

**EFFECTS OF INFORMATION TECHNOLOGY ON VALUE
ADDED TAX COMPLIANCE AMONG SME TRADERS IN
MOMBASA COUNTY, KENYA**

BY

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DECLARATION

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

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ABSTRACT

This research intended to analyze the contribution of information technologies towards tax compliance among small and medium sized enterprises. The focus was on the compliance of small scale traders in Mombasa Town CBD towards VAT compliance. The research objectives of the research was to assess the effectiveness of electronic tax registers, online tax filing process and information sharing on VAT compliance among the traders in Mombasa town. The research used descriptive research design that analyzed the data both quantitatively and qualitatively based on the Economic deterrence theories. The research also considered the implication of online filing from the punitive and persuasive approach of Economic deterrence theory where online filing reduces the incidences of tax evasions by taxpayers the targeted population consisted of all business dealers and traders within Mombasa CBD. The sample selected consisted of traders from 100 SMEs within Mombasa CBD. The mode of data collection used was through questionnaires with closed-ended questions delivered by mail and enumerators who assisted in data collection. Data analysis involved both Regression analysis and descriptive analysis carried out using SPSS (V21). From the results there was an increase in the use of ETR machines and online filing by SMEs within Mombasa County which has increased the level of compliance significantly. The researcher recommends that the government should undertake more enforcement policies to foster more tax compliance among SMEs by conducting further research on the effects of demographic factors on tax compliance level.

TABLE OF CONTENTS

DECLARATION	i
ABSTRACT.....	iii
LIST OF FIGURES.....	viii
LIST OF ABBEVIATIONS	ix
DEFINITION OF TERMS.....	x
CHAPTER ONE: INTRODUCTION.....	1
1.1.1 Background of the Study.....	1
1.2 Statement of the problem	8
1.3 Research Objectives.....	9
1.4 Research Questions	10
1.5 Significance of the Study.....	10
1.6 Scope of the Study	11
CHAPTER TWO: LITERATURE REVIEW	12
2.1 Introduction	12
2.2 Theoretical Framework.....	12
2.2.1 Technology Acceptance Model.....	12
2.2.2 Ability to Pay Theory	13
2.2.3 Benefit Theory.....	13
2.3 Conceptual Framework.....	14
2.4 Empirical Review	16
2.6 Chapter Summary	23
2.7 Research gap	24
CHAPTER THREE: RESEARCH METHODOLOGY	25
3.1 Introduction	25
3.2 Research Design.....	25
3.3 Target Population	25
3.4 Sampling Framework	25
3.5 Sample Size and Sampling Technique.....	26
3.6 Research Instruments	27

3.9 Pilot study	28
3.10 Validity of Research Instruments	28
3.12 Data Processing and Analysis.....	29
3.13 Model specification.....	29
CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION	31
4.1 Introduction	31
4.3 Demographic Characteristics	31
4.3.1 Gender of Respondents	31
4.3.2 Age Bracket	32
4.2.3 Respondents position in business.....	32
4.2.5 Age of Business	33
4.4 Use of electronic tax register	33
4.4.1 Registration for VAT with KRA	33
4.4.2 Respondents opinion the effects of ETR on operation	34
4.4 Online tax filing	35
4.4.1 Online (I-tax) registration of businesses	35
4.4.2 When businesses registered as I-tax tax payers	36
4.4.3 Respondents opinion regarding use of I-Tax	37
4.5 Electronic tax payer information sharing.....	38
4.5.1 Sharing of tax information with other parties	38
4.5.2 Respondents opinion regarding tax payer information sharing.....	39
4.6.1 Respondents opinion concerning their compliance to tax requirements	41
4.7 Inferential Statistics	43
4.7.1 Correlation Analysis	43
4.7.2 Regression Analysis.....	45
4.7.3 Analysis Of Variance-ANOVA	47
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	49
5.1 Summary of findings	49
5.2.1 Electronic Resources at Point of sales	49
5.3 Conclusions	51
Recommendations of the study.....	52
5.5 Recommendations for further study	53
REFERENCES.....	54
APPENDICES	62

Appendix I: Consent Letter	62
Appendix II: Research Questionnaire	63
APPENDIX III: BUDGET.....	67
APPENDIX IV –WORK PLAN	67

LIST OF TABLES

Table 3.1: Distribution of the study sample	27
Table 4.1: Response rate	31
Table 4.2: Gender of respondents	31
Table 4.3: Age bracket.....	32
Table 4.4: Respondents position in business	32
Table 4.5: Age of the business	33
Table 4.6 :Respondents opinion on how electronic tax registers affects their businesses	34
Table 4.7: Respondents opinion regarding use of I-Tax	37
Table 4.8: Respondents opinion regarding tax payer information sharing	40
Table 4.9: Respondents opinion concerning their compliance to tax requirements.....	42
Table 4.10: Pearson Correlation Results.....	44
Table 4.11: Model Summary	46
Table 4.12: Analysis of the R-Square	47
Table 4.13: ANOVA table	48

LIST OF FIGURES

Figure 3.1: Conceptual Framework	15
Figure 4.1: Registration for VAT with KRA	33
Figure 4.2: Online I-tax registration of businesses	36
Figure 4.3: When businesses registered as i-tax tax payers	37
Figure 4.4: Sharing of tax information with other parties	39

LIST OF ABBREVIATIONS

ETR -Electronic Tax Register

GDP – Gross Domestic Product

IEA – Institute for Economic Affairs

IRS - Internal Revenues Services

KNBS – Kenya National Bureau of Statistics

KRA - Kenya Revenue Authority

OECD -Organization of Economic Cooperation and Development

PIN - Personal Identification Number

SME – Small and Medium Enterprise

TCC -Tax Compliance Certificate

UNECA -United Nations’ Economic Commission for Africa

VAT – Value Added Tax

DEFINITION OF TERMS

Electronic Tax Information Sharing – Refers to the disclosure of tax information using electronic media (Benjamin and Mbaye, 2012)

Electronic Tax Register - is a Government approved device that records and issues fiscal data of services provided and goods sold (Catanzariti, 2004)

Online Tax Filling – Refers to the use of internet platforms to declare and file taxes (Catanzariti, 2004)

Small Enterprise– Is a firm involved in trade, service, industry or a business activity whose annual turnover ranges between five hundred and five million shillings; or which employs between ten and fifty people (Becker, 1968).

Tax compliance -is the taxpayers' willingness and ability to fulfil all tax laws including declaring accurate taxable incomes as well as timely payment of net tax liabilities every year (IRS, 2009).

Value Added Tax- is the total Tax Levied on services supplied in Kenya as well as taxable goods consumed and/or imported into Kenya

CHAPTER ONE: INTRODUCTION

1.1.1 Background of the Study

Taxation policies are a volatile issue especially in governance of most developing economies throughout the world. Tax refers to the compulsory contribution by the public to government's tax authority agencies. Siringi and Naibei. (2011) explained that taxes are compulsory contribution, imposed by government, and while taxpayers may receive nothing identifiable in return for their contribution, they nevertheless have the benefit of living in a relatively educated, healthy and safe society". She further explains that taxation is part of the price to be paid for an organized society and identified six reasons for taxation: provision of public goods, redistribution of income and wealth, promotion of social and economic welfare, economic stability as well as regulation and harmonization.

Tax compliance refers to the willingness and ability of individuals' organizations and companies to fulfil the tax laws, as well as declare their correct incomes annually. (Alley and James, 2002). According to Andreoni, Erard and Feinstein (1998) tax compliance is the taxpayers' willingness to obey tax laws in order to attain economic growth and development. Generally, tax compliance requires adequate tax knowledge of tax policies in terms of honest declaration of correct taxable incomes, capability to apply taxation policies accurately, timeliness and adequate record management to enable complete filing of tax returns and associated documents (Bhupalan and Singh, 2001).

A key component of a country's taxation system is its mode of administration. An essential objective of tax administration is to ensure the maximum possible compliance by taxpayers of all types with their tax obligations. No tax is better than its administration, so tax administration matters a lot (Bahl and Bird, 2008).

