

**Factors Affecting Value Added Tax Compliance on Small and
Medium Enterprises in Embakasi East Constituency, Nairobi City
County**

Elaine Wairimu Kaniaru

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DECLARATION

This project is my original work and has not been presented for a post graduate diploma in any other academic or non-institution.

Signature _____ **Date** _____

ELAINE WAIRIMU KANIARU

HDB336-C016-0932/2017

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

Signature _____ **Date** _____

Dr. K. KIMANZI

JKUAT, Kenya

DEDICATION

I dedicate this project to my parents for their time and support as well as to my siblings for creating the environment to do my research. I am indebted to many individuals for their current support and contributions towards the successful during this project.

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I would like to thank all those that helped me to ensure the success of this research. This included my colleagues who through consultation assisted me to complete the research. I would like to thank my supervisor, Dr. K. Kimanzi for the time, support and the guidance he rendered to me during the course of this research project. Above all, I thank the Almighty God for the strength and gift of life that enabled me to complete this research paper.

ABSTRACT

The current study sought to establish the factors affecting value added tax compliance on small and medium enterprises in Embakasi East Constituency, Nairobi City County. It was guided by the following specific objectives: - to determine the effect of enforcement measures on value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County; to establish the effect of taxpayers' sensitization on value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County; and to establish relation between tax invoice management system and value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County. Three theories namely: economic deterrence theory, diffusion of innovation and theory of planned behavior formed the theoretical framework of this study. Descriptive research design was employed. The target population was 2846 micro and small enterprises licensed in Embakasi East Constituency Nairobi City County. A sample of 351 Micro and Small Enterprises-determined using Yamane's formula-was selected using stratified random sampling. This study used primary data collected through questionnaires. A pre-test on a different sample was carried out and the reliability coefficients results computed. A Cronbach's alpha greater than 0.7 ($\alpha > 0.7$) for all the variables was acceptable. Data analysis was conducted by use of descriptive statistics and inferential statistics using standard statistical techniques including pearson correlation coefficient and regression analysis. From the descriptive statistics, it was established that most taxpayers are not aware that Tax Procedures Act (2015) allows the Commissioner to recover any unpaid tax as a civil debt due to the state. Also, the results showed that through the basic education in schools and colleges, most respondents did not get basic understanding of taxation. Furthermore, the respondents indicated that they do not keep accurate records like trial balance and journals and ledgers are not updated. The correlation analysis established a strong positive and significant correlation coefficient between enforcement measures and value added tax compliance, while the regression analysis showed that enforcement measures had a significant positive beta coefficient. The correlation analysis established a strong positive and significant correlation coefficient between taxpayers' sensitization and value added tax compliance, with the regression analysis showing that taxpayers' sensitization had a significant positive beta coefficient. Lastly, tax invoice management system and value added tax compliance had a strong positive and significant pearson correlation coefficient, which was supported by the regression analysis, which established a significant and positive beta coefficient for the tax invoice management system. The study concluded that increased enforcement efforts by the Kenya Revenue Authority enforcement officers may lead to improved value added tax compliance. On taxpayers' sensitization, the study concludes that increasing taxpayers' sensitization to small and medium enterprises through tax seminars, taxpayers' day and social media platforms could lead to improved value added tax compliance. To sum, the study concludes that adoption of tax invoice management system by the small and medium enterprises could lead to improved value added tax compliance. The current study recommends that Kenya Revenue Authority through their social media platforms, educate the taxpayers, especially small and medium enterprises on the content of the Tax Procedures Act (2015) so as to ensure that the taxpayers are aware of their rights and obligations, and those of the taxman. In addition, the government through ministry of education, should come up with curriculum that has taxation as basic and common unit from secondary school to universities.

TABLE OF CONTENTS

DECLARATION.....	ii
DEDICATION.....	iii
ACKNOWLEDGEMENT.....	iv
ABSTRACT.....	v
TABLE OF CONTENTS	vi
LIST OF TABLES	x
LIST OF FIGURES	xi
ABBREVIATIONS AND ACRONYMS.....	xii
DEFINATION OF TERMS	xiii
CHAPTER ONE	1
INTRODUCTION.....	1
1.1 Background of the Study	1
1.1.1 Global Perspective of VAT Compliance.....	2
1.1.2 Regional Perspective of VAT Compliance	3
1.1.3 Local Perspective of VAT Compliance	5
1.1.4 Small and Medium Enterprises	6
1.2 Statement of Problem	7
1.3 Objectives of the Study	8
1.3.1 General Objective	8
1.3.2 Specific Objectives	9
1.4 Research Questions	9
1.5 Significance of the Study.....	9
1.5.1 KRA Management and Policy Makers	9
1.5.2 The Taxpayers (SMEs)	10
1.5.3 Scholars and Researchers	10
1.6 Scope of the Study.....	10
1.7 Limitations of the study.....	10
CHAPTER TWO	12
LITERATURE REVIEW	12
2.1 Introduction.....	12
2.2 Theoretical Review	12
2.2.1 Economic Deterrence Theory.....	12
2.2.2 Theory of Planned Behavior.....	14

2.2.3 Diffusion of Innovation Theory.....	16
2.3 Conceptual framework	17
2.4 Empirical Literature Review.....	18
2.4.1 Enforcement Measures and VAT Compliance.....	18
2.4.2 Taxpayers’ sensitization and VAT Compliance.....	19
2.4.3 Tax Invoice Management System and VAT Compliance.....	20
2.5 Summary.....	22
2.6 Research gaps.....	22
CHAPTER THREE.....	24
RESEARCH METHODOLOGY	24
3.1. Introduction.....	24
3.2. Research Design.....	24
3.3. Target Population	24
3.4 Sampling Frame	25
3.5 Sample size	25
3.6 Sampling Technique.....	26
3.7 Data collection instruments	27
3.8 Data collection method.....	27
3.8.1 Pilot testing.....	28
3.8.2 Validity of the Instruments.....	28
3.8.3 Reliability of the Instruments	28
3.9 Data analysis	29
3.10 Diagnostic Test.....	30
3.10.1 Normality Test.....	30
3.10.2 Multicollinearity test.....	30
3.11 Operationalization and measurement of variables	30
3.12 Ethical considerations.....	32
CHAPTER FOUR.....	33
DATA ANALYSIS AND DISCUSSION OF FINDINGS.....	33
4.1 Introduction.....	33
4.2 Response Rate	33
4.3 Reliability Test Results.....	34
4.4 Demographic Analysis	34
4.4.1 Gender Distribution of the respondents	34

4.4.2 Age of the SME	35
4.4.3 Education Level	36
4.5 Diagnostic Tests	37
4.5.1 Normality Test.....	38
4.5.2 Multicollinearity Test.....	38
4.6 Descriptive Statistics	39
4.6.1 Enforcement Measures and VAT Compliance.....	39
4.6.2 Taxpayers' Sensitization and VAT Compliance	41
4.6.3 Tax Invoice Management System and VAT Compliance.....	42
4.6.4 VAT Compliance.....	43
4.7 Correlation analysis.....	44
4.8 The model summary.....	45
4.9 Analysis of Variance	45
4.11 Discussion of the Findings.....	47
4.11.1 Enforcement Measures and VAT Compliance	47
4.11.2 Taxpayers' Sensitization and VAT Compliance	48
4.11.3 Tax Invoice Management System and VAT Compliance.....	49
CHAPTER FIVE	51
SUMMARY OF FINDINGS CONCLUSION AND RECOMMENDATIONS	51
5.1 Introduction.....	51
5.2 Summary of Findings	51
5.2.1 Enforcement Measures and VAT Compliance.....	51
5.2.2 Taxpayers' Sensitization and VAT Compliance	51
5.2.3 Tax Invoice Management System and VAT Compliance.....	52
5.3 Conclusions.....	52
5.3.1 Enforcement Measures and VAT Compliance.....	53
5.3.2 Taxpayers' Sensitization and VAT Compliance	53
5.3.3 Tax Invoice Management System and VAT Compliance.....	53
5.4 Recommendations	53
5.4.1 Enforcement Measures and VAT Compliance.....	53
5.4.2 Taxpayers' Sensitization and VAT Compliance	54
5.4.3 Tax Invoice Management System and VAT Compliance.....	54
5.5 Suggestion for Further Studies.....	54

REFERENCES.....	55
APPENDICES	60
APPENDIX I: INTRODUCTORY LETTER	60
APPENDIX II: DATA COLLECTION INSTRUMENT	61

LIST OF TABLES

Table 3.1: Target Population	25
Table 3.2. Sample Size	27
Table 3.3: Operationalization and measurement of variables	31
Table 4.1: Reliability of research instrument	34
Table 4.2: Age of the SME.....	36
Table 4.3: Tests of Normality.....	38
Table 4.4 Multicollinearity test.....	39
Table 4.5: Enforcement Measures	40
Table 4.6: Taxpayers' Sensitization.....	41
Table 4.7: Tax Invoice Management System	42
Table 4.8: VAT compliance	43
Table 4.9: Correlations matrix of variables under this study	44
Table 4.10: Model summary.....	45
Table 4.11 Anova.....	46
Table 4.12: Regression Coefficients	46

LIST OF FIGURES

Figure 2.1: Conceptual Framework	17
Figure 4.1: Response Rate	33
Figure 4.2: Gender of Respondent	35
Figure 4.3: Education level.....	37

ABBREVIATIONS AND ACRONYMS

CIAT	International Center for Tropical Agriculture ...
GDP	Gross Domestic Product
ICT	Information and Communication Technology
ITMS	Integrated Tax Management System
KNBS	Kenya National Bureau of Statistics
KRA	Kenya Revenue Authority
RRA	Rwanda Revenue Authority
SME	Small and Medium-sized Enterprise
SPSS	Statistical Package for the Social Sciences
UGX	Ugandan Shilling
URA	Uganda Revenue Authority
VAT	Value Added Tax

DEFINATION OF TERMS

Enforcement measures	Deliberate measures taken by tax authority to enforce compliance among the taxpayers including arrest of tax payers, caveat of assets and agency notice (Crawford, 2013).
Small and Medium Enterprises	Small and Medium Enterprise is a formally registered business with an annual turnover of between Ksh. 8-10 million, an asset base of at least Kenya Shillings 4 million and employing between 5-150 employees (World Bank, 2019).
Tax Compliance	Tax compliance is the ability to and willingness of taxpayers to comply with tax laws by declaring their correct incomes and payment of the correct amount of taxes on time (IRS, 2009).
Tax Invoice Management System	Tax invoice management system is an enhancement of the current electronic tax register to enable automatic reporting of tax invoice transaction. (KRA, 2020)
Taxpayers' sensitization	Programs aimed at making the taxpayers understand the prevailing tax laws, regulations and how they can carry out the procedure and of submitting the tax correctly (Andreas & Savitri, 2015).
Value Added Tax	It is defined as a tax levied on the price of a product or service at each stage of production, distribution, or sale to the end consumer (OECD, 2018).

CHAPTER ONE

INTRODUCTION

1.1 Background of the Study

Governments all over the world rely on taxation, to fund its functions. It is regarded as a key source of resource mobilization in the country, as it helps in the attainment of the country's different goals (Alkhatib, Abdul-Jabbar, & Marimuthu, 2018). In addition, the revenue collected is associated to infrastructural needs and strengthening the relationship between the citizens and their government (Alshira'h, Abdul-Jabbar & Samsudin, 2018). One of the major forms of tax revenue includes value added tax (VAT).

Value-added tax is a form of consumption tax. It is a tax collected on goods and services at every stage of its production, during which value is added to it, from its initial production to the point of sale. From the perspective of the buyer, it is a tax on the purchase price. The introduction of VAT over the past few decades has been the most visible tax reform undertaken in revenue performance (Tanzi & Zee, 2000). There is some evidence, particularly in the third world countries, that those countries that have adopted VAT raise more revenues (Keen & Lockwood, 2010). In Kenya, VAT is important in enhancing revenue collection to attain the set target of Ksh. 973.5 billion for the year 2013/2014 to fund the 1.6 trillion budget. However, revenue reports from KRA have shown that VAT revenue performance has been low over years, and KRA has not been able to achieve the set targets for VAT.

