variable: VAT Performance

Regression equation:

$$Y = 2.516 + 0.313 X_1 + 0.279 X_2 + 0.292 X_3 + \varepsilon$$

4.8.1 Analysis of Variance

Further ANOVA tests were conducted to determine whether the model works in explaining the relationship among variables as postulated in the conceptual model. Results in Table 4.15 above suggest that the model was statistically significant, as shown by F statistic of 23.965 and p value < 0.05 (p = 0.000), which may indicate that the independent variables selected are good predictors of VAT performance.

4.8.2 Test of Research Questions

The first question asked what the effect of automation was on VAT performance in the domestic taxes department of Nairobi region, Kenya.

Automation was shown to have a positive relationship effect on VAT performance of the domestic taxes department in East of Nairobi region. The results in Table 4.15 above revealed that the p value was less than 0.05, i.e. $\rho=0.000$ which implies that the relationship was statistically significant.

The second question asked what the effect of staff training on VAT performance was in the domestic taxes department of Nairobi region, Kenya. Staff training was also observed to have a positive relationship with VAT performance. The results in Table 4.15 above revealed that the p value was less than 0.05 ($\rho=0.004$), which implies that the relationship was statistically significant.

The third question asked what the effect of enforcement laws on VAT performance was in the domestic taxes department of Nairobi region, Kenya.

Enforcement showed a positive relationship with VAT performance for the tax department under study. The results in Table 4.15 above showed that p value was less than 0.05 ($\rho=0.000$) which implies that relationship was statistically significant.

4.9 Discussion of the Findings

This chapter presents discussion of the results of various tests carried out on the study. The results of each of the questions in this study will be discussed.

4.9.1 Effect of Automation on Value Added Tax Performance

The first objective of the study was to determine the effect of automation on VAT performance within the domestic taxes department in East of Nairobi region, Kenya. The findings of this study were statistically significant i.e. $p = 0.000$, which is less than 0.05, the conventional probability significance level. Similar findings were revealed by Agbadi, (2011) who did a study on the effects of automated systems on VAT among Malaysia taxpayers. The study found improved performance towards VAT for respondents through attendance to training and seminars on VAT matters. The conclusion was that respondents were able to adopt automated systems on VAT based on the information that is available. These findings are consistent with those of Floropoulos et al (2010) who sought to determine the success of taxation information

systems in Greece. Their study found that information systems enhance efficiency in tax administration and improved quality of services offered by Greek tax authorities.

4.9.2 Effect of Staff Training on Value Added Tax Performance

The second objective of the study was to determine the effect of staff training on value added tax performance within the case study region of the domestic tax department in East of Nairobi region, Kenya. The findings of this study were also statistically significant i.e. p value = 0.004, which is less than 0.05 the conventional probability significance level. A study by Saheb (2013) was in agreement and found that staff training on VAT performance was statistically significant in Dar Es Salam; the study recommend for continuous staff training to enhance performance.

These findings also concur with those of Sultana, Irum, Ahmed and Mehmood (2012) who examined the impact of employee training on performance of the Telecommunication Sector in Pakistan. Their study concluded that if organizations invested in the right type of employee training it could enhance employee performance as well as competencies and skills.

4.9.3 Effect of Enforcement on Value Added Tax Performance

Third objective of the study was to determine the effect of enforcement on VAT performance within the domestic taxes department in East of Nairobi region, Kenya. The findings of this study were statistically significant i.e. p value = 0.000, which is less than 0.05 the conventional probability significance level. These results concur with those of Ndumia (2015) who sought to establish the effect of enforcement measures on VAT revenue for firms in the large Value-Added Taxpayer category in Kenya. The findings from the study showed that enforcement measures such as audit rate, imposition of penalties, criminal sanctions and another determinant of VAT revenue; the contribution of imports to VAT revenue, had varying degrees of relationship to the VAT revenue for firms in the large Value-Added Taxpayer category. The study revealed that audit rate, penalties and contribution of imports to VAT revenue positively influenced VAT revenue for firms in the large Value Added Taxpayer category, whereas criminal sanctions negatively affected VAT revenue for these firms.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter addresses the summary of the findings, the conclusions and the recommendations. This is done in line with the objectives of the study.