According to Oladipupo and Obazee (2016), Tax Compliance is a critical issue in any economy since taxes form a significant source of revenue to the government and it contributes for the overall development and prosperity of that country. According to Gitaru, (2017) the Kenyan society, tax administration and revenue collection forms an integral part since the Kenyan government has used tax revenues to finance and sustain projects that improves social welfare through provision of public goods. In this regard, the collection of tax revenues should therefore comply with the basic principles of taxation that include certainty, convenience, efficiency, economy, equity and the ability to pay(Jones and Lemler, 2010).In collection of tax revenues, the government main objective to minimize its expenditures as much as possible while maximizing the tax revenue collected. The aim of the above objective is to enable the government to finance its budget with tax revenue and ensure that it minimizes debt financing to cover the budget deficits (Barro, 1989). The accounting and control procedures that are adopted to ensure that the government expenditure follows the set policies and frameworks include establishing systems of checks and balances as well as budgetary controls. The checks and controls ensure that the government monitors the taxation of all residents, individuals and organization (both for profit and not for profit corporates) with the rationale of minimizing expenditure and maximizing the tax revenue collected in line with the objectives (Ward, 2007). The pursuit of the above objectives therefore forms the basis of measuring the efficiency of operations of government tax agencies and the aspiration of increasing the tax revenue collected. The government has therefore integrated technological options to solve the challenge of low tax revenues collected. The strategic policies involve transforming the tax collection procedures and policies in order to keep up to date of the expectations, needs and requirements of tax payers existing in the modern business world

(Kiarie and Muturi, 2015). The Kenya Revenue Authority (KRA) has integrated Information Communication Systems that automate tax collection procedures. The automations include the

integration of modern computing infrastructure that check and minimizes revenue collection risks. According to Ireland (1994), upgraded computer software and hardware tend to facilitate collection of more revenues while controlling the expenditures incurred during tax collection. The computing infrastructure facilitate tax collection in terms of minimizes the tax clearance period. Moreover, Desmeules and Haughton (2001) explains that computerized tax collection system also improves efficiency of the tax authority institutions in terms of ensuring that there is improved efficiency of the human resources, proper assessment of tax liabilities (to control unremitted tax) as well as preventing tax evasion. Computerization also facilitates proper accountability of the collected tax revenues and curbing embezzlement of tax funds by fraudulent individuals. In this regard, the computer systems create audit trails through proper synchronization of different integrated systems that together can be compared to check if fraudulent activities have been conducted. Dramod (2004) explains that automation of tax collecting agencies empowers the efficiency of tax administration and collection and is therefore an integral part of promoting the efficiency of operations of government agencies. In this regard, both governmental and non-governmental agencies are therefore likely to benefit from the automation of tax collection processes in terms of smooth operation of the government (De Wulf and Sokol, 2005). Generally, there are several methods that an economy may evaluate tax compliance. One such method has been through Tax Simplification or Tax System Reform. This has been established to have dual effects on enhancing compliance, this is because it helps taxpayers in avoiding inadvertent errors, as well as limit opportunities for tax evasion. Additionally, the second method which has also been used to enhance compliance is the provision of tax authorities with additional enforcement tools. Other methods also include improved taxpayer services for instance taxpayer education, adoption of modern technology as well as efficient administration by the tax authorities (Brostek, 2007).

Technology continues to influence the way we work, play, and also interact with others. It is not surprising that indeed technology continue to affect how tax systems are designed and administered especially so in developing countries like Kenya. The Adoption of modern in tax collection agencies therefore promote efficiency in the administration of taxes among taxpayers resulting to provision of more efficient services to tax payers and ultimately enhanced tax compliance (Edwards- De Wulf and Sokol, 2005). Governments worldwide have increasingly been demanding substantially more effective use of modern technology systems for the delivery of services to tax payers especially the SME. The government's most ambitious objective is to get all organizations (and more specifically, private for-profit companies) to pay their taxes accurately and in a timely manner with minimal resistance. To achieve this vision, developing countries are adopting the use of modern technologies in the fields of computing and information sharing. The unprecedented advancement of computing technologies since the late 80s have led to the introduction of innovative fiscal monitoring and control systems that have eased the processes of tax administration (Teltscher, 2002). The systems have enabled tax regulation authorities to monitor the compliance of taxpayers in terms of promoting the taxpayers to voluntarily register and file their tax returns as well as promote timely payment of tax liabilities as and when due. Unfortunately. The tax regulation agencies have recorded low voluntary compliance of taxpayers and this has resulted to the adoption of enforcement policies by the tax agencies such s periodic auditing and introduction of high penalties relating to non-compliance. This has been the practice in Kenya until the year 2003 when KRA embarked on serious automation and taxpayer empowerment to adopt tax online services through training, sensitization and tax clinics. Building a high level of compliance needs a wide range of technology especially with regards to computers and the internet, as well as effectiveness of tax administration to detect and punish the businesses that attempt to evade taxes. The need to enhance tax compliance costs are incurred by third parties such as businesses, in meeting the requirements laid upon them in complying with a given structure and level of tax (Sandford et

al., 1989). Such costs are significant for small business taxpayers in all Organizations for Economic Cooperation and Development (OECD). There is an extensive literature in the area much of it summarized in

(Evans, 2008; and Vaillancourt& Clemens, 2008), which shows that tax compliance costs are high for SMES in absolute terms and relative to the size of the business, whether measured by reference to turnover, income, number of employees or any other proxy. Research also shows that tax compliance costs do not appear to be diminishing over time (Lignier and Evans, 2012).

In response to this concern about tax compliance costs, governments have often endeavored to implement tax policies in the form of concessions that produce favorable outcomes for the small business sector (Pope & Abdul-Jabbar 2008). Such special tax concessions for small business fall mainly into two categories: positive concessions that provide a lower rate of taxation, an exemption or an accelerated deduction; and relieving concessions that excuse the taxpayer from requirements otherwise imposed (Payne, 2003). The first category of provisions can be expected to have some impact on the tax compliance burden on taxpayers while the second category will have some impact on the tax compliance burden on management of small businesses

Such relieving provisions include registration thresholds, simplified accounting rules, and time related concessions. According to RoK, (2014) the VAT Act 2014 requires that all businesses making a gross business turnover exceeding five million to be registered for VAT. On the other hand, the Micro and Small Enterprise Act, 2012 define a small enterprise to mean a firm, trade, service, industry or a business activity whose annual turnover ranges between five hundred and five million shillings; and which employs between ten and fifty people (RoK, 2012). Thus this study will therefore focus on SME that have registered for VAT and making a gross turnover exceeding Five million shillings excluding micro enterprises.

1.1.2 Tax Compliance of Small and medium sized enterprises in Kenya

The taxation framework in Kenya has been designed to rely on four major tax heads: value added tax, Pay as You Earn tax withholding tax and corporation tax (IEA, 2012). However, all these taxation instruments have failed in the informal economy (IEA, 2012; Mpapale, 2014). Subsequently in a bid to mobilize revenue from the informal economy and reduce the tax gap, the Government introduced the Turnover Tax (TOT) introduced in the Finance Bill of 2007 where the tax base was on the turnover of any business below Kshs.5 million and above Ksh 500,000. The tax is charged at a flat rate of 3% of annual turnover (IEA, 2012).

The Turnover tax is intended for small enterprises that are unable to keep proper records of accounts, among other complexities associated with regular tax regime. However, in the year 2008/09, TOT performed at 31% and from the beginning of the year 2009/10, the performance of the TOT was above average but on a declining trend. According to IEA (2012) the compliance of a tax payer to a tax system will be determined by the assessment of the financial benefits received by the taxpayer for compliance verses the cost incurred by the taxpayer for non-compliance. In a Parliamentary Budget Office (2010) study they revealed that the informal sector of the economy has a highpotential of expansion as well as increased contribution to the tax revenue collected. During the early nineties, the potential taxable income accruable from the informal sector economy was on average 4% of the GDP as per IEA's Budget Focus, 2011. Empirically, this meant that the authorities had the potential of expanding the tax base by a proportion equivalent to 4% of the GDP. To put this in a more contemporary context, in the year 2013, the nation's GDP was estimated by the Kenya National Bureau of Statistics to be about KShs. 1.68 Trillion, 4% of this is KShs. 67.2 Billion. Assuming a similar proportion of contribution, this means that the tax base in the year 2013 would have been expanded by an estimated KShs. 67.2 Billion (Mpapale, 2014).

Attempts to establish the causes of low compliance of taxpayers in the informal economy explained that the main causes were absence of internal control practices and poor management of the businesses as major causes. In addition, the informal approach to establishment, operation and dissolution of enterprises, cash-based economies with inadequate accounting records and audit trails in practice and limited resources and technical capacity (IEA, 2012). However, the government has invested in enhancing taxation in the sector by introducing the I-Tax platform for tax administration and information sharing, awareness training programs and the integration of financial systems to enhance the tracking of flow of cash (Grant Thornton, 2016).

1.1.3 Sectors in Mombasa Town

Mombasa town is located in Mombasa County and it serves as the country's sea port. It has large industries including apparel, grain milling and cement factories. Mombasa therefore has a wide range of investment opportunities in the transport, industrial agricultural as well as tourism industries. The town enjoys a diverse business environment that is vibrant and enjoys the administrative support provided by the Mombasa county government. In this regard the town is a logistics hub that serves the entire EastAfrican community and connects it to the rest of the world. The town is home to Moi International Airport (Onyiego, Namusonge and Waiganjo, 2017). Mombasa County is the second largest city in Kenya after Nairobi. Its major economic activities include fishing, tourism, industrial and manufacturing commercial activities. Majority of the businesses within the county are private SMEs which help to spur the economic growth of this area. They range from import and export businesses, to manufacturing and fabrication to real estate. Currently, Mombasa County has got over ten thousand SMEs registered with the Municipal Council of Mombasa that carry out their operations (Ngugi and Kerongo, 2014). Some of these firms have lasted for years, while some close shop after a while, either no longer

operating or move to other towns. Within Mombasa Central Business District (CBD), there are over 3,100 SMEs that range from manufacturing to small traders.

The SMEs in Mombasa town facilitate economic growth of the country by providing employment opportunities to the large population of Mombasa county residents. However, there exists great conflict between tax authorities and the informal SMEs and workers since most of the informal businesses are not registered for VAT and therefore do not remit their taxes accurately and on time. This challenge not only affects the Kenya Revenue Authority (KRA) but also the Mombasa County administration. With increasing growth and expansion of SMEs proper establishment of tax policies and administration is important since it would facilitate increased revenue collection from informal businesses and thereby achieving the government's tax collection objective.