Clearly, the data shows that there is a problem with VAT collection as KRA has not been meeting the annual set targets. To boost revenue collection, the government has come up with many reforms on VAT administration, aimed at raising revenue effectively in consistence with each country's uniqueness and administrative capacity (Kanyinga, 2016). It is a policy implementation by the government, through which few alterations are made into the tax system. This is to overcome the loopholes and enhance the effectiveness of the tax administration in

the country in order to generate higher revenues from taxes as compared to the overall spending. The reforms help the government to minimize tax evasion and tax avoidance. According to, Bekoe, Danquah and Senahey (2016), tax reforms aim at strengthening the current tax system and widening the tax base, leading to more efficient tax system with low marginal tax rates. The tax reforms are driven by many factors including the desire for tax system, equity and integrity.

However, one of the key concerns in every nation when dealing with taxation is tax compliance. This is the degree in which a taxpayer complies with the tax rules in a particular country (Alshira'h, Abdul-Jabbar, & Samsuddin, 2016). The problem of tax non-compliance is as old as the institution of tax system (Wentworth & Rickel, 2015). Tax non-compliance can be differentiated into unintentionally and intentionally (Alabede, Ariffin, & Idris, 2011). Tax evasion is categorized as the most frequent and extreme form of tax non-compliance especially by SMEs which are rarely regulated in most countries. With the challenges faced by governments in bringing small trader in to tax bracket, there is need to come with strategies that can help

1.1.1 Global Perspective of VAT Compliance

Tax compliance has been a global issue. According to International Monetary Fund (2013), there was a tax gap of 30% in VAT collection and 14% in income tax collection from SMEs in the United Kingdom. Tax gap in this case is the difference between revenue that would have been collected if compliance was at 100% and the actual tax revenue collection. According to Her Majesty's Revenue and Customs (HMRC) 2016 estimates, tax evasion accounts for approximately £.5.2 billion of the tax gap in the United Kingdom. Even though non-compliance is experienced in all sectors of the economy, SMEs constitute a large portion of Her Majesty's Revenue and Customs' tax base and contributes around 51% of the overall tax gap as per tax

gap estimates for financial year 2014-2015. In Italy, over €183 billion is the estimated amount that is lost through tax evasion in a year.

In China, VAT was comprehensively implemented as the country's only indirect tax in 2016, effectively replacing the business tax (BT) that previously applied to a number of industries (Bekoe, Danquah & Senahey, 2016). Value-added tax reforms brought several industries instrumental to the Chinese economy under the jurisdiction of the VAT. The real estate, construction, finance, and lifestyle services sectors made up 80 percent of total BT revenue before the tax was scrapped. Under VAT, businesses are considered either general taxpayers or small-scale taxpayers based on their annual sales. Small-scale taxpayers – those collecting less than RMB 500,000 in revenue – benefit from a lower VAT rate of three percent, compared to the six to 17 percent levied on general taxpayers, depending on their industry. In 2017, the revenue from VAT was 15.47 billion yuan (\$2.2 billion) which made up 33.9 percent of China's total tax revenue for the year (Bekoe, Danquah & Senahey, 2016).

Kasipillai and Abdul-Jabbar (2006) established that compliance levels in Malaysia were high because ninety-seven percent of SMEs that were studied had tax knowledge. Access to tax education in Malaysia is easy, this is because tax information is accessed through free public lectures. A study in Australia by Mckerchar & Hansford (2015) showed that many small businesses were found to be unaware of their lack in tax knowledge leading to unintended tax non-compliance. This is supported by evidence documented among Malaysian individual tax payers who unknowingly made errors while filing tax returns (Loo et al., 2016).

1.1.2 Regional Perspective of VAT Compliance

In recent times, VAT has become a major source of revenue in many developing countries, including the sub-Saharan African countries (Ikpe & Nteegah, 2013). This is an impressive record in virtually all countries where it was introduced and it influenced the decision to

introduce VAT in Nigeria in January 1994, as a replacement for the existing sales tax. For instance, VAT revenue in the year of its inception (1994) was N8.194 billion, which was 36.5 percent greater, than the projected N6 billion for that year (Ajakaiye and Odusola, 2000). Similarly, actual VAT revenue for 1995 was N21 billion, compared to the projected N12 billion. In terms of contributions to total federal collected revenue, VAT accounted for about 4.06 % in 1994 and 5.93% in 1995. According to Adereti, Adesina, & Sanni (2011), N404.5 billion was collected on VAT (5.1% of total revenue) in 2008.

Eighty percent of countries in sub-Saharan Africa have adopted the VAT, which has become responsible for raising around one-quarter of all tax revenue (Keen, 2013). In Uganda, of the UGX 556.9 billion revenue shortfall for 2017/18, UGX 475 billion was attributed to domestic VAT (Nakimuli, 2020). The URA has taken measures to curb VAT fraud, improve compliance and plug the gaps including de-registration of VAT registered entities. In line with the need to curb the VAT revenue gap, the VAT Amendment Act, 2018 introduced a new requirement for designated persons to withhold 100% of VAT charged on payments for taxable supplies and pay this directly to the URA. The VAT agents are required to withhold VAT, on the payments for taxable supplies. In addition, these designated entities are required to withhold VAT on invoices issued by non-VAT registered persons on supplies equivalent to one quarter of the annual registration threshold, which is currently UGX 37.5 million (Nakimuli, 2020).

Whereas the East Africa countries that comprises of Uganda, Tanzania and Kenya have remained in the list of developing countries, despite economic and abundance of natural economic resources, South Africa has a comparatively advanced tax collection system, which explains the country's position as a leading economy in the continent (IMF, 2013). In June 2016 gross revenue collected surpassed the monthly target by 3.20%. In 2017, the first half year (H1:2017) financial report on revenue collection outperformed the H1:2016 by 9.74%.

This performance was attributed to automation (introduction of TMS in 2016), audits and anti-corruption initiatives by a revenue report (South Africa Revenue Service, 2017).

1.1.3 Local Perspective of VAT Compliance

In the 2009/10 tax year, the highest tax contribution came from VAT followed by Personal Income Tax and then Corporate Income Tax. Since the formation of the KRA, the ratio of tax revenue to GDP has gradually climbed from 14 % in 1995/96 to 22 % in 2009/10. This current ratio of 22 percent is relatively high compared to most of the other countries in the region. Between 1994 and 2003, Uganda reported an average tax to GDP ratio of 11.1 percent and in Rwanda reported an average tax to GDP ratio 9.2 percent (Ssuuna, 2017). The treasury estimates the contribution of large taxpayers to total tax revenue to be about three quarters ratio. This applies to both direct and indirect taxes PWC (2010). In 2013, VAT contributed about 23% of the total tax revenue collection by the government (KNBS, 2014).

Though VAT contributed substantial amount of revenue, there is a low level of compliance particularly among SMEs. Kenya has been a low-income country, there is need to ensure effective and efficient tax administration, so as to collect enough tax revenue to finance development and meet current expenditure requirements. According to CIAT (2006), KRA is expected to promote compliance with tax laws, ensure effective enforcement by highly professional and motivated workforce to achieve maximum tax collection at minimal cost for the economic and social well-being of all Kenyans (CIAT, 2006). In summary, KRA plays an important role in collection of tax revenues for funding the operations of the government.

Wangechi (2018) analyzed the impact taxes have on Small and medium-sized enterprises in Kenya. The study indicated that there existed a strong relationship between tax compliance and the growth of SMEs in Kenya. The study concluded that high taxation had a negative effect on the growth of SMEs in Kenya. The author found out that better taxation rates led to growth of

SMEs. If the tax rates are high, the author found that it would decrease the profits that SMEs were making and hence they would not have enough money to re-invest and pay taxes. Further to the study, the author made a recommendation of better and favorable tax policies being implemented. These tax policies include a tax holiday, and also efficient tax payment schedule that will be favorable to growing businesses.

Barnes (2010) discovered that better tax policies had a positive effect on growth of SMEs in Kenya. Limitation of the study was that it covered small geographical location, whereby it just covered one county. Therefore, a further study was recommended to be done in other counties and have a wider range of taxation in Kenya. The above finding is consistent with the study by Njuru, Ombuki, Wawire and Okeri (2013) who found out that for a very long time, investment was not successful in Kenya. This raised the policy makers' curiosity because an investment is what led to economic growth of a country. On one hand, Prichard (2015) concluded that income tax, value-added tax (VAT), and also the existence of Kenya Revenue Authority (KRA) had a negative impact on the SMEs in Kenya. On the other hand, Isenbaert (2010) concluded that import tax, excise tax and tax amnesty had a positive impact on SMEs in Kenya. Therefore, suitable tax systems together with tax reforms, were very necessary to ensure growth and sustainability of SMEs in Kenya.

1.1.4 Small and Medium Enterprises

According to Micro and Small Enterprises Act No. 55 of 2012, a micro enterprise is a firm, trade, service, industry or a business activity; whose annual turnover does not exceed five hundred thousand shillings and which employs less than ten people. These enterprises some being informal, are mostly known as SMEs, but are categorized according to number of employees. This also is how SMEs are grouped in Kenya according to Micro and Small Enterprise Act 2012. Micro have 1-9, Small, 10-50 while medium have above 50 employees.

Small and medium enterprises (SMEs) are a major influencer for economic growth, largely due to the labor input they bring to a particular country.

In the world, SMEs are responsible for the generation of nearly half of a countries' GDP (Akinboade, 2015). In Africa, a large portion of Africa's businesses are micro, small and medium enterprises, which have been heavily linked in the support and development of the performance of these countries. The SMEs contributes 35-50 percent of the global Gross Domestic Products. They are the dominant and vast majority of firms in many economies in the world, for instance, 90 percent of enterprises in Africa are MSEs, (Venter & Clercq, 2007). However, a majority of these businesses in Africa rarely comply with the stipulated taxation standards that are implemented by tax authority (Machogu & Amayi, 2016). A majority of the issues cited include high tax costs, complex tax laws, deliberate evasion of taxes and poor regulatory policies to improve their level of compliance. MSEs are also less compliant, when contrary to large corporations which are easier to monitor as a majority have enlisted with tax authorities (Nduruchi & Makokha, 2017).

In Kenya, there is a high unemployment rate as such most individuals turn to micro, small and medium enterprises in order to make a living or as a source of revenue (Mbugua, Mwambia, & Baimwera, 2017). Further, under the Kenya Vision 2030, MSEs have been identified as a key driver in the provision of goods and services enhancing competition, fostering innovation, generating employment hence alleviating poverty. The country's level of economic development is therefore, reliant on the performance of these enterprises. However, a majority of the MSEs or SMEs have not enlisted with the tax authorities, while those that enlist fail to file tax returns and honor their tax obligations (Mwangi, 2014).

1.2 Statement of Problem

Tax evasion is categorized as the most frequent and extreme form of tax non-compliance. The level of compliance with existing tax laws depends on several factors which can be categorized

into economic factors, social factors and demographic factors (Tanzi & Zee, 2000). Researchers across the world have studied these factors into details. For example, in Yemen, Helhel & Ahmed, (2014) established that attitudes, high tax rates and partial tax systems were the two major factors related to low tax compliance rate. In Malaysia, Normala and Obid (2013) confirmed that there is a significant relationship between the level of tax education and the level of VAT compliance. Locally Jemaiyo and Mutai (2016) found that tax compliance cost, tax knowledge, tax penalties and tax audit had significant effect on level of tax compliance in real estate sector in Eldoret, Kenya.

Though studies clearly show the reasons for tax evasion, KRA has constantly been missing the VAT targets. For instance, the 2018/2019 annual revenue performance report by KRA shows that KRA managed to collect only Ksh. 409.5 billion from VAT against a target of Ksh. 464.2 billion (KRA 2019). In 2019/2020 financial year, the 2019/2020 revenue performance reports show that VAT reduced from Ksh. 464.2 billion in 2018/2019 to Ksh. 380.8 billion in 2019/2020 (KRA 2020). In 2020/2021 financial year, the VAT collected amounted to KShs. 478.2 billion against a target of KShs. 484.2 billion missing target by KShs. 2 billion. These revenue shortfalls have been blamed on tax evasion and other behaviors of tax non-compliance by SMEs and other small taxpayers. It is this worrying trend in revenue collection statistics and the knowledge gap that warrants research to be done in this area, and thus the current study sought to establish the factors affecting value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County.