5.2 Summary of Findings

The general objective of the study was to determine the effect of revenue collection strategies on VAT performance, a case of domestic taxes department in Nairobi East Region, Kenya. In particular the study sought to determine the influence of automation, staff training and enforcement of laws on VAT performance.

5.2.1 Automation and VAT Performance

The first objective of the study was to determine the effect of automation on VAT performance, a case of domestic taxes department in East of Nairobi region, Kenya. Results revealed that automation affected VAT performance in the area under study. This was supported by the agreement that various attributes of automation affect VAT

performance. The attributes included making the process of value added tax collection easy, helping to cut cost incurred during value added tax collection, assisting to monitor the value added tax collection process, helping to update value added tax payers registry, aiding in the management of private collection agencies, aiding in the elimination of redundant activities that dampen VAT collection and assisting in the consolidation of data. These results were supported by the correlation result which showed that automation and VAT performance had a strong positive and significant association. Further, these results were supported by the regression results which revealed that there was a strong positive and significant relationship between automation and VAT performance.

5.2.2 Staff Training and VAT Performance

The second objective of the study was to determine the effect of staff training on VAT performance, a case of domestic taxes department in East of Nairobi region, Kenya. Results revealed that staff training affected VAT performance in the area under study, supported by the agreement that various attributes of staff training affect VAT performance. The attributes included employees possessing VAT administration skills, employees having a deep understanding of VAT structure, employees understanding the tax law in Kenya, employees having tax return analysis skills and employees having requisite knowledge on how to use the automated tax administration systems. These results were supported by the correlation result which showed that staff training and VAT performance had a positive and significant association. Further, these results were supported by the regression results which revealed that there was a strong positive and significant relationship between staff training and VAT performance.

5.2.3 Enforcement and VAT Performance

The third objective of the study was to determine the effect of enforcement of law on value added tax performance, a case of domestic taxes department in East of Nairobi region, Kenya. Results from this study revealed that enforcement affected VAT performance of the surveyed domestic taxes department, supported by the agreement that various attributes of enforcement affect VAT performance. The attributes included helping curb non-compliance, use of restraining orders against defaulters,

use of collection agencies, use of audit rates, imposition of penalties on non-compliant taxpayers, imposition of criminal sanctions on non-compliant taxpayers and assigning account managers to specific large non-compliant taxpayers. These results were supported by the correlation result which showed that enforcement and VAT performance had a positive and significant association. Further, these results were supported by the regression results which revealed that there was a strong positive and significant relationship between enforcement and VAT performance.

5.3 Conclusion

The study concluded that revenue collection strategies affected VAT performance of the domestic taxes department in Nairobi East Region, Kenya. Specifically, the study concluded that automation, staff training and enforcement affected VAT performance of domestic taxes department in Nairobi East Region, Kenya. Further, the study concluded that the effect of revenue collection strategies on VAT performance was positive. The effect was informed by the increase in the number of registered value-added taxpayers, higher levels of reporting compliance among value added taxpayers, higher levels of payment compliance among value added taxpayers, increase in the number of value-added taxpayers who file their returns on time and expansion of the tax base of value-added taxpayers.

5.4 Recommendations

Based on the study findings, several recommendations were made. First, the study recommended that the KRA should consider scaling up the adoption of automated systems as this would not only reduce the costs of operation but also increase efficiency by making operations seamless. Secondly, the study recommended that KRA should look into allocating a larger budget to staff training through the human resource department, as the staff ought to keep in step with the constant reforms that are being made in the taxation system in Kenya. This would ensure that there is no gap between formulation and implementation of tax reforms. Thirdly, the study recommends that KRA should consider stepping up their surveillance systems so as to identify tax evaders, as enforcement has proved to be very vital in enhancing VAT performance.

5.5 Limitations of the Study

The study was limited by the availability of department heads of the domestic taxes department in Nairobi East Region, who were too busy during working hours to reply to the study research questionnaires. To mitigate this problem, the researcher gave a lengthy period of data collection. Further the researcher made numerous phone calls to increase the response rate. The area surveyed was also limited in scope (Nairobi East Region only), and the author acknowledges that a larger population may have been able to provide more conclusive results.