1.2 Statement of the problem

VAT compliance in SME's has been a problem hence introduction of information technology by KRA to assist in motoring and enhancing compliance level. KRA as therefore undertaken numerous measures to increase its tax base by establishing a platform of increasing the tax payer's numbers to 6 million by end of 2025 against the present number of 4.4 million. Under the new policy KRA focuses on increasing the registration of tax payers in the small and medium sized enterprises (SMEs) sector who have been excluded from the scrutiny of the tax authority due to their low turnover. The SMEs in Kenya have often avoided voluntary VAT registration and the few that have registered have failed to maintain accurate records of their gross turnover. More importantly SMEs have inaccurately filed their tax returns whereby they understate their turnover thereby avoiding payment of tax liabilities. The reduced tax revenues have complicated the achievement of the objective of maximizing tax revenue. Additionally, the tax authorities have experienced increased cost of monitoring noncompliance among SMEs.

KRA has therefore introduced integrated computer and information systems to enhance new tax payer registration as well as monitoring compliance of existing taxpayers. The technologies include the electronic tax registers (ETR), online tax registration and filling of returns and taxpayer information sharing. Unfortunately, KRA has not achieved its targets of increasing the tax revenue collected from SMEs (IEA, 2012).

A study by Ortega and Sanguinetti (2013) focused on tax compliance but did not focus on the adoption of information and computer technology. Hasegawa , Ishida, Slemrod and Hoopes (2012) investigated the effect of public disclosure of tax reports of individuals and businesses in Japan and found positive relationship, however, the study did not determine the significance of information technology in tax information sharing,. Wanjiku (2011) conducted an analysis of the impact of ETR systems on VAT audit duration time in Kenya and Naibei & Siringi (2011) focused on revenue collection. With increasing focus on electronic filing of tax liabilities, information sharing and use of ETR at the sales point, it's important for an analysis on the impact of adoption of such technologies in facilitating registration and compliance of taxpayers in the SMEs. This research has therefore focused on how the integrated information technologies have affected the tax compliance among SMEs by focusing on VAT remittances among SME traders operating within Mombasa Town CBD.

1.3 Research Objectives

The study was guided by the following objectives:

1.3.1 General Objective

To analyse the impact of information technology on Value Added Tax compliance on Small and medium sized traders in Mombasa Town, Kenya.

1.3.2 Specific Objectives

- To analyze the significance of integrating electronic tax register (ETR) machines on VAT compliance among SME Traders in Mombasa Town.
- To determine the effect of online tax filling on VAT compliance among SME in Mombasa Town.
- To determine the significance of taxpayer electronic information sharing on VAT compliance among SME Traders in Mombasa Town.

1.4 Research Questions

The research therefore wanted to answer the following questions.

- What is the significance of electronic tax registers machines to VAT compliance among SME Traders in Mombasa Town?
- What is online tax filling system affect VAT compliance among SME Traders in Mombasa Town?
- What is the effect of electronic information sharing on compliance among SMEs Traders in Mombasa Town?

1.5 Significance of the Study

The study contributed to the existing theory on taxpayer compliance especially among SMES. The findings of the study would benefit the different stakeholders in the realm of taxation in Kenya.

1.5.1 Kenya Revenue Authority

The KRA could benefit by understanding the level of VAT compliance among SMES in Mombasa CBD as well as address the tax payers' concerns regaling to tax compliance specifically in the informal sector enterprises. This information was used to design the appropriate trader friendly methods of collecting taxes, sensitization and awareness campaigns that could improve tax revenue collection from the sector.

1.5.2 Parliament (Legislative Assembly)

The Legislative Assembly (Parliament) would use the information to amend parts of the VAT to develop better tax legislation that focus on the SMEs in the informal sector. The findings will enable the informal sector traders and workers to learn their duties and obligations as tax payers.

1.5.3 Scholars and Academicians

The findings of the study would be of significance to the researcher as it greatly contributed to the existing empirical literature relating to tax compliance among small scale traders operating in Mombasa Kenya

1.6 Scope of the Study

The research was conducted in Mombasa CBD. It covered SMEs operating within the informal sector. The study therefore analyzed the use of electronic tax registers (ETR) at the points of sales, the online tax filling by taxpayers as well as information sharing on compliance with VAT. The research was conducted in the month of March 2020.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviewed literature that was related to and consistent with the objectives of this study.

2.2 Theoretical Framework

This section reviews the theories guiding the formulation and conceptualization of the study. It focused on the economic deterrence theory and intrinsic motivation theory and how they inform research in tax compliance.

2.2.1 Technology Acceptance Model

A study by Nicoleta (2011) explains that an online filing system that is so versatile based on its design, usability and performance. Therefore, further evaluations should be made on interactivity, download delay, navigability and content. Furthermore, the customer feedback on frequency of use, likelihood of return, responsiveness and satisfaction to the website should be analyzed critically. The method was developed taking into account the perceived ease of use and its usefulness to the users. In their study Venkatesh and Davis (1996), confirmed the importance of TAM model adding that its full benefits are realized when intertwined with a more advanced model that boasts diverse variables with both social and human factors. The factors are taken into account by the theory of planned behavior (TPB). Similarly, Azmi and Kamarulzaman (2010) looked at the perceived risk within the online tax filing in Malaysia. Their study was based on the perception that e-government has become considerably more important in today's world due to its effectiveness and reliability by various government departments. Online tax filing is a system that has been adopted by developed countries through which the public can engage with the government and meet their tax obligations cost-effectively. Researchers are yet to come up with an integrated system for tax to allay the fears and negative perception of the public despite wide adoption across the globe. They concluded that a number

of performance and psychological risk facets remain significant in addition to time and privacy risks. Electronic tax filing systems face congestion when filing is done near the tax deadline. A number of studies have pointed that taxpayers tend to e-file around this time hence system crashes if the system capacity is exceeded. Taxpayers may find themselves frustrated by the need to spend a lot of time learning about the system and perhaps realize that the system cannot provide the functions anticipated leading to psychological and time risks. Taxpayers' confidential data have to be transmitted electronically exposing the taxpayer to privacy risks. Recommendations on risk reduction strategies should be formulated to take care of the taxpayers concerns through advanced security features such as advanced encryption for the user interface. E-filing adoption opens the door to many risks which can be mitigated by formulation of risk-specific strategies.

2.2.2 Ability to Pay Theory

The theory was formulated by Kendrick (1939) the citizens ought to contribute toward the running of the government proportionately, based on the level of income earned from operations within the country. This theory attempts to share the level of tax burden amongst the taxpayers based on their ability of the taxpayer and taking into consideration the personal characteristics of the person. The theory is popular as it equates the individual taxpayer's taxable income to the amount of tax payable to hence satisfying the need for equity and justice. Such taxes personal taxes as income taxes, inheritance taxes, consumption and net worth are equitably premised under this theory (Wasao 2014).

2.2.3 Benefit Theory

This theory was developed by Knut W. in 1896 and Erik L. 1919. In this approach conferment of benefits by the state on one person determines the amount of taxes he/she should pay. If a person derives more benefits from the state, the tax payable by such person should be guided accordingly. Critics of this principle argue that the state should avoid creating a direct link

between benefits derived and benefits conferred. Instead, the government should assert the idea of tax liabilities being a compulsory contribution where individuals, corporate entities, government and non-government organization pay in order for the government to provide public goods and services. Therefore, a quid pro quo does not exist in the process. The total expenditure accumulated by the state cannot be adequately equated to the benefits derived by an individual taxpayer. If this principle is applied to the letter then the poor will end up paying the most taxes based on the benefits they derive hence the small scale traders have to pay higher tax liabilities compared to medium and large scale tax payers. (Wasao 2014)

2.3 Conceptual Framework

Conceptual framework is a representation of the result obtained in a research creating a relationship between variables both graphically or diagrammatically (Mugenda, 2003). The conceptual framework of the study demonstrates the effect of integration and use of electronic tax register (ETR) systems at point of sales, taxpayer online filing process and information sharing measures on compliance of VAT among SME traders in Mombasa County

This is diagrammatically illustrated in Figure 2. The study was guided by the conceptual framework below.