1.3 Objectives of the Study

1.3.1 General Objective

The study sought to establish the factors affecting value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County.

1.3.2 Specific Objectives

The Specific Objectives were;

- i. To determine the effect of enforcement measures on value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County.
- ii. To establish the effect of taxpayers' sensitization on value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County.
- iii. To establish the relation between tax invoice management system and value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County.

1.4 Research Questions

The following questions were addressed;

- i. What is the effect of enforcement measures on value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County?
- ii. How does taxpayers' sensitization affect value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County?
- iii. What is the relationship between tax invoice management system and value added tax compliance among small and medium enterprises in Embakasi East Constituency, Nairobi City County?

1.5 Significance of the Study

The study may be beneficial to the following stakeholders:

1.5.1 KRA Management and Policy Makers

This study may help the government to enact and implement tax policies based on the findings.

It may provide reference guidelines to government regulators on strategic responses in

promoting tax compliance. The study may also help KRA have a better understanding of the SME sector, which will enable them develop strategies to improve compliance levels. Finally, tax administrators can reform measures taken to design better education programs and increase their knowledge.

1.5.2 The Taxpayers (SMEs)

The findings from the current study may help the SMEs to understand the importance of the VAT reforms in tax administration. They may get to understand that automations and changes in tax laws are not meant to punish them; but to make the tax system efficient not just for revenue collection, but also for efficient operations of their businesses.

1.5.3 Scholars and Researchers

Academicians and researchers may also benefit greatly. The report is important to academics who may wish to carry out further research in the taxation and this will add more to the existing body of knowledge. The results of the study provide useful information for researchers regarding taxation of Small, Medium Enterprises, and serve as preference for further studies.

1.6 Scope of the Study

The research laid its primary focus on the factors affecting value added tax compliance on small and medium enterprises in Embakasi East Constituency, Nairobi City County. The variables under study are enforcement measures, taxpayers' sensitization and tax invoice management system. The study relied on primary data collected by means of structured questionnaires administered to a sample of 351 respondents. The data collected was limited to enforcement measures, tax invoice management system and VAT compliance in in Embakasi East Constituency, Nairobi City County. The study covered 2020/2021 financial year.

1.7 Limitations of the study

The unique population of sample size might not have brought answers honestly to the questionnaire. Thus, the findings might perhaps not reflect the opinion of all respondents to

generalize other SMEs across the country. Due to the failure of sample respondents to answer with frankness, the findings might not be relied upon on understanding relationships between the independent variable and the dependent variable.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This section provides information from the theoretical review, conceptual framework, review of study variables, empirical literature review, critique of the reviewed literature, summary and research gaps.

2.2 Theoretical Review

The theoretical literature review is a structure that summarizes concepts and theories, which one develops from previously tested and published knowledge. You then synthesize to build the theoretical background, or basis for data analysis and interpretation of the meaning contained in the research data (Swanson & Chermack, 2013). This section highlights the theories that the study will be built upon. They include; theory of planned behaviour, economic deterrence theory and diffusion of innovation.

2.2.1 Economic Deterrence Theory

The deterrence theory is attributed to the early seminal works of classical philosophers including Cesare Beccaria (1738–1794), Jeremy Bentham (1748–1832) and Thomas Hobbes (1588–1678). Together, the foregoing theorists complained against the legislative policies that were dominant in European thought for over a thousand years, as well as against the spiritualistic accounts of criminal acts on which they were commonly attributed to. Further, in addition to the foregoing complaints, these social philosophers offered the basis for modern deterrence theory in criminology (Abrams, 2012; Ronald and Christine, 2010).

In its modern versions the economic theory of crime is predicated on ‘the deterrence hypothesis’ – the assumption that potential and actual offenders respond to both positive and negative incentives, and that the volume of offences in the population is influenced by law

enforcement and other means of crime prevention (Ehrlich, 2018). According to Ehrlich (2018) proponents of this theory believed that people choose to obey or violate the law after calculating the gains and consequences of their actions. Overall, however, it is difficult to prove the effectiveness of deterrence since only those offenders not deterred come to the notice of law enforcement. Thus, we may never know why others do not offend.

Deterrence happens in two broad forms, that is general and specific deterrence. The former inhibits members of the public from indulging in a given crime from observation of the penalties of the committer's actions (Mohammed, 2015). The latter on the other hand specific discourages the committer from indulging in a comparable crime in the future, by demonstrating to the person the repercussions of their actions (Alfred et al., 1978). Attributed to the work of Hobbes, Beccaria, and Bentham, the theory of deterrence relies on three individual components: celerity, certainty and severity (Akers, 2000). The more undecorated a reprimand, it is perceived, the higher the likelihood that a reasonably calculating individual will discontinue criminal acts. Therefore, in order to deter crime, penalties ought to be underscored by criminal law so as to encourage the citizenry to abide by the law (Moyer, 2001).

There are numerous studies done currently on this theory. The studies and their findings have created controversy and great discussion as to the validity of deterrence as it relates to criminal activity or lack thereof (Sitren and Applegate, 2012). Empirical economic analyses of deterrence attempt to test the central prediction of Becker's (1968) rational-actor model of criminal behaviour: that less crime occurs when the expected penalties are greater (Levitt and Miles 2018).

Tax evasion occurs when taxpayers willingly adopt illegal means such as failing to file income received or other possible means to eliminate the tax obligations and evade compliance with tax regulations. Taxpayers would have the ability to pay taxes, then benefit in terms of service

deliver from the government. However, there is no such commitment to pay all due taxes. This is only made possible by the deterrence theory, which facilitates tax compliance in the Kenyan government. This study considers the deterrence theory to be relevant since tax compliance is of much focus. As the government improves the likelihood of detection of SMEs through tax audit, it is important to determine the impact that such reforms can have on compliance of SMEs. This theory guides the first variable of the study.

2.2.2 Theory of Planned Behavior

The theory of planned behavior was planned by Ajzen (1985) for the purpose of improving the predictive power of the theory of reasoned action (TRA). Ajzen's idea was to include perceived behavioral control in TPB which was not a component of TRA (Belch & Belch, 2004). According to Ajzen (1991) perceived behavioral control refers to the degree to which a person believes that he or she can perform a given behavior. TPB has been applied to studies of the relations among beliefs, attitudes, behavioral intentions, and behaviors in various human domains. These domains include, but not limited to, advertising, public relations, advertising campaigns, healthcare, sport management, and sustainability (Cunningham & Kwon, 2003). It is a psychological theory that links beliefs to behavior. The theory maintains that three core components, namely, attitude, subjective norms, and perceived behavioral control, together shape an individual's behavioral intentions. In turn, a tenet of TPB is that behavioral intention is the most proximal determinant of human social behavior.

According to TRA, if an individual evaluates a suggested behavior as positive (attitude) and if he or she believes significant others would want the person to perform the behavior (subjective norm), the intention (motivation) to perform the behavior will be greater and the individual will be more likely to perform the behavior. Attitudes and subjective norms are highly correlated with behavioral intention; behavioral intention is correlated with actual behavior (Sheppard, Hartwick & Warshaw, 1988). Human behavior is guided by three kinds of considerations:

behavioral beliefs, normative beliefs, and control beliefs. In their respective aggregates, behavioral beliefs produce a favorable or unfavorable attitude toward the behavior, normative beliefs result in a subjective norm, and control beliefs pertain to perceived behavioral control. According to Ajzen (2002) the attitude towards the behavior, the subjective norm and the perceived behavioral control; leads to the formation of a behavioral intention. In particular, perceived behavioral control is presumed not only to affect actual behavior directly, but also affect it indirectly through behavioral intention (Noar and Zimmerman, 2005). Scholars have widely criticized the theory, because it ignores the individual's needs prior to engaging in a certain action, needs that would affect behavior regardless of expressed attitudes. Another limitation is that it does not integrate into the theory the role the individual's emotions play in the development of intentions and during decision-making play. In addition, most of the research on TPB is correlational. Some scholars suggest more evidence from randomized experiments to help improve on the usefulness of the theory (Sniehotta, 2009). Further, Sussman and Gifford (2019) experimental studies challenged the assumption that intentions and behavior are consequences of attitudes, social norms, and perceived behavioral control. They alluded that associations among the three key elements--attitudes, social norms, and perceived behavioral control--and intentions may be bi-directional.

According to Mollie (2010), the theory of reasoned action has been used in the field of tax compliance to explain compliance behavior and examine the behavioral beliefs related to compliant reporting, but has not been used to design persuasive messages aimed at increasing compliance. For instance, Hasseldine, Hite, James, and Toumi (2007) examined the use of sanction based persuasive messages in increasing tax compliance using a field study conducted in the United Kingdom. They found evidence that the three messages that emphasized sanctions were overall more effective at increasing tax compliance than the messages that emphasized citizenship or provided information in regards to available tax assistance services. The theory

is important on predicting the power of taxpayers' sensitization as a tool of improving tax compliance. Prior to tax training, KRA should be able to use the theory on predicting the outcomes of such trainings, and therefore the theory guides the variable of taxpayers' education.

2.2.3 Diffusion of Innovation Theory

This theory seeks to describe the patterns of adoption in technology, explaining the mechanism of the adoption and further predicting whether and how a new invention or innovation will be successful, as advanced by Everett Rogers in 1962. The DOI theory proposes that technological innovation is communicated through particular channels, over time, among the members of a social system. Based on this definition, using tax invoice management system is a fairly new practice in Kenya and can be seen as an innovation for each individual internet user. According to Rogers (2003), the stages through which a technological innovation passes involves five steps which typically follow each other in a time-ordered manner. The stages are: knowledge- an individual learns of the existence of the innovation, understands its functioning and seeks information on how to use it correctly. Persuasion: the forming of a favorable attitude to the technology/innovation, after the knowledge stage in the innovation-decision process. Decision: at this stage, the individual chooses to adopt or reject the innovation.

Rogers, (2003) defines adoption as 'full use of the innovation as the best course of action available' and rejection means not using the innovation. Implementation is the stage at which the innovation is put into practice or use. Confirmation: Reinforcement is based on positive outcomes from the innovation and the individual looks for support for his / her decision. Lastly in innovation: decisions may be optional (where the person or organization has a real opportunity to adopt or reject the idea), collective (where a decision is reached by consensus among the members of a system), or authority-based (where a decision is imposed by another

person or organization which possesses requisite power, status or technical expertise) (Sahin, 2006). This theory guides the third variables, tax invoice management system.

2.3 Conceptual framework

Conceptual framework is a set of broad ideas and principles that are taken from relevant fields of enquiry, to be used to structure a subsequent presentation (Kombo and Tromp, 2009). Creswell (2013) pointed out that it helps the researcher to define the concept, map the conceptual scope, systematize relations among concepts and identify gaps in literature. It comprises of the independent variable which is the presumed cause of the changes of the dependent variable and the dependent variable which the researcher wishes to explain (Kothari, 2014). Figure 2.1 presents this relationship.