5.6 Further Research

The study proposes that a research of the same caliber be conducted focusing on income tax and excise duty to create allowance for comparison. Further, the study suggests that a study focusing on other factors other than revenue collection strategies affecting VAT performance be conducted.

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APPENDICES

Appendix I: Introduction Letter

Ruth Mwangi

P.O Box

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Dear Sir/Madam,

RE: ACADEMIC RESEARCH PROJECT

I am a post graduate from Jomo Kenyatta University of Technology. I wish to conduct a research entitled “*effect of the revenue collection strategies on value added tax performance, a case of domestic taxes department in Nairobi East Region, Kenya*” A questionnaire has been designed and will be used to gather relevant information to address the research objectives of the study. The purpose of writing to you is to request for permission to collect information on this important subject from the management.

Please note that the study will be conducted for academic purpose only. Strict ethical principles will be observed to ensure confidentiality.

Your acceptance will be highly appreciated.

Yours Sincerely

Ruth Mwangi

Appendix II: Questionnaire

Section A: General Information

Serial number

1. Indicate your gender Male () Female ()
2. Please indicate your age bracket Below 35 years () 35-40 years () 41-45 years () 46- 50 years () Above 50 years ()
3. Indicate your highest education qualification Certificate () Diploma () Bachelors () Masters () PhD () Any other () Specify
4. Indicate years worked 5 years or less () 6-10 years () 11-16 years () 17-25years () Over 25 years ()

Section B: Automation

Kindly tick your level of agreement to show the effect of automation in relation to VAT revenue performance Key 5 Strongly Agree (SA), 4 Agree (A), 3 Neutral (N), 2 Disagree (D), 1 Strongly Disagree (SD).

Statement	SD	D	N	A	SA
Our department has adopted the appropriate systems to streamline the value added tax collection process.					
Automation makes the process of value added tax collection easy.					
Automation help to cut cost incurred during value added tax collection.					
Automation helps to monitor the value added tax collection process.					
Automation helps to updated value added tax payers registry					
Automation helps in the management of private collection agencies					
Automation aids in the elimination of redundant activities that dampen value added tax collection.					
Automation assists to consolidation of data.					

Section C: Staff Training

Kindly tick your level of agreement to show the effect of staff training in relation to VAT revenue performance. Key 5 Strongly Agree (SA), 4 Agree (A), 3 Neutral (N), 2 Disagree (D), 1 Strongly Disagree (SD).

Statement	SD	D	N	A	SA
The employees in our department have value added tax administration skills.					
The employees in our department have deep understanding of value added tax structure.					
The employees in our department understand the tax law in Kenya.					
The employees in our department have return analysis skills.					
The employees in our department know how to use the automated tax administration systems.					

Section D: Enforcement

Kindly tick your level of agreement to show the enforcement strategies utilized by the domestic taxes department, KRA. Key 5 Strongly Agree (SA), 4 Agree (A), 3 Neutral (N), 2 Disagree (D), 1 Strongly Disagree (SD).

Statement	SD	D	N	A	SA
Enforcement helps to curb non-compliance					
The domestic taxes department uses restraining orders against defaulters					
The domestic taxes department uses collection agencies					
The domestic taxes department uses audit rate					
The domestic taxes department imposes penalties on non-compliant taxpayers.					
The domestic taxes department imposes criminal sanctions on non-compliant taxpayers.					
The domestic taxes department assigns account managers to specific large non-compliant taxpayers.					

Section E: Value Added Tax Performance

Kindly tick your level of agreement with the following statements about Value Added Tax performance at the domestic tax department in KRA. Key 5 Strongly Agree (SA), 4 Agree (A), 3 Neutral (N), 2 Disagree (D), 1 Strongly Disagree (SD).

Statement	SD	D	N	A	SA
The number of registered value added taxpayers has increased.					
The level of reporting compliance among value added taxpayers has gone up.					
The level of payment compliance among value added taxpayers has gone up.					
The number of value added taxpayers who have filed their returns on time has increased.					
The tax base of value added taxpayers has expanded.					

THANK YOU FOR YOUR RESPONSES