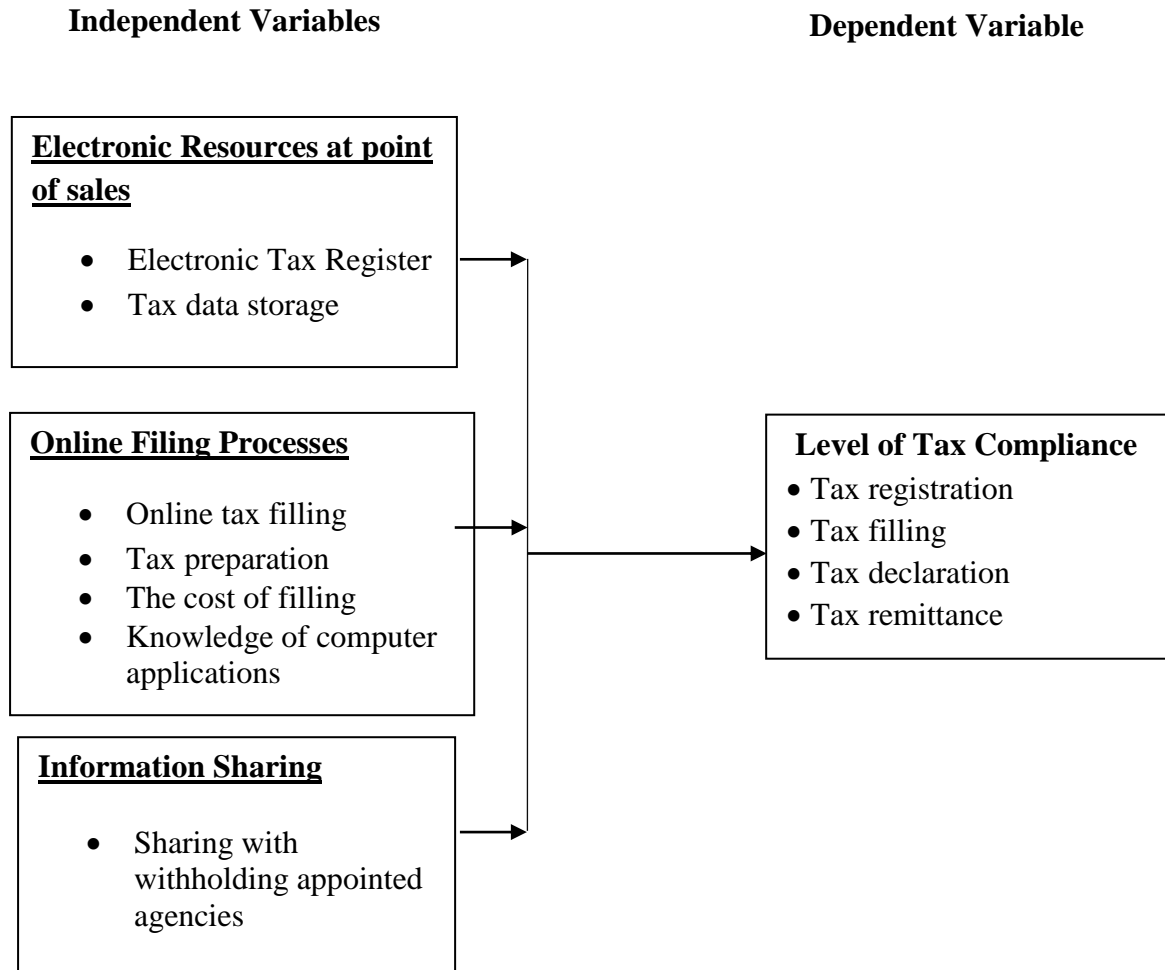


Figure 3.1: Conceptual Framework

Independent variables

The conceptual framework in figure 1 above shows that tax compliance among SMES can be attributed to adoption of information communication technologies. The use of internet platform in tax filling involves registration of tax payers, filling tax payers' tax returns and processing their payment invoices. The use of electronic tax register enables for storage of all information concerning transactions as well a reconciliation of information. The Electronic sharing of

taxpayer information will include sharing the VAT compliance information of a taxpayer with third parties which is expected to have a negative effect on defaulter's reputation.

Dependent variable

Tax compliance can be determined based on taxpayer registration, declaration, filling of taxes as well as tax remittances.

2.4 Empirical Review

The section reviews empirical literature on studies that have explored the different concepts of and the factors contributing to tax compliance.

2.4.1 Taxation Activities within the Kenyan Informal Sector

Experiences in the past couple of years have proven that the informal sectors are unquestionably the growth engines of the African economy and therefore the Kenyan government considers the issue of the informal sector and SMEs a priority. It has been obvious that there cannot be a recovery from the financial and economic crisis without small enterprises which have to be freed of burdens weighing on their actions (Kiarie and Muturi, 2015). The SMEs tax was introduced to serve this end. This tax was set in a new direction in the income tax system.

Although certain elements of the system which has been presented in the parliament may still be modified via the expected social and parliamentary debate, but it includes – besides a more favorable tax rate – two conceptual differences whether the tax levied on essential consumer goods in the VAT Bill 2013 was favorable or computation for income tax based on cash flows will favour the informal sector (RoK, 2014). Tax regimes and taxation of SMEs and the informal sector have become increasingly topical and governments globally have sought to accommodate and provide a means for such businesses to participate in mainstream economic activity in a legitimate fashion. Previously, tax administrations had argued that the cost of registering these

enterprises and processing their returns far outweighed the benefits in terms of revenue yield (IEA, 2012)

This remains true where such businesses are required to participate in the normal taxpaying regime and this has led to a significant move internationally to offer simplified regimes for this category of taxpayers. Cost versus benefit is still an important issue that needs to be carefully balanced. However, a better balance is greatly facilitated where a simplified regime is implemented. There is a growing awareness that tax systems can go beyond merely maximizing revenue collection but over the medium- to longer-term can inculcate a higher degree of tax compliance and build a platform to support entrepreneurship and business development (Marti, 2010). Over time, perceptions regarding small businesses have changed. In the late 70's, tax authorities often regarded SMEs as habitual tax evaders and avoiders. The increasing growth of the private informal sector further increased their contribution to the economic growth and development of the business industry in developing countries thereby creating more focus on the taxation of the informal sector (Ouma et,al, 2007)

2.4.2 Tax Compliance analysis

Marti (2010) explains the concept of tax compliance as the process of a taxpayer to fully and freely fulfil all legal provisions relating to tax obligations. Unfortunately, for most developing countries, the taxation burdens relating to tax laws will often fall on SMEs compared to medium and large-scale business organizations. SMEs often face numerous challenges in complying to the tax laws since they operate with limited financial resources and expertise on the complicated and diverse legal regulations. Pope and Abdul-Jabbar (2008) explain that SMEs incur high costs of compliance thereby resulting to tax evasion and fraudulent manipulation of records. To this end, the SMEs are unable to expand operations and investments thereby losing the market to larger sizes organizations that have taxation attractiveness. Fagbemi and Noah (2010) explained that the non-compliance of taxpayers can be in the form of tax evasion through failure to file and

submit tax returns, understatement of taxable income, overstatement (and fraudulent inclusion) of tax deductions, late payments of tax liabilities, outright non-submission of tax levies. Tax evasions are prevalent especially in least developed countries and therefore reduces the amount of government revenue collected by the state. According to Chipeta (2002) tax evasion leads to slow economic development, economic stagnation and a myriad of social- economic problems. with increased cost of compliance coupled with high tax burden most SMEs will have low disposable income resulting to higher probabilities of tax evasion

Measuring compliance behavior has been a challenge for many scholars in finding a measure which allows the researcher to determine the compliance level and directly study how compliance is changed with a change in underlying tax- related parameters. Nicoleta, (2011) is of the opinion that, asking questions that addresses participants about their own past involvement in tax evasion is not sufficient. What is needed is a compliance indicator which can be repeatedly measured with changes in policy parameters. According to Change (2010) the Kenyan government developed a framework for evaluating individual taxpayer compliance which focuses on four parameters: registration as a taxpayer, filling returns on time, correctly report tax liabilities, payment of taxes on time.

In a meta-analysis study by Nicoleta, (2011) to review the factors for tax compliance, the review showed that one possibility of measuring compliance was to ask hypothetically about tax evasion behavior possibly with a case situation to describe the context in detail and how it would differ if a specific change occurred. According to Slemrod, (2007) the calculation of tax liability from gross taxable income affected the level of compliance among taxpayers since most tax payers could not compare the cost of calculation of tax liabilities and penalties associated with non-compliance. According to Sagas, Nelimalyani and Kosgeikimaiyo (2015) analysis on

taxpayer registration, filling taxes, correct tax declaration and timely remittance of taxes will determine one tax compliance levels.

2.4.3 Electronic Tax Register and Tax compliance

The Kenya Revenue Authority introduced Electronic tax registration (ETR) machines to calculate and determine the amount of Value added tax payable by a trader without the trader having to cross check his/her sales details. The ETR machines were introduced to combat the challenge of collecting taxes by KRA especially with traders undervaluing the total sales turnover made with an intention of tax evasion. The ETR machines have proved very effective however their performance after the initial implementation stages was questioned by researchers. In Kathuri (2006) findings, the ETR gadgets had failed to increase tax revenues among 21 african states. Wanjiku (2011) researched on the impact of ETR machines in reducing VAT auditing processes in Kenya and found that indeed the machines reduced the processes of tax audits significantly. The research findings recommended on increased integration of ETR machines to more registered businesses within Kenya since the ETR machines improves the attitude of compliance among business traders while at the same time providing essential information (relating to tax administration) to KRA. Naibei and Siringi (2011) also observed that traders who frequently used the ETR machines had higher levels of tax compliance and thereby increased VAT revenue collected. Chege (2010) also did a research on the impact of ETR machines at the point of sales on VAT compliance among hotels located in Nairobi Kenya and observed that the integration of ETR machines increased the levels of VAT tax compliance since the hotels were able to declare higher taxable income and increased tax liabilities.