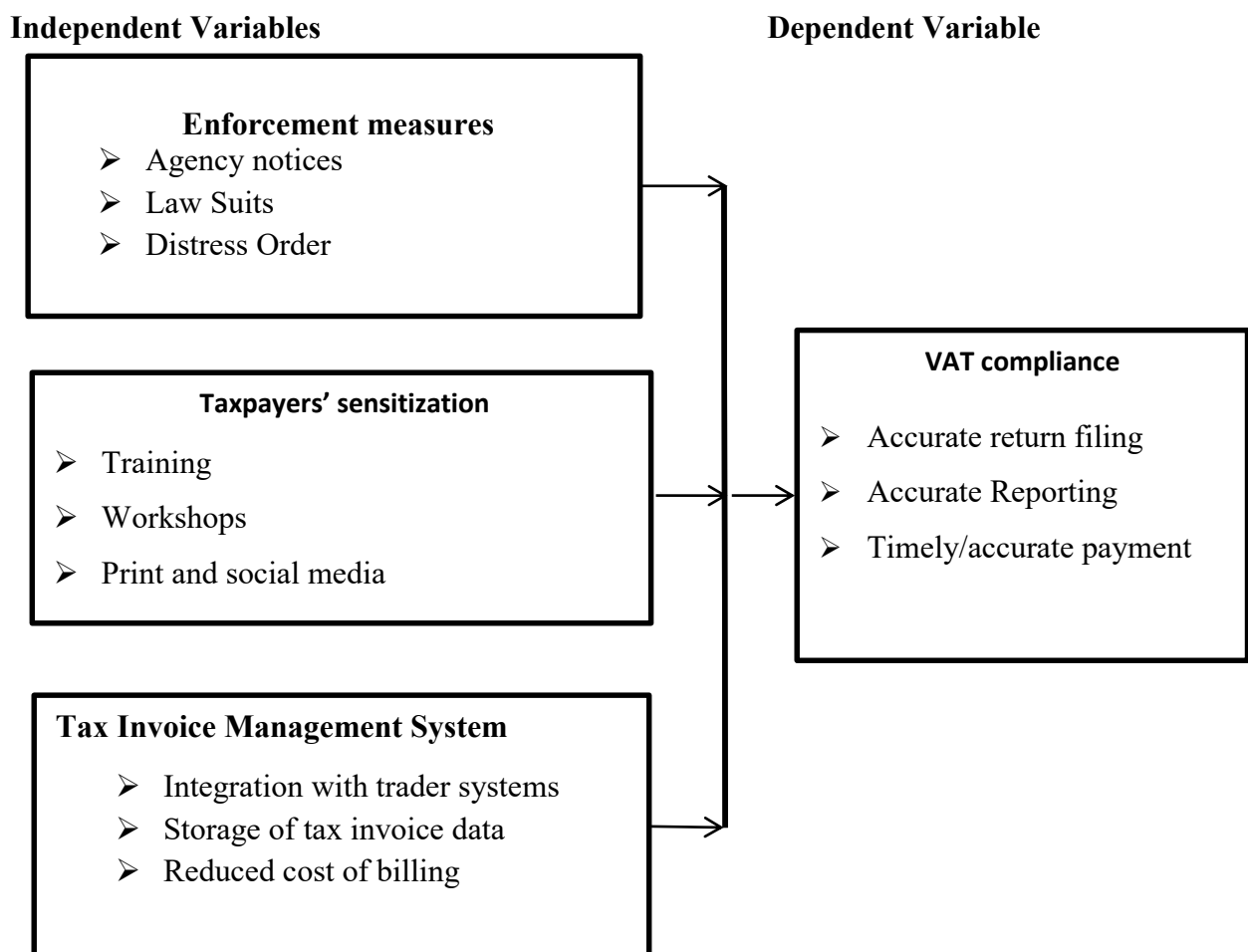


Figure 2.1: Conceptual Framework

2.4 Empirical Literature Review

This section reviews previous research and debates around the determinants of value added tax compliance, mainly focusing on the literature on compliance behaviour. It contains literature on research undertaken within globally, regionally and locally. Specifically, enforcement measures, taxpayers' sensitization and TIMS was discussed in relation to VAT compliance.

2.4.1 Enforcement Measures and VAT Compliance

Alkhatib, Abdul-Jabbar and Munusamy (2018) did a study to determine the effects of deterrence factors on income tax evasion among Palestinian SMEs. The variables used were probability of detection (audit), penalties and tax rates. The study applied the Partial Least Squares (PLS) analysis technique. The study showed that probability of detection was significantly and negatively related to income tax evasion. Also, the result indicated the crucial role tax penalty, plays in influencing the decision of SMEs with regards to income tax evasion. They recommend that probability of detection, tax penalty and tax rate, should be targeted by tax administration in the attempt to measure income tax evasion considering their predictive strength.

Adediran, Alade and, Oshode (2013) conducted a study with the title the impact of tax audit and investigation on revenue generation in Nigeria. The data for this study was generated from primary sources through the use of 500 questionnaires, administered to the staff of the Federal Inland Revenue Service (FIRS) and Edo State Board of internal Revenue, Edo State of Nigeria. Data was then analysed using Pearson's correlation coefficient with the Statistical Package for Social Sciences (SPSS). The study established that Tax Audit and Investigation can help curb the problems of tax evasion and tax avoidance to a great extent. Tax audit and investigations serve as motivating factors to the tax payers in carrying out their tax obligations in Nigeria and that tax audit and investigation can be regarded as the solution to Nigeria tax problems.

Kiame (2019) sought to establish the effect of enforcement measures on tax debt realization in Kenya. Specifically, the study sought to assess the effect of issuance of Agency notice, use of distraint actions, use of charge or/security on immovable property and use of court suits as 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 notices as an enforcement measure 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.

2.4.2 Taxpayers' sensitization and VAT Compliance

Iraman, Ono and Kakinaka (2021) evaluated if tax education is good or evil for boosting tax compliance in Hong Kong. This was to clarify suggestions from many researchers, who viewed that tax education fosters compliance, while others argued that it inspires tax evasion. The analysis explored on tax education and whether it improves tax compliance using 600 respondents from Hong Kong. The research model consolidated on the information and findings, showed that taxpayers comply if they are able and willing to positively perceive tax system as being fair and morally believe that is right to comply.

Geremew (2017) investigated how different factors influence tax compliance in Hawassa City, Ethiopia. The factors of interest were financial constraints, reference group influence, tax awareness, perception on fairness, understatement of income, educational status, collection procedures, absence of government incentives and trust in tax assessment. The research involved collection of both primary and secondary data based on descriptive statistics (frequency, percentage, mean and SD). The findings showed that male property owners

registered higher than their female counterparts at 92.8% and 7.2% respectively and that 60.8% of the sampled respondents understood the tax laws. The study recommended that more tax awareness be done to female property owners so as to improve their tax compliance just their male counterparts.

Mukasa (2015) examined the relationship between tax knowledge, perceived tax fairness and tax compliance of small and medium enterprises in Uganda. The study adopted a cross-sectional research design, combined with qualitative (analytical and explanatory) and quantitative (descriptive and inferential) research designs. The study found out that, tax knowledge and perceived tax fairness had a causal relationship with tax compliance. Tax knowledge and perceived tax fairness was found to have a positive and significant relationship with tax compliance. However, the relationship between tax knowledge and perceived tax fairness was found to be weak. These findings imply that positive improvement of taxpayers' knowledge and perceptions of fairness about taxes will lead to improved tax compliance

Kanyinga (2016) did a study on the effect of tax reforms on compliance with turn over tax among small and medium enterprises in Industrial Area-Nairobi. The study adopted the descriptive survey research design. The population of the study was 1240 SMEs out of which 186 was used as the sample size. The study found that tax reforms including tax rate regime, taxpayers' training and education and online tax filing has positive effects (increases) tax compliance in SMEs sector.

2.4.3 Tax Invoice Management System and VAT Compliance

Bellon, Chang, Dabla-Norris, Khalid, Lima, Rojas and Villena (2019) examined the impact of e-invoicing on firm tax compliance and performance using administrative tax data and quasi-experimental variation in the rollout of VAT electronic invoicing in Peru. They found that e-invoicing increases reported firm sales, purchases and value-added by over 5 percent in the first year after adoption. The impact is concentrated among smaller firms and sectors with

higher rates of non-compliance, suggesting that e-invoicing enhances compliance by lowering compliance costs and strengthening deterrence. The reform's positive effects on tax collection are hindered by shortcomings in the VAT refund mechanism in Peru, suggesting that digital tools such as e-invoicing should be complemented by other reforms to improve revenue mobilization.

OECD (2018) observed that a software technology is used by businesses to evade taxes. Electronic cash registers and other point of sales systems in retail stores and restaurants are generally assumed to contain accurate information, but once they are equipped with specialist "sales suppression" software, they can be used to facilitate elaborate tax frauds. This poses a major risk in all countries and results in governments losing billions in tax revenue. It has been estimated that sales suppression in Canadian restaurants alone could amount to \$2.4 billion in just one year.

Kabochi, Mwaniki and Ogara (2019) observed that Rwanda introduced ETRs in 2014, where the technology was much more advanced than that of other East African countries. Rwanda adopted a system where an Electronic Billing Machines (EBM) located at taxpayer's premises is linked to Rwanda Revenue Authority (RRA) by use of telecommunication SIM card. The tax authority is then able to monitor the invoices raised and a replica of transactions stored within RRA archive system which can be accessed by the taxpayer. Through the system, Rwanda was able to increase its VAT revenue by 25%.

Locally, Kabochi (2019) opines that in an effort to improve VAT compliance through use of technology, the KRA implemented the Tax Invoice Management System to regulate the invoice issuance process. Tax invoice management system integrate trader systems such as electronic tax register, point of sale and ERP-billing/invoicing system with the KRA's iTax platform, with the objective of monitoring the transmission of electronic tax invoices. The connection

between TIMS and iTax is expected to increase efficiency in tax administration, while introducing user friendly experience for taxpayers. Tax invoice management system provides KRA with real time access to invoices issued by traders thus curbing tax evasion. The use of technology as a compliance enabler was a necessity to enhance VAT compliance and curb tax evasion.

2.5 Summary

The above chapter reviews various theories that explain dependent and independent variables as well as the empirical literature and how it relates to the study variables and their underlying relationships. The theories discussed are Economic Deterrence Theory, Diffusion of Innovation Theory, and theory of Planned Behavior and their contribution to the topic under research. The review provides basis for developing a conceptual framework, which provides a quick understanding of the connection between the dependent and independent variables. This chapter also presented a review of the study variables on the effect of system automation on VAT compliance among SMEs.

In addition, empirical review was conducted where past studies both global and local are reviewed in the following criteria; topic of discussion, scope and methodology resulting into a critique. It is from the critique that research gaps are developed.

2.6 Research gaps

A research gap is defined as the missing piece or pieces in the research literature, in an area that has not yet been explored or is under explored. It could be a population, research method, research variables or conditions (Bezot, 2018). Most of the highlighted studies in the literature review did not explicitly address the effect of automation on VAT compliance. Bellon; Chang; Dabla-Norris; Khalid; Lima; Rojas; Villena (2019) examined the impact of e-invoicing on firm tax compliance and performance using administrative tax data and quasi-experimental

variation in the rollout of VAT electronic invoicing in Peru. While in Rwanda, Kabochi (2019) observed that the Rwanda Tax Authority is then able to monitor the invoices raised and a replica of transactions stored within RRA archive system which can be accessed by the taxpayer. Through the system, Rwanda was able to increase its VAT revenue by 25%. Similar systems to TIMS have been in operation in those countries for a while. A gap was therefore created since the independent variables used were different, which was bridged by doing a local study on effect of TIMS on VAT compliance.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1. Introduction

This section provides the methodology that was used in conducting the research which is inclusive of the research design, study area, study population, sampling research instrument, data analysis and ethical considerations.

3.2. Research Design

Mugenda and Mugenda (2013) defined research design as the way the study is designed, that is, the method used to carry out the research. Kothari (2012) states that research design is the arrangement of the conditions for collection and analysis of data in a manner that aims to combine relevance to the research purpose with economy in procedure. A descriptive research design was used in the study. According to Kothari (2014), descriptive research is crucial in such a study since it is geared towards the comprehensive interpretation of features that apply to the complex nature of a given problem. Since this study was statistical in nature, a descriptive research method is recommended since it captured the specific characteristics of a population. This would, in return, be used to make inferences about the rest of the population without influencing the collection data through manipulation.

3.3. Target Population

According to Cooper and Schindler (2014) population is the total collection of elements about which one wishes to make some inferences. The target population should have some observable characteristics, to which the study intends to generalize the results (Mugenda and Mugenda 2013). The target population will be SMEs licensed in Embakasi East Constituency Nairobi City County. According to Trade and Licensing Department (2021), there are 2846 SMEs licensed in Embakasi East Constituency Nairobi City County. From these 2846 SMEs,

sampling frame was chosen. The business owners or someone conversant with the tax administration in the business was selected to fill the questionnaire.