A study conducted by Sagas, Nelimalyani & Kosgeikimaiyo (2015) assessed the impact of ETR systems to businesses in Western Kenya and observed that more than 70 percent of the responded agreed that ETR has reduced the level of tax evasion with 86 percent of the

respondent agreeing that the ETR machines have increased the revenue collected from the traders. Naibei and Siringi (2011) assessed the significance of ETR machines on VAT compliance among businesses in the private sector. The findings, explained that periodic and thorough inspection of businesses by KRA agent resulted to increased compliance level. However; sales of Private Business Firms show insignificant relationship with VAT compliance. From these findings, the study concludes that inspection of businesses by tax authorities as well as use of ETRs are major determinants of VAT compliance among private Business Firms in Kenya.

2.4.4 Online Tax Filing and VAT Compliance

According to Ouma et al, (2007) tax authorities have incurred huge challenges in enforcing vat compliance and taxation of the informal sector. Most businesses in the sector have modest forms of operations characterized by small scale trade that is devoid of external environment and existing tax regulations. The traders in this informal sector adopt basic operation and management skills due to limited staff education and training. Therefore, such taxpayers though subjected to regulations made by local authorities lack the necessary resources to adopt automated document processing and filing operations. Therefore, such businesses have in the past relied on manual filing of forms and manual submission of the tax returns to KRA offices. With the introduction of the online tax filing system in 2014 (called I-tax), most tax payers have improved their tax compliance and boosted the tax revenue collected since the system has eased documentation of the tax payer's personal information by providing genuine Personal Identification Number (PIN) and tax compliance certificates. According to KRA(2015) the main objective of the I-tax system is to curb the rate of tax evasion by potential tax payers as guided by the economic deterrence theory. The theory as explained by Harold (2011), shows that tax compliance rates are reduced when the probability of tax evasion reduces. Therefore, introduction of computer-generated returns that are electronically transferred eases the

communication processes between individuals and the tax authority. Taxpayers can therefore edit their details (subject to review by KRA staffs) and information is shared instantly between the two parties with minimal chances of errors. A study by Sagas, Nelimalyani and Kimaiyo (2015), on the impact of ETR on KRA revenue collection in Western Kenya revealed that indeed the ETR machines have significantly reduced the rate of non-compliance and tax evasion among potential taxpayers. Moreover, over 80 percent of the respondents agreed with the opinion that ETR machines have increased the VAT tax collected from businesses. Gekonge and Atambo (2016) examined the effects of ETR systems on revenue collection by KRA from tax payers in Uasin Gishu County. The study sought data from staff from management and the employees of KRA as well as existing Tax payers. From their findings, the ETR system was more convenient and very efficient as compared to the traditional manual system. It reduced queues, workload, physical filing of large files and cumbersome registration processes by both KRA officials and government. Besides, the system enhanced compliance since it has resulted to timely filing of returns although there was a reduction in audit period due to integration of ETR system. The collection of VAT revenue too had improved following the adoption of online tax filling system. The study however, neither consider on the views of already registered taxpayers nor taxpayers operating in the informal sector.

2.4.5 Electronic Taxpayer Information Sharing and Compliance

As there are various forms and levels of individual disclosure of tax information, it is apparent that this may result in varying degrees of deterrence that ultimately impact upon compliance. However, the experience of individual public disclosure on a global scale has been limited (Slemrod et al., 2013). At one extreme we have the Nordic countries where personal level public disclosure is displayed with Norway leading the way. At the other extreme we have the majority of western countries which honor privacy principles with some exceptions in Europe and the US which has trailed limited spells of public disclosure. In between the extremes, other countries

have adopted and then discarded various forms of disclosure or as in the case of Australia have adopted limited

Disclosure measures for corporations only. The following section provides a brief overview of disclosure measures adopted in selected countries and the impact, if any these measures have had upon taxpayer compliance. Investigating both Sweden and Finland as fellow Nordic countries it is apparent that both corporate and personal level disclosure exists. In Finland not only can one apply to the tax authority for information about individuals but the media also publishes the top 1000 income earners and provides personal details including how much tax has been paid as a portion of salary (Catanzariti, 2004).

There are also boutique publications that publish guides on everyone who earns about 40,000 Euros, but otherwise it is just a long list of people the Finns would know of. Given there are only five million people in the country and very few foreigners, it is highly likely that many tax evaders would be known or identified (Catanzariti, 2004). Consequently, the transparency in the Finnish system is accepted and has generally a positive effect on compliance rates.

Slemrod and Ishida (2012) analyzed the effects of the disclosure of tax reports to the public in Japan up until its abolition in 2005. It was discovered that where there was a threshold of disclosure (that is, taxable incomes above about 40,000 yen for individuals, \$400,000AUD equivalent and 75,022,000 yen for corporations) many taxpayers whose liability would otherwise be close to the threshold chose to under-report income so as to avoid disclosure. However, the strong result only applied to disclosure systems with a threshold and the financial statements of companies provided no evidence that taxable incomes reduced with the abolishment of the disclosure system. Overall, it was concluded that public disclosure had the power to change behavior (Slemrod, Hasegawa, Hoopes, and Ishida, 2012).

2.5 Critique of the Study

There has been a considerable amount of research, which has been carried out on tax compliance (AL, 1998). Studies on the social-economic factors affecting tax compliance have been consistently been inconclusive leaving studies to state that the more important question is why people pay taxes and not why they evade them (SLEMROD A. E., 1992). According to (WEBLEY, 2002) there are very minimal studies on VAT non-compliance. The main purpose for pushing for increased tax compliance through a reduction of tax evasion by issuing of withholding taxes, helping taxpayers through taxpayer service and other mechanisms is to increase tax compliances. The effects of audits, penalties and criminal sanctions vary sometimes even within the same context (Witte & Woodbury, 1985; Dubin & Wilde, 1988).

2.6 Chapter Summary

This chapter examined the existing literature, features research gaps that should be filled and displays the conceptual framework that has been designed. According to research study by Venkatesh and Davis (1996), on the impact of modern technologies on tax compliance, modern technologies (such as TAM) are likely to increase the level of compliance. Additionally, Knut (1896) developed taxation theories on how the governments' taxation policies focus on maximizing benefits to taxpayers. The above theories therefore form the need for adoption of technologies such as ETR machine by SMEs at the point of sales. Additionally, Azmi and Kamarulzaman(2010) analysed the impact of online filing in Malaysia. The theory therefore recommended the importance of online filing and the opportunities that it has to the government and SMEs with a focus on developing economies. According to Fagbemi, Uadile& Noah (2010) information sharing facilitates compliance in that the government revenue collection agencies can share information with third parties showing noncompliance thereby limiting the operation of SMEs in tax evasion. Similar observations were made by Sagas, Nelimalyani and Kosgeikimaiyo (2015) who observed significance of taxpayers' registration, filing of taxes, correct tax declaration and timely remittances of taxes on tax compliance.

2.7 Research gap

The review of the existing literature shows a number of knowledge gaps. The review clearly showed that Kenya Revenue Authority (KRA) has introduced information technology platforms to widen its tax base. Ultimately the number of taxpayers will increase to over 6 million by end of 2025 against the present number of 4.4 million. The ambitious plan saw the increase in number of tax payers usually big corporations increase their tax contribution (Naibei & Siringi, 2011)). Unfortunately, the existing literature has not focused on the contribution of small and SMEs towards the tax revenue. The literature review does not consider SMEs inadequacy to keep proper records, filing of returns as well as settling liabilities. Thereby creating a research gap on how integration of information technology affects tax compliance.

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

In this chapter, the research techniques, data collection procedures and instruments, the sampling design, reliability and validity of research instruments were discussed.

3.2 Research Design

This research adopted a descriptive survey where qualitative and quantitative data was collected. According to Kothari (2006) surveys are very useful in conducting social research since they focus on the activities of individuals in terms of the contributions of their behaviours towards a particular problem as well as how the problem can be solved by the societies as a whole. The research design was adopted since it facilitates the use of extensive data collection techniques including interviews and questionnaires. The results that were obtained in this research were validated and thereafter generalized to related cases. This research analysed the factors contributing to tax compliance with a survey research design being used to analyse data collected from traders in SMEs within Mombasa CBD

3.3 Target Population

The target population for this included all registered and licensed SME traders operating in Mombasa CBD. According to UNECA, (2015), Mombasa has an estimate of over 6000 licensed and registered SME businesses with 6350 operators registered for VAT.

3.4 Sampling Framework

According to Saunders *et al*, (2009) a sampling frame refers to a list of all elements of a population from which a sample is selected. In this study the sampling frame consisted of all SME operations

Who had registered for VAT and operating within Mombasa town?

3.5 Sample Size and Sampling Technique

In this research, stratified random sampling was adopted where a smaller sample was selected from the entire population. Nassiuma (2000) formula was used in determining the population size. According to Nassiuma (2000) the sample size can be calculated as follows

$$n = \frac{NC^2}{C^2 + (N - 1) e^2}$$

Where:

N= Population

C_v= Coefficient of variation (0.5)

e= Tolerance at desired level of confidence,(0.05 at 95% confidence level)

n= Sample size

Upon substitution:

$$n = \frac{(6,350 \times 0.5^2)}{0.5^2 + (6,350 - 1) \times 0.05^2} = 98.463$$

The sample size selected for this research was 100 SME operators in Mombasa Town.

Distribution of the study sample is shown on Table 3.1 below.

Table 3.1: Distribution of the study sample

<i>Population Category</i>	<i>Population</i>	<i>Sample Size</i>
<i>Whole sellers</i>	848	13
<i>Retailers</i>	3529	55
<i>Manufacturers</i>	608	9
<i>Service</i>	1365	22
<i>Total</i>	6350	100

3.6 Research Instruments

This research adopted a structured questionnaire as its main research instrument. The questionnaire was then formulated to have clear and simple questions to facilitate higher response levels with the traders. The questions included in the questionnaire sought information on the respondents' VAT compliance level, and their use of electronic tax registers, online tax filing, and effects of information sharing. The research preferred the use of structured questionnaire since they facilitated easy investigation of the problem in a cost efficient and timely manner. The questions included were both open and closed ended questions. Secondary data was also obtained from the KRA Mombasa Branch regarding the level of VAT compliance and the use of the various information technologies under investigation.

3.7 Research Procedure

The research will rely on primary data. The primary data will be collected by use of a Likert Scale type questionnaire with closed ended questions. A research permit was obtained from KESRA registrar office, Nairobi Campus to give permission to the study to carry out data compliance exercise. An introductory letter was sent to department and section heads two weeks

prior to commencement of the exercise to enable the relevant Authorities to prepare for the exercise in advance to avoid inconvenience. Data collected was checked for reliability and validity and to ensure that valid conclusions are drawn from the data (Saunders et al, 2009).

3.9 Pilot study.

McMillan (2013) says that pilot testing is a small scale try out of an instrument such as a questionnaire that is administered to direct the revision or fine-tuning process, in order to reveal issues that may affect its administration, and their correction until it is satisfactory. The study will employ sample size of 20 taxpayers and tax officers who are not part of the actual sample for pilot study. They will be given the questionnaire to fill. According to Mark (2015), pilot test is used to gauge any varying element, which may occur in an actual research, and to check whether research elements produced what was expected. He stated that pilot study not only checks on completeness and probable accuracy of a questionnaire, in terms of time, but also helps fine tune it to reflect and produce desirable output. Accordingly, it is used to correct ambiguities before the actual study, in order to produce the best results.

3.10 Validity of Research Instruments

Expert judgement was used to verify the validity of the research instruments. The researcher therefore integrated expert recommendation to review the instruments where the researcher modified the structuring of the questionnaire following the recommendation given by her supervisor. The supervisor further reviewed the final draft of the questionnaire and verified the appropriateness of all items included in the questionnaire. The supervisor therefore ensured that inappropriate (or insensitive) items were not included in the questionnaire (Mugenda and Mugenda, 1999). Content validity of the instrument was also determined through piloting and the identified respondent's information checked against research objectives. Piloting was done at Bamburi within Mombasa town, Kenya. The Piloting town identified due to its physical location

and its proximity to the research area (Mombasa Town), and hence it was expected that the factors under observation would reflect those of Mombasa Town.

3.11 Reliability of Research instruments

According to Mugenda and Mugenda (2003) the reliability of the research instrument was assured by conducting a pilot study of all SME operators within Mombasa CBD. Furthermore, Cronbach alpha was calculated for the pilot questionnaire and yielded an alpha value of 0.86. the instrument was therefore reliable and could be used in the research since the data that would be obtained can be analysed counterchecked and replicated for future related studies .

3.12 Data Processing and Analysis

Data was collected and cleaned in preparation for analysis. It was later subjected to descriptive and inferential statistics methods. The results obtained were thereafter presented in the form of charts and tables which is easy to understand. The study also conducted cross tabulation and correlation analysis to determine the existence of significant relationships between the variables. Regression analysis then followed to determine the effect of the independent variable on the dependent variable.

3.13 Model specification

The following multivariate regression analysis model has been used

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

α - Constant

β_1 , β_2 , and β_3 - Coefficient indicating rate of change of tax compliances. The β coefficients for each independent variable will be subjected to a z-test in order to test each hypothesis of the effects of application of online filing process, the electronic tax register at point of sales and information sharing measures on compliance of VAT among SME operators in Mombasa CBD.

Y- cost of Tax compliance

X_1 - integration of electronic tax register (ETR) systems at point of sales

X_2 - online filing process

X_3 - information sharing measures

ε - Error term

All the above Analysis were carried out using SPSS and all tests were two-tailed. The Significance levels were measured at $p < 0.05$ (95% confidence level)

CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND INTERPRETATION

4.1 Introduction

This chapter gives the results of the study and their discussions. Data has been analyzed and presented in form of bar graphs, pie charts, and tables.

4.2 Response Rate

Out of the 99 questionnaires which were distributed to the respondents 80 of them were returned, giving the study a response rate of 80%.

Table 4.1 : Response rate

<i>Response</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Expected response</i>	99	100
<i>Received response</i>	80	81
<i>Non response</i>	19	19

4.3 Demographic Characteristics

4.3.1 Gender of Respondents

The distribution of the respondents' gender are as shown in table 4.2 below:

Table 4.2: Gender of respondents

<i>Gender</i>	<i>Frequency</i>	<i>Percentage</i>
<i>Male</i>	64	80
<i>Female</i>	16	20
<i>Total</i>	80	100

From the table 4.2 above 20% of the respondents were female while 80% of the were male.

4.3.2 Age Bracket

The study sought to examine the distribution of respondents by age and the findings are illustrated in table 4.3:

Table 2.3: Age bracket
Age bracket

	<i>Frequency</i>	<i>Percentage</i>
<i>18-30 years</i>	4	5
<i>31-40 years</i>	16	20
<i>41-50 years</i>	28	35
<i>51-60 years</i>	32	40
<i>Total</i>	80	100

From the table above, 20% of the respondents were aged 31-40 years, 35% were aged 41-50 years and 40% were aged 51-60 years and none of them were aged 18-30 years.

4.2.3 Respondents position in business

The study sought to ascertain the position of respondents in business and the findings are as shown in table 4.4:

Table 4.4: Respondents position in business
Duration

	<i>Frequency</i>	<i>Percentage</i>
<i>Owner</i>	48	60
<i>Manager</i>	20	25
<i>Staff</i>	12	15
<i>Total</i>	80	100

25% of the respondents were managers, 60% were business owners and 15% were staff.

4.2.5 Age of Business

The duration in which the respondents had been doing business and the findings are as shown in table 4.5:

Table 4.5: Age of the business

<i>duration</i>	<i>Frequency</i>	<i>Percentage</i>
0-5	28	35
6-10	40	50
Above 10	12	15

According to the findings 15% had been doing dairy farming for over 10 years, 50% had been doing it for 6-10 years, 35% for below 6 years, ..

4.4 Use of electronic tax register

4.4.1 Registration for VAT with KRA

The findings on the time that the businesses were registered for VAT with KRA are as shown in figure 4.1

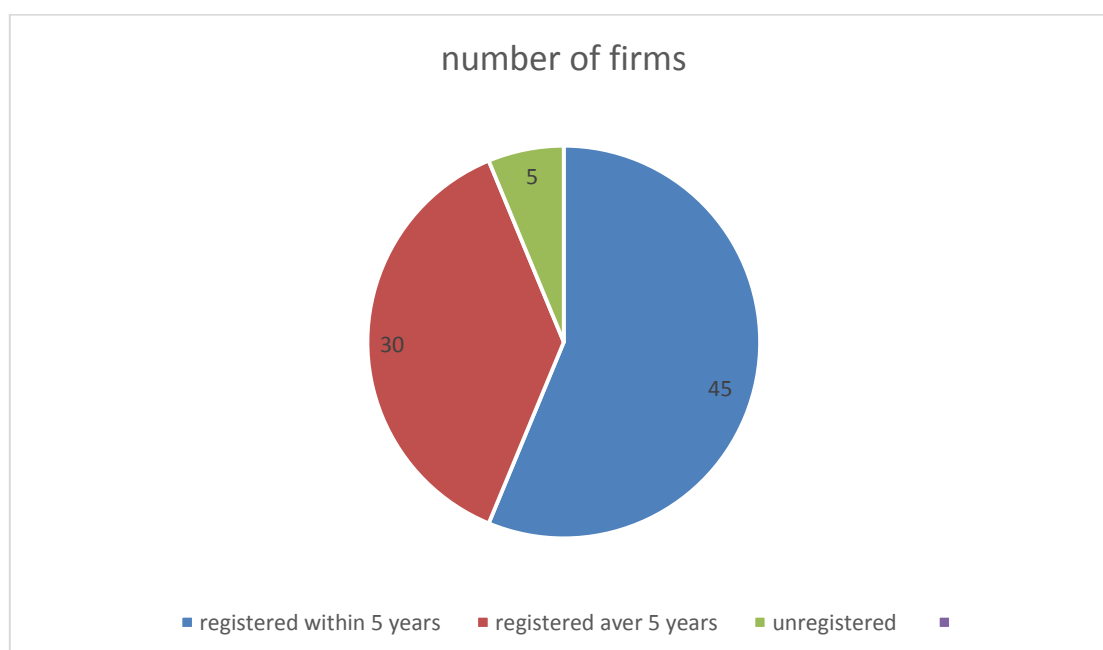


Figure 4.1: Registration for VAT with KRA

From the figure above 5% of the SMEs were unregistered for the VAT 45% of the respondents had their businesses were registered for VAT with KRA for less than 5 years while 30% were registered for more than 5 years.