Table 3.1: Target Population

Sector of economy	Number of SMEs in the sector
Tourism and hospitality	305
Health services/clinics	198
Jua Kali	683
Irrigation and Agriculture	252
Building and construction	546
Professionals	261
General retailers and wholesalers	601
Total	2846

Source: Trade and Licensing Department (2021)

3.4 Sampling Frame

Cooper & Schindler (2014) define a sampling frame as a list that consist of all the elements from which a representative sample is drawn and has relations to the study’s target population. They further propose that the listed elements could be individuals, geographical locations, institutions or organizations or other units as defined by the research phenomena under study. The current list is of registered businesses from different sectors formed the sampling frame. These were from tourism and hospitality, health services/clinics, jua kali, irrigation and agriculture, building and construction, professionals and general retailers and wholesalers.

3.5 Sample size

A sample size must be large enough to be representative of the universe population (Kothari, 2012). Creswell (2014) stresses that sample size chosen by the researcher should be capable of giving enough information about the population and one which can be analysed with ease. Yamane’s formula was adopted in this study to determine the sample size. The formula was adopted in the calculation of sample size (n) when the size of the population (N) and an error of margin ϵ . The formula is a random sampling technique, used in the estimation of the sampling size. This formula was appropriate because it considers the size of the population.

$$n = \frac{N}{1 + NE^2}$$

Where by:

n = number of samples

N = target population

E = margin of error (0.05)

$$n = \frac{2846}{1 + 2846 * 0.05^2}$$

$$n = 351$$

3.6 Sampling Technique

According to Creswell, (2013) sampling is a procedure or technique of selecting some elements from the population to be representatives of the whole group. Sampling technique involves choosing a group of elements, people, sets or behavior with similar characteristics to involve in a study (Kothari, & Garg, 2014). Stratified random sampling which is a type of probability sampling was employed in this study. Stratified sampling involves a process of segregation followed by a random or purposive sample from each stratum, while a simple random sample is one in which each and every member of the population has an equal chance of being selected as respondents (Mugenda & Mugenda, 2013). Stratification was done based on the taxpayers' business sector, after which samples will randomly be picked from every unique stratum.

The representative sample from each stratum was selected using the formula $(n/N) * K$, where K is the size of the stratum. Strata in stratified sampling are distinct subsets of all entries on a sampling frame (Maxwell, 2012). The strata in this study share a common character thus categorized by industry, use of the probability sampling technique ensured the homogeneity of

each stratum. Stratified random sampling method improves accuracy and representativeness of the results by reducing sampling bias.

Table 3.2. Sample Size

Sector of economy	Sample Population
Tourism and hospitality	38
Health services/clinics	24
Jua Kali	84
Irrigation and Agriculture	31
Building and construction	67
Professionals	33
General retailers and wholesalers	74
Total	351

Source: Researcher (2022)

3.7 Data collection instruments

In data collection, the researcher should describe the major method(s) for collecting data from the subjects, Maxwell (2012). In this study the main data collection instruments were the questionnaires. Questionnaire was preferred because they are effective data collection instruments that allow respondents to give much of their opinions pertaining to the researched problem. The questionnaire used the five Likert scale (from strongly agree to strongly disagree). The questionnaires were self-administered to the personnel who handle taxes in the sampled SMEs. The questionnaires had an introductory letter introducing the researcher to the respondents and explaining the purpose of the research. Respondents were assured of strict confidentiality of the information they used share with the researcher and that the information is strictly for research purposes.

3.8 Data collection method

This study collected primary data to effectively address the objective of the study. The questionnaires were carefully designed tested and evaluated to assure validity of the primary data. This is in concurrence with Hox and Boeije (2005) who highlighted that both questionnaires and respondents can influence the response a researcher collects. The study

concentrated more on closed ended questions for easier analysis. As Hox and Boeije (2005) outlines, open ended questions add onto the cost of a study, and it is difficult to analyse, thus taking more time of respondents. Due to the busy nature of respondents, the researcher used drop and pick method where the questionnaires were distributed to the respondent and later pick them up for subsequent data analysis.

3.8.1 Pilot testing

The study carried out a pilot test to test the validity and reliability of the questionnaires in gathering the data required for purposes of the study. Kombo and Tromp (2011) describe a pilot test as a replica and rehearsal of the main survey. The purpose of a pilot test is not so much to test research hypotheses, but rather to test protocols, data collection instruments, sample recruitment strategies and other aspects of a study in preparation for a larger study (Cooper and Schilder, 2011). The study was piloted using 10 SMEs from the Langata Constituency and then the pilot data was analysed using the Cronbach's Alpha test to examine the internal consistency of the data.

3.8.2 Validity of the Instruments

Validity determines whether the research items truly measure what they are intended to measure or how factual the research results are Kombo and Tromp (2011). To test content validity (extent to which the sample is a representative of the population), experts' opinion was sought. The research questions in the questionnaire were developed to represent each variable in the research.

3.8.3 Reliability of the Instruments

Reliability analysis aims at finding out the extent to which a measurement procedure produced the same result, if the process is repeated over and over again under the same conditions (Collins, 2006). Cronbach alpha coefficient was computed using SPSS. The Cronbach alpha coefficient value above 0.6 shows that the measurement procedure is reliable (Collins, 2006).

3.9 Data analysis

Qualitative data was collected through questionnaires and response rate analysed. Quantitative data from the questionnaire was coded and entered into the computer for statistical analysis. The Statistical Package for Social Sciences (SPSS version 20) will be used for analysis. Frequencies, mean and standard deviation was used to summarize the data. According to Kothari (2012), this measures the point about which items have a tendency to cluster and describe the characteristics of the data collected.

Regression analysis as a statistical modelling technique which was used to identify meaningful, stable relationships among sets of data. The application of analytical procedures was based on the premise that, in the absence of known conditions to the contrary; relationships among information may reasonably be expected to exist. Regression measures the causal relationship between one dependent and one independent variable. Multiple regression analysis measures the effects of multiple independent variables on one dependent variable. The study adopted a multiple regression model.

Regression equation

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

Y= VAT compliance

X₁= Enforcement Measures

X₂= Taxpayers' sensitization

X₃= Tax Invoice Management System

€= Error term

β₀= Constant term

β₁, β₂ and β₃= regression coefficients for X₁, X₂ and X₃.

3.10 Diagnostic Test

The aim of diagnostic research is to evaluate how well a diagnostic test can confirm and rule-out some certain characteristics in a sample (Collins, Ford, Guichard & Allard, 2006). Collins, *et. el.* 2006 opined that diagnostic test, address the numerous kinds of predispositions that might take place in a study aiming to examine the precision. Diagnostic Test aimed at verifying whether or not the researcher could proceed with regression model of the study. In this study two test were considered namely normality test and multicollinearity.

3.10.1 Normality Test

Normality test is used to establish if a data set is well modelled by a normal distribution (Razali & Wah, 2011). The supposition for normality is particularly essential when constructing reference interval for variables (Ghasemi & Zahediasl, 2012). The research's normality test was done using shapiro wilk statistic. Ghasemi *et el.* (2012) mentioned that decision-making criteria on the test are if the significance level > 0.05 , then the null hypothesis that the data came from a normally distributed population cannot be rejected.

3.10.2 Multicollinearity test

Multicollinearity refers to a state where there is a high degree of association between the independent variables (Kothari, 2012). The goal is to understand how various independent variable impact dependent variable. In the current study, multicollinearity was tested using variance inflation factor (VIF). As rule of thumb, VIF values greater than 10 shows the existence of multicollinearity (Sheather, 2009).

3.11 Operationalization and measurement of variables

The variables of concern in the proposed research are VAT compliance, tax invoice management system, taxpayers' sensitization and enforcement measures. These variables could not be measured directly measured hence the need to identify measurable indicators to

take the place of the variables. The measurements of the variables will be done by the 5-point Likert Scale.

Table 3.3: Operationalization and measurement of variables

Var.	Indicator	Instrument	Measure	Data Analysis
Enforcement measures	Agency notices	Questionnaire	5-point likert scale	Multiple regression analysis
	Law Suits	Questionnaire	5-point likert scale	Multiple regression analysis
	Distress Order	Questionnaire	5-point likert scale	Multiple regression analysis
Taxpayers' sensitization	Training	Questionnaire	5-point likert scale	Multiple regression analysis
	Workshops	Questionnaire	5-point likert scale	Multiple regression analysis
	Print media	Questionnaire	5-point likert scale	Multiple regression analysis
Tax Invoice Management system	Compatibility	Questionnaire	5-point likert scale	Multiple regression analysis
	Storage of data	Questionnaire	5-point likert scale	Multiple regression analysis
	Cost reduction	Questionnaire	5-pointlikert scale	Multiple regression analysis
VAT compliance	Accurate returns	Questionnaire	5-point likert scale	Multiple regression analysis
	Timely returns	Questionnaire	5-point likert scale	Multiple regression analysis
	Timely payment	Questionnaire	5-point likert scale	Multiple regression analysis

3.12 Ethical considerations

The researcher informed each respondent about the purpose and objectives of study and sought a written consent from respective respondents. In working with the respondents, the researcher assured protection by informing the respondent that the researcher was not to disclose their identities or names in the instrument and in the publication of this particular study.

CHAPTER FOUR

DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.1 Introduction

The chapter gives the results by evaluating data reliability and presenting the summary statistics for research whose objective was to determine the factors affecting value added tax compliance on small and medium enterprises in Embakasi East Constituency, Nairobi City County.

4.2 Response Rate

By use of research assistants, the researcher distributed 351 questionnaires to the SMEs in Embakasi East Constituency, 257 questionnaires were fully answered and returned. The results are as shown in figure 4.1 below.

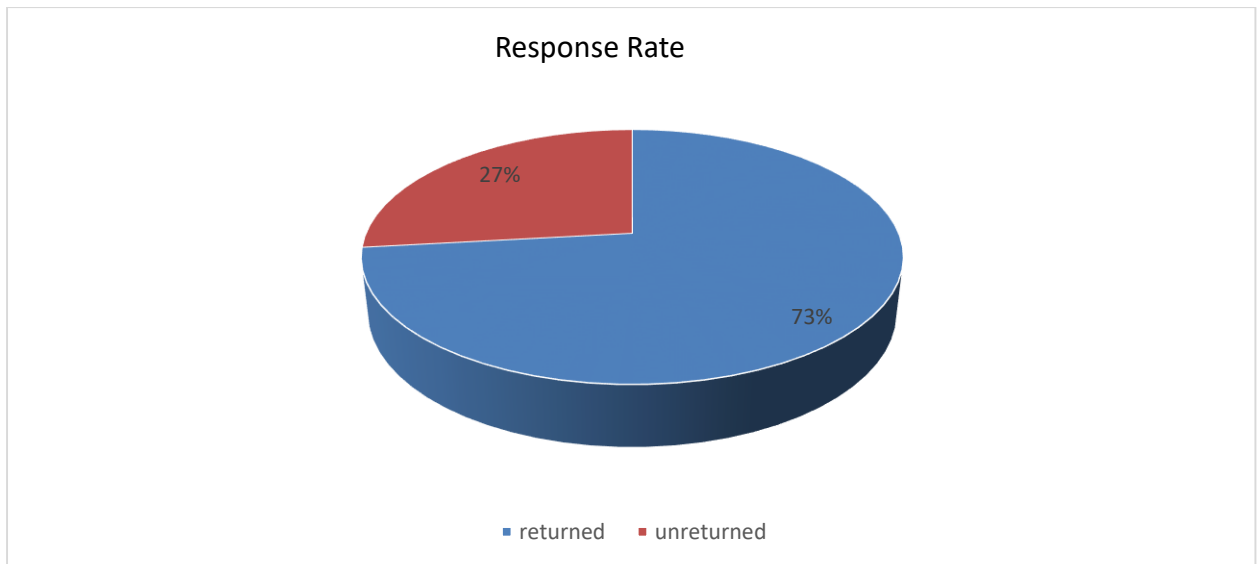


Figure 4.1: Response Rate

Out of 351 questionnaires distributed to the respondents, 257 questionnaires were fully filled and returned which represented 73% response rate while 94(27%) did not respond. The response rate of 73% was considered adequate for data analysis. This is supported by Kothari (2014) who stated that response rate of 60% and above is good while over 70% was very good.

4.3 Reliability Test Results

So as to ascertain the dependability of the research instrument, the questionnaires were piloted using 10 SMEs from the Langata Constituency as shown in table 4.1 below.

Table 4.1: Reliability of research instrument

Variable	Cronbach's Alpha	Number of Items
VAT compliance	.701	4
Enforcement Measures	.834	4
Taxpayers' sensitization	.743	4
Tax Invoice Management System	.714	4

A Cronbach's alpha coefficient was used to assess the instrument's reliability. That is to ascertain the repeatability, stability or internal consistency of a questionnaire used in the research. Cronbach's alpha coefficient for VAT compliance was found to be .701 while that of enforcement Measures was found to be 0.834. Further, taxpayers' sensitization yielded a Cronbach's alpha of .743, while tax invoice management system was 0.714. Each of the Cronbach's alpha coefficients is above 0.7 suggested by Bryman (2008).

4.4 Demographic Analysis

This section represents the results for the demographic analysis of the respondents and their businesses. The demographic analysis includes the gender of the respondent, the education level and the period their SMEs have been in operation.

4.4.1 Gender Distribution of the respondents

The respondents were also required to state their gender. The responses from the 257 respondents were recorded in figure 4.2 below.

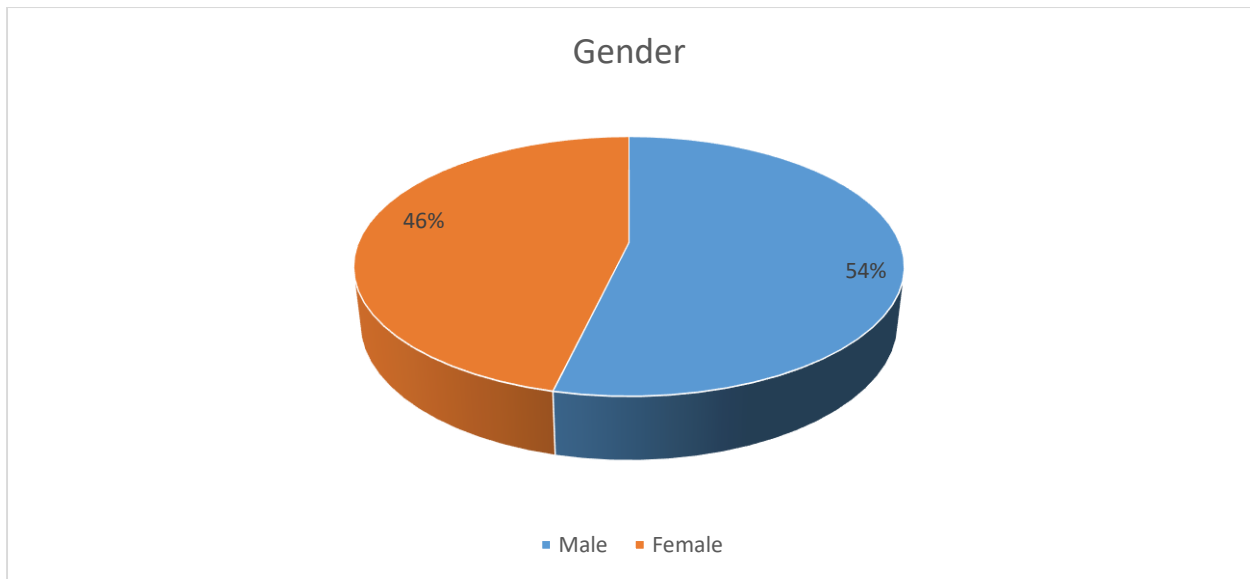


Figure 4.2: Gender of Respondent

On gender distributions, the study showed that 54% of the respondents were male, while female respondents were 46% of the total respondents. These results show that the majority of the respondents in owning SMEs in Embakasi East Constituency were male. However, the number of women in informal sector seem to be increasing of late, which can be attributed to availability of capital for women enterprises from both government and non-governmental organizations like Kenya Women Finance Trust and the capitation given by the office of women representative in the counties.

4.4.2 Age of the SME

The study also requested the respondents to indicate the Age of their SME. That is, the range of years the SME has been in operation within Embakasi East Constituency. The results from 257 respondents were presented in table 4.4 below.

Table 4.2: Age of the SME

Years	Frequency	Percent
Below 5	57	22.2
Between 5 and 10	43	16.7
Between 10 and 15	39	15.2
Between 15 and 20	32	12.5
More than 20	86	33.4
Total	257	100.0

Table 4.2 shows the number of years the SME in Embakasi East Constituency has been in operation. The study indicated that 22.2% of the total SMEs have been in operation for less than 5 years, 16.7% have been in operation for between 5 and 10 years. Further, 15.2% between 10 and 15 years, while 12.5% between 15 to 20 years. Those SMES that have been in operation for over 20 years were 86, representing 33.4% of the total responses.

These results show that majority of SMEs are young with only less than 5 years of operation. As the number of years increase, the number of SMEs reduces. This could be as a result of SMEs collapsing, few years after starting due to tough economic conditions brought by factors like taxation as indicated by a report by Mnewa and Maliti (2008). These SMEs are less likely to attain or maintain their growing profitability due to several factors including tax policies. However, for over 20 years, there are 86 SMEs. These represents SMEs that has been in operation since independence.

4.4.3 Education Level

The level of education for 257 respondents who participated in the study was also examined. The results were presented in figure 4.3 below.

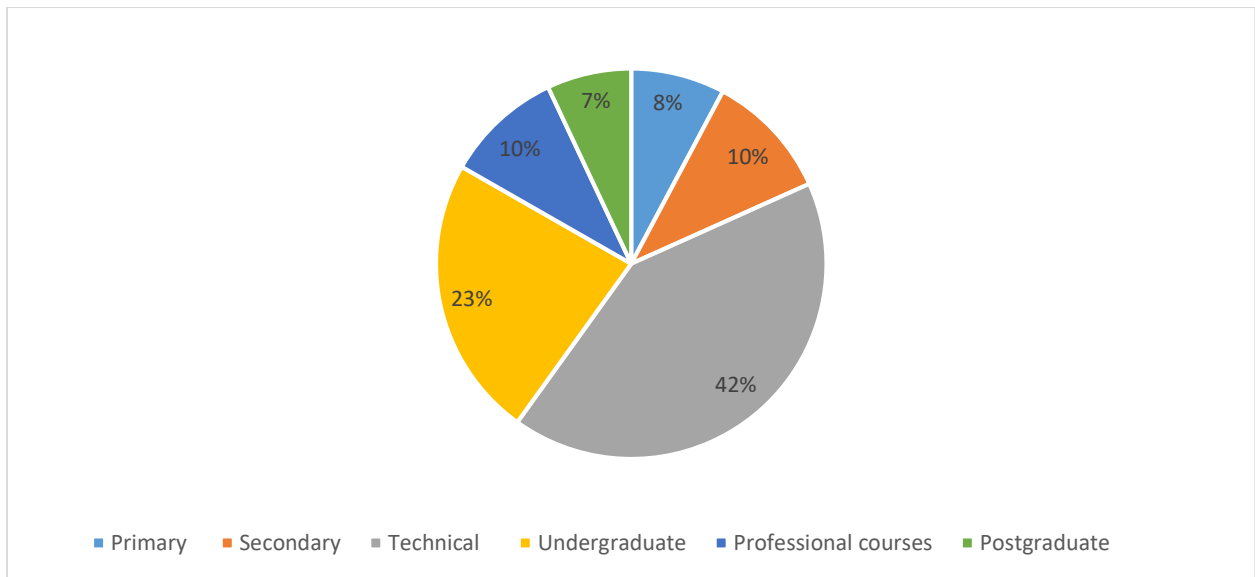


Figure 4.3: Education level

The results presented in figure 4.3 shows that out of 257 respondents, 8% had primary school education as their highest academic level, 10% had a secondary school certificate. Majority (42%) stated that their highest level of education was technical education, which includes college diplomas and certificates. Undergraduate level was 23% while post graduate level were 7%. Lastly, the respondents with professional course were 10%. The study established that most respondents had formal education and thus they could respond to the questionnaires on concerning VAT compliance without need of an interpreter. Also, this mean that technical education is doing well in Kenya as it is supposed to make people to be job creators and not job seekers, thus government need to invest more in technical education than in any other form of education.

4.5 Diagnostic Tests

In order to achieve unbiased estimates of the study parameters, various assumptions of regression were tested. These included normality assumption and multicollinearity assumption of the independent variables.

4.5.1 Normality Test

The normality of data was tested using the Shapiro Wilk test. If the p value is less than the chosen alpha level, then the null hypothesis is rejected and there is evidence that the data tested are not normally distributed. On the other hand, if the p value is greater than the chosen alpha level, then the null hypothesis that the data came from a normally distributed population cannot be rejected. The null-hypothesis of this test is that the population is not normally distributed. Results of the normality test are presented in table 4.3.

Table 4.3: Tests of Normality

Variable	Shapiro-Wilk		
	Statistic	df	Sig.
VAT compliance	.259	257	.15
Enforcement Measures	.627	257	.41
Taxpayers' sensitization	.376	257	.06
Tax Invoice Management System	.408	257	.12

The normality of data was tested using the Shapiro Wilk test. The p values for VAT compliance, enforcement measures, taxpayers' sensitization and tax invoice management system were 0.15, 0.41, 0.06 and 0.12 respectively. Since the p-value was found to be more than the chosen alpha level, then the null hypothesis is rejected and there is evidence that the data tested are normally distributed.

4.5.2 Multicollinearity Test

Multicollinearity test was carried out to determine if one or more independent variable in regression model are highly correlated. This would be used to predict linearity from each other. Tolerance value and Variance Inflation Factor (VIF) are used to test multicollinearity.

Tolerance value of less than 1 and VIF value of more than 10 suggest presence of multicollinearity.

Table 4.4 Multicollinearity test

Model	Collinearity statistics	
	Tolerance	VIF
Enforcement Measures	.432	2.314
Taxpayers' sensitization	.368	3.717
Tax Invoice Management System	.393	2.545

The results show that enforcement measures, taxpayers' sensitization and tax invoice management system had a VIF of 2.314, 3.717 and 2.545 respectively. Since all V.I.F for the three independent variables were less than 10, there is no multicollinearity and thus regression analysis was conducted to determine the effect of the three independent variables on VAT compliance.

4.6 Descriptive Statistics

The findings are derived from a Likert scale in the questionnaires, where the respondents were supposed to indicate their level of agreement or otherwise with a given statement. The descriptive statistics was done based on each independent variable for a study whose objective was to determine the factors affecting value added tax compliance on small and medium enterprises in Embakasi East Constituency, Nairobi City County.

4.6.1 Enforcement Measures and VAT Compliance

The first objective of the study was to determine the effect of enforcement measures on VAT compliance among SMEs in Embakasi east Constituency, Nairobi City County. The results from a 5-point Linkert scale questionnaire are shown in table 4.5.

Table 4.5: Enforcement Measures

Enforcement Measures	Mean	Std. Dev
Am aware that Tax Procedures Act (2015) allows the Commissioner to recover any unpaid tax as a civil debt due to the state	1.87	.261
The enforcement officers rely on evidence and witnesses when taking VAT defaulter for court trial	3.51	.810
KRA Frequently issues agency notices to VAT defaulters	4.01	.411
Most distress orders are issued after agency notice by KRA has failed to recover the taxes due	3.90	1.047
Grand mean	3.3225	

From the descriptive statistics, it was established that most taxpayers are not aware that Tax Procedures Act (2015); allows the Commissioner to recover any unpaid tax as a civil debt due to the state (Mean=1.87, standard deviation=0.261). The small standard deviation is an indication that the respondents agreed among themselves. They gave similar responses on the statement. Also, it was shown that the enforcement officers rely on evidence and witnesses, when taking VAT defaulter for court trial (Mean=3.51, standard deviation=0.810). Furthermore, the results show that KRA frequently issues agency notices to VAT defaulters (Mean= 4.01, standard deviation=0.411). Lastly, the descriptive statistics showed that most distress orders are issued after agency notice by KRA has failed to recover the taxes due (Mean= 3.90, standard deviation=1.047). The high standard deviation is an indication that the respondent disagreed among themselves concerning the statement. They gave varying responses.