4.4.2 Respondents opinion the effects of ETR on operation

The respondent's opinion the effects of electronic tax registers on daily business operations are as shown in table 4.6 below:

Table 4.6 Respondents opinion on how electronic tax registers affects their businesses

<i>Statements</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<i>Registration fo VAT with KRA</i>	20%	18%	2%	38%	22%
<i>We operate Electronic Tax Register Machine (ETR)</i>	15%	30%	5%	27%	13%
<i>KRA has calibrated our ETR Machine</i>	20%	20%	10%	45%	5%
<i>our ETR Machines is submitted for periodic audit by tax agent</i>	30%	10%	10%	45%	10%
<i>KRA checks our ETR machines periodically</i>	10%	25%	5%	40%	20%
<i>We issue with ETR receipt to customers for all transactions</i>	20%	20%	5%	50%	5%

<i>carried out</i>					
<i>We file monthly returns for all</i>	10%	30%	10%	50%	10%
<i>ETR transactions</i>					

From the table above the respondent's opinion on whether the business was registered for VAT with KRA 20% of the respondents strongly agreed, 18% agreed, 38% disagreed and 22% strongly disagreed, 2% of them were undecided. The respondent's opinion on the daily use of an ETR machines; 15% of the respondents strongly agreed, 30% agreed, 27% disagreed and 13% strongly disagreed, 5% of them were undecided. Regarding whether the business uses KRA calibrated ETR Machine ;20% of the respondents strongly agreed, 20% agreed, 45% disagreed, 5% of them strongly disagreed 10% were undecided. On the opinion that KRA checks the firm's ETR machines periodically 10% of the respondents strongly agreed, 25% agreed, 40% disagreed and 20% strongly disagreed, 5% of them were undecided. Concerning whether the business issues ETR receipt to customers for all transactions carried out 20% of the respondents strongly agreed, 20% agreed, 50% disagreed and 5% strongly disagreed, 5% of them were undecided.

Regarding whether the business files monthly returns for all ETR transactions 10% of the respondents strongly agreed, 30% agreed, 50% disagreed and 10% strongly disagreed, 10% of them were undecided.

4.4 Online tax filing

4.4.1 Online (I-tax) registration of businesses

The respondents' opinion on the were registration of business with KRA online (i-tax) were as shown in figure 4.2 below:

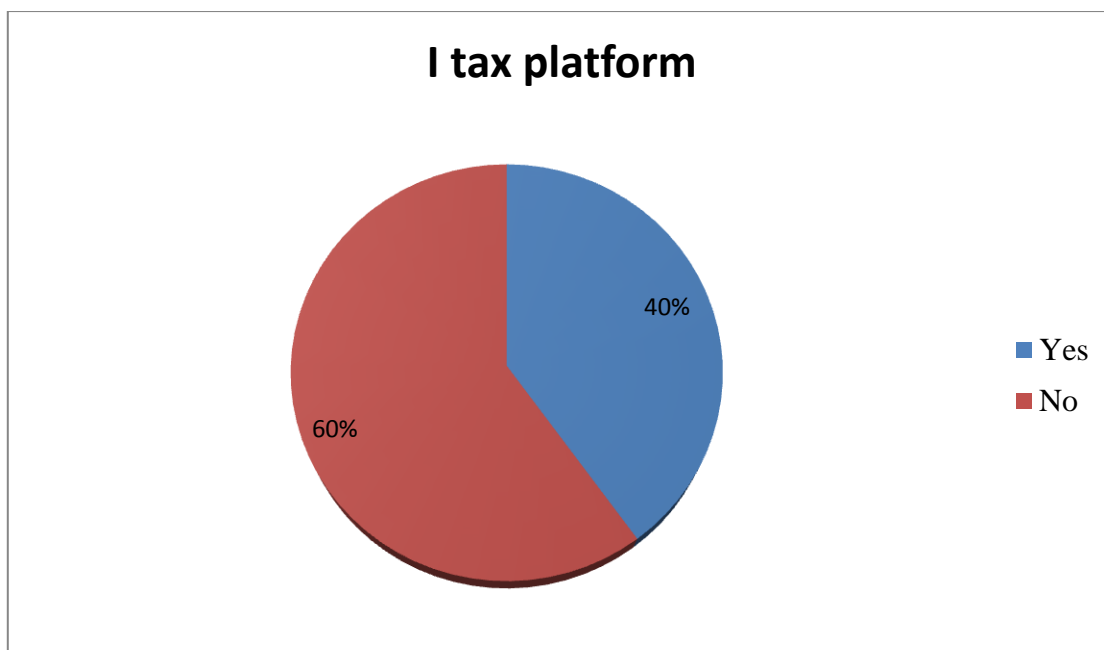


Figure 4.2: Online I-tax registration of businesses

40% of the respondents had their businesses were registered i-tax platform as active tax payers while 60% said that their businesses were not registered.

4.4.2 When businesses registered as I-tax tax payers

The respondents' opinion on when the businesses were registered as i-tax tax payers are as shown in figure 4.3:

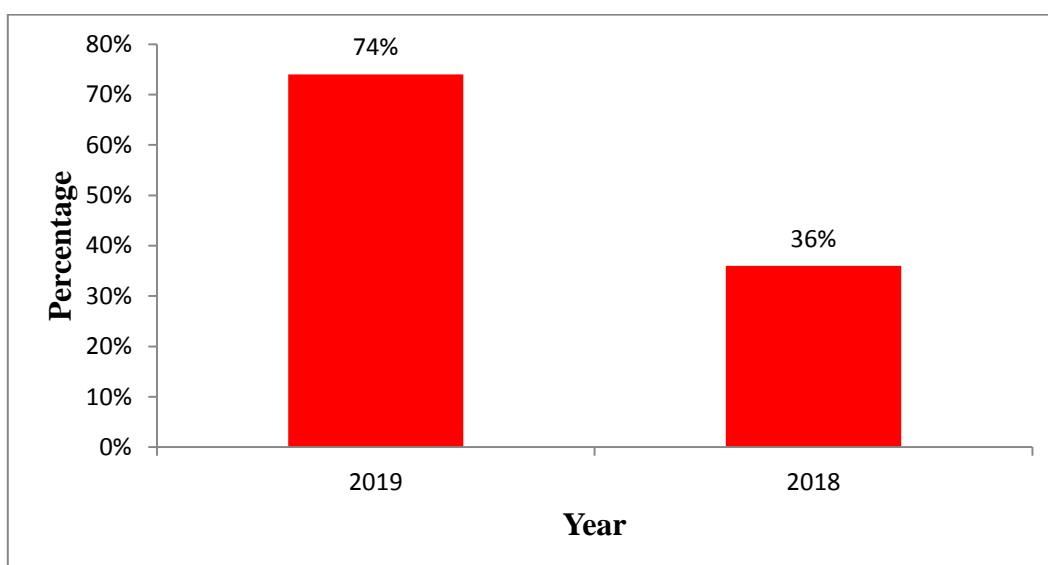


Figure 2.3: When businesses registered as i-tax tax payers

From the figure above 74% of the respondents had their businesses registered as i-tax tax payers in 2019 while the minority 36% had been registered in 2018.

4.4.3 Respondents opinion regarding use of I-Tax

The respondents' opinion on the use of I-tax systems are shown in table 4.7 below:

Table 4.7: Respondents opinion regarding use of I-Tax

<i>Statements</i>	<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<i>We have registered our business for VAT and Income Tax</i>	30%	15%	5%	30%	20%
<i>We file monthly VAT returns on I-tax</i>	15%	30%	5%	40%	10%
<i>We post all transactions on I-Tax</i>	5%	30%	5%	50%	10%
<i>We spend a short time to file tax returns in I-Tax</i>	20%	30%	5%	20%	25%
<i>The use of I-Tax has increased the level of compliance</i>	45%	45%	2%	8%	0%
<i>I-tax has eased payment of Taxes through online invoicing</i>	35%	45%	5%	10%	10%
<i>small businesses easily understand their tax liabilities on I-tax platform</i>	15%	20%	0%	40%	25%

Table 4.7: Respondents opinion regarding use of I-Tax

The respondents' opinion on whether their businesses have registered themselves for VAT and Income Tax; 30% of the respondents strongly agreed, 30% disagreed and 20% strongly disagreed, 5% of them were undecided and 15% agreed.

Concerning whether businesses file monthly VAT returns on I-tax; 30% of the respondents agreed and 40% disagreed, 10% of them strongly disagreed, 5% were undecided and 15% strongly agreed. Regarding whether the businesses post all transactions on I-Tax 30% of the respondents agreed, 50% disagreed and 10% strongly disagreed, 5% of them were undecided and 5% strongly agreed. On opinion that businesses spend a short time to file tax returns in I-Tax; 20% of the respondents strongly agreed, 30% agreed and 20% disagreed, 5% of them were undecided and 25% strongly disagreed. Concerning whether businesses use of I-Tax has increased the level of compliance; 45% of the respondents strongly agreed and 45% agreed, 2% of them were undecided, 8% disagreed and none strongly disagreed. On whether I-tax has eased payment of Taxes through online invoicing; 35% of the respondents strongly agreed, 45% agreed and 10% disagreed, 5% of them were undecided while 10% strongly disagreed.