4.6.2 Taxpayers' Sensitization and VAT Compliance

The second objective of the study was to determine the effect of taxpayers' sensitization on VAT compliance among SMEs in Embakasi East Constituency, Nairobi City County. The results from a 5-point Linkert scale questionnaire are shown in table 4.6.

Table 4.6: Taxpayers' Sensitization

Taxpayers' Sensitization	Mean	Std. Dev
Several tax trainings conducted by KRA through workshops and seminars have equipped SMEs with basic understanding of VAT structure.	3.99	.737
Through the basic education in schools and colleges, I have basic understanding of taxation.	2.36	.792
The KRA website, Social Media and Webinar/ Content videos have enough information on various tax procedures	3.79	.456
Feedback on VAT queries raised via Social Media is prompt	3.65	.643
Grand mean	3.4475	

From the descriptive statistics, it was shown that several tax trainings conducted by KRA through workshops and seminars have equipped SMEs, with basic understanding of VAT structure (Mean= 3.99, standard deviation=0.737). The moderate standard deviation was an indication that there was moderate variance in the responses given by the respondents. The results in basic education in schools and colleges, most respondents did not get basic understanding of taxation (Mean=2.36, standard deviation=0.792). The results indicated that the KRA website, Social Media and Webinar/ Content videos have enough information on various tax procedures (Mean= 3.79, standard deviation=0.456). Finally, the results show that Feedback on VAT queries, raised via Social Media is prompt (Mean= 3.65, standard deviation=0.443). The small standard deviation shows that the respondents gave similar responses on the statement.

4.6.3 Tax Invoice Management System and VAT Compliance

The third objective of the study was to determine the effect of tax invoice management system on VAT compliance among SMEs in Embakasi east Constituency, Nairobi City County. The results from a 5-point Likert scale questionnaire are shown in table 4.7.

Table 4.7: Tax Invoice Management System

Tax Invoice Management System	Mean	Std. Dev
The KRA Tax Invoice Management System is fully compatible with the other businesses ICT systems and online system	4.19	.259
Tax invoice management system used in ETR is user friendly, cost effective and reliable	4.21	1.100
Integration of Tax Invoice Management System with iTax system enables monitoring and generation of electronic tax invoices and their transmission in real time	3.57	1.229
Connectivity problems between Control Unit and TIMS is a major challenge in adoption of TIMS	2.80	.640
Grand mean	3.6925	

From the descriptive statistics, it was found that KRA tax invoice management system is fully compatible with the other businesses ICT systems and online system (Mean=4.19, standard deviation=0.259). The small standard deviation shows that the respondents gave similar responses on the statement. They agreed among themselves concerning the statement. Concerning ease of use, the results shows that the tax invoice management system used in ETR is user friendly, cost effective and reliable (Mean=4.21, standard deviation=1.100). Also, the results show that integration of tax invoice management system with iTax system enables monitoring and generation of electronic tax invoices and their transmission in real time (Mean=3.57, standard deviation=1.229). The high standard deviation is an indication that the respondent disagreed among themselves concerning the statement. They gave varying responses. Lastly, it was shown that Connectivity problems between Control Unit and TIMS is

not a major challenge in adoption of TIMS (Mean=2.80, standard deviation=0.640). The moderate standard deviation was an indication that there was moderate variance in the responses given by the respondents.

4.6.4 VAT Compliance

The dependent variable was VAT compliance. The table below shows the descriptive statistics from the responses based on 257 respondents. The results show the means and standard deviations about VAT compliance. The results from a 5-point Linkert scale questionnaire are shown in table 4.8.

Table 4.8: VAT compliance

VAT Compliance	Mean	Std. Dev
I file returns accurately	3.61	.092
I file returns on time	2.43	.643
I have the correct obligations	3.57	.951
I keep records like TB; Journals and Ledgers are updated	2.46	.371
Grand mean	3.0175	

The descriptive statistics on VAT compliance shows that most SMEs file their returns accurately (Mean=3.61, standard deviation=0.092). The small standard deviation shows that the respondents gave similar responses on the statement. They did not differ much among themselves concerning the statement. Also, the findings show that most SMEs file their returns on time (Mean=2.43, standard deviation=0.643). Further, it was shown that most SMES have the correct obligations (Mean=3.57, standard deviation=0.951). Lastly, the respondents indicated that they do not keep accurate records like TB; Journals and Ledgers are updated (Mean=2.46, standard deviation=0.737). The moderate standard deviation was an indication that the respondents did not differ much on their response concerning the statement.

4.7 Correlation analysis

After performing descriptive analysis, correlation analysis was done to determine the association between independent and dependent variables. The correlation coefficients range from -1 for a perfect negative relationship to +1 for perfect positive relationship through zero for no relationship. Table 4.9 below shows the correlation coefficients between the variables. The study conducted correlation analysis to establish the relationship between variables.

Table 4.9: Correlations matrix of variables under this study

		Enforcement Measures	Taxpayers' Sensitization	Tax Management System	Invoice VAT Compliance
Enforcement measures	Pearson Correlation	1			
	Sig. (2-tailed)				
	N	257			
Taxpayers' sensitization	Pearson Correlation	.208*	1		
	Sig. (2-tailed)	.044	.008		
	N	257	257		
Tax invoice management system	Pearson Correlation	.297	.156*	1	
	Sig. (2-tailed)	.141	.009		
	N	257	257	257	
VAT Compliance	Pearson Correlation	.616*	.591*	.578*	1
	Sig. (2-tailed)	.000	.001	.008	
	N	257	257	257	257

*. Correlation is significant at the 0.05 level (2-tailed).

The correlation analysis established a strong positive and significant correlation between enforcement measures and VAT compliance at $r=0.616$ at $p=0.000<0.05$. Increasing enforcement measures by KRA enforcement department may lead to increased VAT compliance. Also, taxpayers' sensitization had a strong and significant association ($r=0.591$, $p=0.001<0.05$) with VAT compliance. These results shows that increased taxpayers' sensitization programs may lead to increased VAT compliance. Lastly, the analysis established

a strong positive and significant correlation between tax invoice management system and VAT compliance at $r=0.578$ at $p=0.008<0.05$. The correlation coefficients between the independent variable were weak, confirming the earlier results that there is no multicollinearity problem among the independent variables. They could therefore be used to study the effect of the three independent variables on dependent variable.

4.8 The model summary

The model summary consists of R. value, R square value, Adjusted R Squared Value, and a standard error of the estimate.

Table 4.10: Model summary

R	R Square	Adjusted R Square	Std. Error of the Estimate
.868	.753	.729	.4252

a. **Dependent Variable:** VAT compliance

b. **Predictors:** (Constant), enforcement measures, taxpayers' sensitization and tax invoice management system

Regression model summary shows that the correlation coefficient of R was 0.868 and R square was 0.753. An R squared of 0.753 shows that enforcement measures, taxpayers' sensitization and tax invoice management system contribute to 75.3% of the VAT compliance. The remaining 24.7% can be explained by other variables which were not part of this study. The adjusted R square was 0.729, an indication that even if the results changes, the model would still explain 72.9% of the total variations on VAT compliance.

4.9 Analysis of Variance

The analysis of variance was done to generate the f- statistic which is used to test significance of R. That is, ANOVA was conducted to test goodness of fit in the model. The results are shown in table 4.11.

Table 4.11 Anova

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	50.655	3	16.885	84.004	.001 ^b
	Residual	50.853	253	.201		
	Total	101.508	256			

a. **Dependent Variable:** VAT compliance

b. **Predictors:** (Constant), enforcement measures, taxpayers' sensitization and tax invoice management system

Table 4.11 showed the p value of F value (84.004) was $0.001 < 5\%$ which implied that the model was statistically significant at 5%. The independent variables that included enforcement measures, taxpayers' sensitization and tax invoice management system were significant to improve the VAT compliance. The model summary was fit to predict the variations between variables.

4.10 Regression Coefficients

A regression analysis was done to test combined effect of the independent variables (enforcement measures, taxpayers' sensitization and tax invoice management system) to the dependent variable (VAT compliance). The results were then presented in table 4.12 below.

Table 4.12: Regression Coefficients

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	.122	.061		2.000	.023
Enforcement Measures	.190	.043	.128	4.418	.019
Taxpayers' sensitization	.154	.051	.324	3.014	.028
Tax Invoice Management System	.112	.048	.109	2.333	.000

- **Dependent Variable:** VAT Compliance

$$Y = 0.122 + 0.190X_1 + 0.154X_2 + 0.112X_3$$

The study results in table 4.12 above indicate that the constant term (β_0) was 0.122 meaning that in absence of all the other independent variables, VAT Compliance will be 12.2%. Also, enforcement measures had a positive and significant influence on VAT Compliance ($\beta_1 = 0.190$; $p=0.019 < 0.05$). Keeping all the other factors constant, increased use of enforcement measures by 1 unit will lead to increase in VAT Compliance by 19.0%. The findings also show that the taxpayers' sensitization had a significant positive influence on VAT Compliance ($\beta_2 = 0.154$; $p=0.028 < 0.05$). Keeping all the other factors constant, increasing taxpayers' sensitization by one unit will lead to increase in VAT compliance by 15.4%. Last, the findings also show that tax invoice management system had a significant and positive effect on VAT compliance ($\beta_3 = 0.112$; $p=0.000 < 0.05$). These findings show that increasing use of tax invoice management system by 1 unit will lead to increase in VAT compliance by 11.2%, other factors held constant. The regression coefficients of the independent variables are all low. This signifies that each independent variable may not have a significant effect on the dependent variable, but collectively as shown by ANOVA results they do have a significant effect. In comparison on all coefficients, enforcement measures have the most effect compared to tax sensitization and tax invoice management system.

4.11 Discussion of the Findings

The discussions based on the findings from each of the three objectives is done and comparison with other empirical research done in this area of VAT compliance. The discussions are done for both descriptive and regression findings.

4.11.1 Enforcement Measures and VAT Compliance

From the descriptive statistics, it was established that most taxpayers are not aware that Tax Procedures Act (2015) allows the Commissioner to recover any unpaid tax as a civil debt due to the state. Kiame (2019) had showed that use of Agency notices, as an enforcement measure had strong positive with tax compliance, which contain the details of the enforcement measure

employed by the KRA Enforcement Department. Thus, there is need to educate the tax payers on the content of TPA, 2015. The regression model was significance with p-value of 0.000 which is less than 0.05 significance level.

Also, it was shown that the enforcement officers rely on evidence and witnesses when taking VAT defaulter for court trial. Further, the results show that KRA frequently issues agency notices to VAT defaulters. Lastly, the descriptive statistics showed that most distress orders are issued after agency notice by Kra has failed to recover the taxes due.

The correlation analysis established a strong positive and significant correlation coefficient between enforcement measures and VAT compliance. The regression analysis showed that Enforcement Measures had a significant positive beta coefficient. These findings are similar to earlier findings by Alkhatib, Abdul-Jabbar and Munusamy (2018), who showed that probability of detection was significantly and negatively related to income tax evasion. Adediran, Alade and, Oshode (2013) conducted a study with the title the impact of tax audit and investigation on revenue generation in Nigeria. The data for this study was generated from primary sources through the use of 500 questionnaires, administered to the staff of the Federal Inland Revenue Service (FIRS) and Edo State Board of internal Revenue, Edo State of Nigeria. Data was then analysed using Pearson's correlation coefficient with the Statistical Package for Social Sciences (SPSS). The study established that Tax Audit and Investigation can help curb the problems of tax evasion and tax avoidance to a great extent. Tax audit and investigations serve as motivating factors to the tax payers in carrying out their tax obligations in Nigeria and that tax audit and investigation can be regarded as the solution to Nigeria tax problems

4.11.2 Taxpayers' Sensitization and VAT Compliance

From the descriptive statistics, it has shown that several tax trainings conducted by KRA through workshops and seminars have equipped SMEs, with basic understanding of VAT structure. Also, the results showed that through the basic education in schools and colleges,

most respondents did not get basic understanding of taxation. In addition, the results indicated that the KRA website, Social Media and Webinar/ content videos have enough information on various tax procedures. Similar findings were obtained by Kanyinga (2016) who found that tax reforms including tax rate regime, taxpayers' training and education and online tax filing have positive effects (increases) tax compliance in SMEs sector. The results show that feedback on VAT queries raised via Social Media is prompt.

The finding on descriptive statistics were supported by the findings on inferential statistics. The correlation analysis established a strong positive and significant correlation coefficient between taxpayers' sensitization and VAT Compliance. The regression analysis showed that taxpayers' sensitization had a significant positive beta coefficient. These findings are similar to findings by Geremew (2017) showed that educational status helped improve their tax compliance in Hawassa City, Ethiopia.

4.11.3 Tax Invoice Management System and VAT Compliance

From the descriptive statistics, it was found that KRA tax invoice management system is fully compatible with the other businesses ICT systems and online system. Concerning ease of use, the results shows that the tax invoice management system used in ETR is user friendly, cost effective and reliable. This is in agreement to expectation, as Kabochi (2019) opines that the connection between TIMS and iTax is expected to increase efficiency in tax administration, while introducing user friendly experience for taxpayers. Also, it has achieved its use in monitoring and generation of electronic tax invoices and their transmission in real time.

The descriptive statistics also showed that connectivity problems between control unit and TIMS is not a major challenge in adoption of TIMS. The correlation results showed that tax invoice management system and VAT Compliance had a strong positive and significant Pearson correlation coefficient. The regression analysis established a significant and positive beta coefficient for the tax invoice management system. Similar findings were established by

Bellon, Chang, Dabla-Norris, Khalid, Lima, Rojas and Villena (2019) who found that e-invoicing had positive effects on tax collection, while Kabochi, Mwaniki and Ogara (2019) found that through modern billing system, Rwanda was able to monitor the invoices raised and a replica of transactions stored within RRA archive system which can be accessed by the taxpayer. Through the system, Rwanda was able to increase its VAT revenue by 25%.

CHAPTER FIVE

SUMMARY OF FINDINGS CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

This chapter covers summary, conclusions and recommendations based on the objectives. The recommendations were done to policy makers, practitioners and also to the scholars. The summary shows how the dependent variable and independent variable relates.

5.2 Summary of Findings

This sub section gives the summary of the findings based on the objectives. The summary shows how the dependent variable was affected by change in each of the independent variable. The depended variable was VAT compliance while the independent variables were: enforcement measures, taxpayers' sensitization and tax invoice management system.

5.2.1 Enforcement Measures and VAT Compliance

From the descriptive statistics, it was established that most taxpayers are not aware that Tax Procedures Act (2015) allows the Commissioner to recover any unpaid tax as a civil debt due to the state. Also, it was shown that the enforcement officers rely on evidence and witnesses when taking VAT defaulter for court trial. It was also shown that KRA frequently issues agency notices to VAT defaulters. The descriptive statistics showed that most distress orders are issued after agency notice by KRA has failed to recover the taxes due.

The findings on descriptive statistics were supported by the findings on inferential statistics. The correlation analysis established a strong positive and significant correlation coefficient between enforcement measures and VAT compliance. The regression analysis showed that enforcement Measures had a significant positive beta coefficient.

5.2.2 Taxpayers' Sensitization and VAT Compliance

From the descriptive statistics, it was shown that several tax trainings conducted by KRA through workshops and seminars have equipped SMEs with basic understanding of VAT

structure. Also, the results showed that through the basic education in schools and colleges, most respondents did not get basic understanding of taxation. Further, the results indicated that the KRA website, Social Media and Webinar/ content videos have enough information on various tax procedures. Lastly, the results show that Feedback on VAT queries raised via Social Media is prompt.

The results on descriptive statistics were supported by the findings on inferential statistics. The correlation analysis established a strong positive and significant correlation coefficient between taxpayers' sensitization and VAT Compliance. Further, the regression analysis showed that taxpayers' sensitization had a significant positive beta coefficient.

5.2.3 Tax Invoice Management System and VAT Compliance

From the descriptive statistics, it was found that KRA tax invoice management system is fully compatible with the other businesses ICT systems and online system. Concerning ease of use, the results shows that the tax invoice management system used in ETR is user friendly, cost effective and reliable. Also, the results show that integration of tax invoice management system with iTax system enables monitoring and generation of electronic tax invoices and their transmission in real time.

The descriptive statistics also showed that connectivity problems between control unit and TIMS is not a major challenge in adoption of TIMS. The correlation results showed that tax invoice management system and VAT Compliance had a strong positive and significant Pearson correlation coefficient. The regression analysis established a significant and positive beta coefficient for the tax invoice management system.

5.3 Conclusions

The study made the conclusion that tax literacy, cost of compliance and tax audit were very instrumental in ensuring VAT performance. In the absence of any of these variables, VAT

performance. is likely to experience a serious gap in terms of the amount of tax collected against its set targets.

5.3.1 Enforcement Measures and VAT Compliance

Both descriptive and inferential results have shown that enforcement measures had a significant positive relationship with and VAT Compliance. have positive correlation with each other. The study concludes that increased enforcement efforts by the KRA enforcement officers may lead to improved VAT compliance.

5.3.2 Taxpayers' Sensitization and VAT Compliance

Through inferential statistics, the findings suggested that taxpayers' sensitization has positive correlation with VAT compliance. The study concludes that increasing taxpayers' sensitization to SMEs through tax seminars, taxpayers' day and social media platforms could lead to improved VAT compliance.

5.3.3 Tax Invoice Management System and VAT Compliance

The findings showed that there was a significant and positive beta coefficient. The analyzed results suggested that tax invoice management system is an important tool used by KRA to enforce VAT payment, and generally VAT compliance. Thus, the current study concludes that adoption of tax invoice management system by the SMEs could lead to improved VAT compliance.

5.4 Recommendations

The study provided the following recommendations based on the study variables: The study variables used were Tax literacy, cost of compliance and tax audit. The recommendations are based on the findings of the current study.

5.4.1 Enforcement Measures and VAT Compliance

From the descriptive statistics, it was established that most taxpayers are not aware that Tax Procedures Act (2015) allows the Commissioner to recover any unpaid tax as a civil debt due

to the state. The current study recommends that KRA through their social media platforms educate the taxpayers, especially SMEs on the content of the Tax Procedures Act (2015). This will ensure that the taxpayers are aware of their rights and obligations, and those of the taxman.

5.4.2 Taxpayers' Sensitization and VAT Compliance

From the descriptive statistics, it was shown that through the basic education in schools and colleges, most respondents did not get basic understanding of taxation. This could lead to poor tax literacy among the taxpayers, requiring the KRA to do more tax sensitization to SMEs. The current study recommends that the government through ministry of education come up with curriculum that has taxation as basic and common unit from secondary school to universities.

5.4.3 Tax Invoice Management System and VAT Compliance

From the descriptive statistics, it was found that the tax invoice management system used in ETR is not user friendly, cost effective and reliable. This could be due to high cost of acquiring, installation and maintenance cost associated with the system. The current study recommends that KRA improve on the efficiency of the system to reduce the maintenance costs. This will encourage more taxpayers to adopt the use of the tax invoice management system.

5.5 Suggestion for Further Studies

The current study suggests that more research be done using more variables so as to establish which other variables for example, technology and levels of income affect VAT compliance. Similar studies can also be done in other towns in Kenya to establish whether similar findings will be obtained. Also, similar study can be done in Embakasi East Constituency but in a different sector like real estate.

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APPENDICES

APPENDIX I: INTRODUCTORY LETTER

ELAINE WAIRIMU KANIARU

P.O box 6593-00300

Nairobi

Dear respondent,

RE: REQUEST TO COMPLETE THE ATTACHED QUESTIONNAIRE

I Elaine Kaniaru, a student at JOMO KENYATTA UNIVERSITY OF AGRICULTURE AND TECHNOLOGY, student number HDB336-C016-0932/2017 is pursuing a post graduate diploma in tax administration. My Research Proposal is on the **FACTORS AFFECTING VALUE ADDED TAX COMPLIANCE ON MICRO AND SMALL ENTERPRISES IN EMBAKASI EAST CONSTITUENCY, NAIROBI CITY COUNTY**. Therefore, the information provided here, will purely be used for academic purpose and will not be shared with any other institution. Please fill in the questionnaire below which is aimed at collecting information on the above given topic.

Yours Faithfully

ELAINE WAIRIMU KANIARU

APPENDIX II: DATA COLLECTION INSTRUMENT

Introduction

Please read each question carefully and respond to it appropriately. Kindly answer all the questions to your utmost ability. All your responses will be kept confidential.

SECTION A: DEMOGRAPHICS

1. What's your gender?

male

female

2. Age of SME

Years

Please tick (✓) appropriately

Below 5 ()

Between 5 and 10 ()

Between 10 and 15 ()

Between 15 and 20 ()

More than 20 ()

3. What is your highest academic level?

Primary

Secondary

Technical

Undergraduate

Professional

Postgraduate

SECTION B: ENFORCEMENT MEASURES AND VAT COMPLIANCE

4. Using a scale of 1 to 5 where, 5-Strongly agree, 4 -Agree, 3-Neutral, 2-Disagree, 1-Strongly disagree. Rate the extent to which you agree or disagree with the following in

relation to enforcement measures. Rate your opinion against the statements by ticking (✓) against each column.

	Statement	1	2	3	4	5
1	Am aware that Tax Procedures Act (2015) allows the Commissioner to recover any unpaid tax as a civil debt due to the state					
2	The enforcement officers rely on evidence and witnesses when taking VAT defaulter for court trial					
3	KRA Frequently issues agency notices to VAT defaulters					
4	Most distress orders are issued after agency notice by KRA has failed to recover the taxes due					

PART C: TAXPAYERS' SENSITIZATION AND VAT COMPLIANCE

5. Using a scale of 1 to 5 where, 5-Strongly agree, 4 -Agree, 3-Neutral, 2-Disagree, 1-Strongly disagree. Rate the extent to which you agree or disagree with the following in relation to taxpayer awareness. Rate your opinion against the statements by ticking (✓) against each column.

	Statement	1	2	3	4	5
1	Several tax trainings conducted by KRA through workshops and seminars have equipped SMEs with basic understanding of VAT structure.					
2	Through the basic education in schools and colleges, I have basic understanding of taxation.					

3	The KRA website, Social Media and Webinar/ content videos have enough information on various tax procedures					
4	Feedback on VAT queries raised via Social Media is prompt					

PART D: TAX INVOICE MANAGEMENT SYSTEM AND VAT COMPLIANCE

Using a scale of 1 to 5 where, 5-Strongly agree, 4 -Agree, 3-Neutral, 2-Disagree, 1-Strongly disagree. Rate the extent to which you agree or disagree with the following in relation to tax invoice management system. Rate your opinion against the statements by ticking (√) against each column.

	Statement	1	2	3	4	5
1	The KRA Tax Invoice Management System is fully compatible with the other businesses ICT systems and online system					
2	Tax invoice management system used in ETR is user friendly, cost effective and reliable					
3	Integration of Tax Invoice Management System with iTax system enables monitoring and generation of electronic tax invoices and their transmission in real time					
4	Connectivity problems between Control Unit and TIMS or TIMS is a major challenge in adoption of TIMS					

SECTION E: VALUE ADDED TAX COMPLIANCE

8. Using a scale of 1 to 5 where, 5-Strongly agree, 4 -Agree, 3-Neutral, 2-Disagree, 1-Strongly disagree. Rate the extent to which you agree or disagree with the following in

relation to value added tax compliance. Rate your opinion against the statements by ticking (✓) against each column.

	Statement	1	2	3	4	5
1	I file returns accurately					
2	I file returns on time					
3	I have the correct obligations					
4	I keep records like TB; Journals and Ledgers are updated					

...THE END...