Regarding whether small businesses easily understand their tax liabilities on I-tax platform 15% of the respondents strongly agreed, 20% agreed and 40% disagreed and 25% strongly disagreed, none of them were undecided.

4.5 Electronic tax payer information sharing

4.5.1 Sharing of tax information with other parties

The respondents' opinion on whether they ever shared their tax information with other parties was shown in figure 4.4:

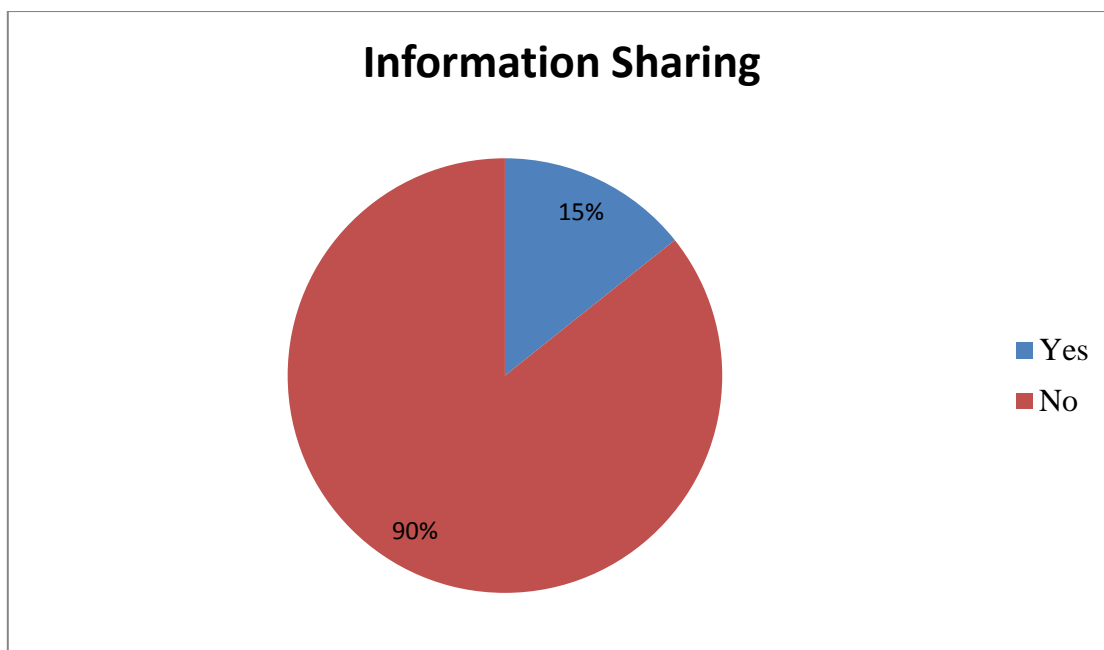


Figure 4.4: Sharing of tax information with other parties

In figure 5 above 15% of the respondents agreed that they had shared their tax information with other parties while 85% disagreed.

4.5.2 Respondents opinion regarding tax payer information sharing

The respondents' opinion regarding tax payer information sharing and the findings are as shown in table 4.8:

Table 4.8: Respondents opinion regarding tax payer information sharing

	<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<i>electronic media enables the public to know the taxpayer individual compliance</i>	45%	45%	0%	5%	0%
<i>non-compliant firms lose business due to Electronic sharing of taxpayer information</i>	40%	50%	0%	10%	0%
<i>Electronic taxpayer information enables the public to know an individual's tax compliance status</i>	40%	40%	0%	20%	0%
<i>electronic taxpayer information sharing has enforced compliance of businesses to taxation laws</i>	25%	30%	5%	40%	0%

From the table above 45% of the respondents strongly agreed that the use of electronic media has made it possible to know the taxpayer compliance of individual businesses, 45% agreed, 5%disagreed and none of them strongly disagreed or were undecided. Additionally, 40% of the respondents strongly agreed electronic sharing of taxpayer information has made non-compliant firms to lose business, 50% agreed and 10% disagreed, none of them were undecided, disagreed or strongly disagreed. Thirdly, 40% of the respondents strongly agreed that electronic taxpayer information has enabled the public to know your tax compliance status and 40% agreed, 20%disagreed and none of them strongly disagreed or were undecided.

Lastly, 25% of the respondents strongly agreed that electronic taxpayer information sharing has made it mandatory for businesses to comply with taxation laws , 30% agreed and 40% disagreed 5% were undecided but none of them strongly disagreed4.6 Tax Compliance

4.6.1 Respondents opinion concerning their compliance to tax requirements

The respondents' opinion concerning their compliance to tax requirements are as shown in table 4.9 below:

Table 4.9: Respondents opinion concerning their compliance to tax requirements
Statements

	<i>Strongly agree</i>	<i>Agree</i>	<i>Undecided</i>	<i>Disagree</i>	<i>Strongly disagree</i>
<i>My business is registered with KRA as an independent tax payer</i>	10%	8%	0%	70%	12%
<i>We ensure that we file tax returns on time</i>	15%	10%	0%	50%	25%
<i>We ensure accurate disclosure of all income to KRA for purposes of tax calculation</i>	25%	10%	0%	55%	10%
<i>All taxes due are paid on time in the business</i>	30%	45%	10%	15%	0%

10% of the respondents strongly agreed that their businesses were registered with KRA as independent tax payers, 8% agreed and 70% disagreed, 12% disagreed and none of them were undecided. Additionally, 15% of the respondents strongly agreed that they file tax returns on time, 10% agreed, 50% disagreed and 25% strongly disagreed and none of them were undecided. Thirdly, 15% of the respondents strongly agreed that they ensure accurate disclosure of all income to KRA for purposes of tax calculation, 10% agreed and 50% disagreed, 25%strongly disagreed and none of them were undecided. Lastly, 30% of the respondents strongly agreed that all taxes due are paid on time in the business, 45% agreed and 15% disagreed, 10%of them were undecided and none of them strongly disagreed.

4.7 Inferential Statistics

4.7.1 Correlation Analysis

This is done between two variables to establish their relationship in a linear manner to see how far they diverge or converge; this depends on their relationship to determine their significance. A positive value of the Pearson correlation coefficient depicts that the two variables are correlated and move in the same direction whereas a negative correlation coefficient denotes the opposite trend. This clearly defines how different variables affect each other at a given degree though the same doesn't depict the cause-effect relation. This study therefore focused on analysis of the dependent and independent variables affecting tax compliance with the findings summarized

Below in Table 4.10.

Table 4.10: Pearson Correlation Results

	<i>tax compliance</i>	<i>application of electronic tax register at point of sales</i>	<i>online filing process</i>	<i>information sharing measures</i>
<i>tax compliance</i>	1			
<i>application of electronic tax register at point of sales</i>	0.866**	1		
<i>online filing process</i>	0.944**	0.356	1	
<i>information sharing measures</i>	0.954**	0.811**	0.203**	1

Technology- Online filing of Returns

** 0.01 significant level at (1-tailed).

From the findings in Table 4.7.1, tax compliance has a strong and significant relationship with integration of ETR machines at the point of sale whereby compliance level increases with increase in the integration of the ETR machines. The findings also showed that the online filing has a positive and significant relationship with tax compliance ($r = 0.944$) meaning that there is a

0.944 probability that tax compliance will increase with increased utilization of online filing. However, the findings showed that the use of electronic tax register does not have a significant relationship with online filing ($r = 0.356$). The findings also revealed that there is a positive and significant relationship between technology and more specifically, the Information sharing and the level of tax compliance ($r = 0.954$). Moreover, there is positive correlation between information sharing and application of electronic tax register at point of sale (0.811). However, there is weak correlation between online filing process information sharing ($r=0.203$) indicating that there is a probability of 0.203 that the level of online filing will increase with increase in the use of electronic tax register at points of sales.

4.7.2 Regression Analysis

A regression model is generally used to assess and depict a cause-effect relationship between variables that a certain degree is depicted by the correlation analysis. The multivariate regression model gives the magnitude of the cause-effect relationship as well as the direction of the relationship. This is achieved through the estimation of the coefficients of estimations attributed to the explanatory variables. This means that a negative coefficient of estimation would often imply a decrease by the magnitude of the estimated coefficient in the response variable. The standardized coefficients of estimation are utilized to improve the accuracy of the specified model

Table 4.11: Model Summary

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	.031	.109		.264	.762
Application of tax register	.664	.134	.950	4.689	.000
online filing process	.352	.145	.435	2.845	.044
information sharing measures	.287	.138	.416	2.130	.039

In the estimation of the coefficients found in the multivariate regression analysis model the following results were achieved

$$Y=0.031+0.664X_1+0.352X_2+0.287X_3$$

Table 4.10 gives a summary of the predicted model related to the given independent variables. Taking all variables constant, factors affecting tax compliance among the small-scale traders Mombasa was 0.031. At the same time, it showed that holding the other variables constantly at zero, increasing the application of tax register at the point of sale by one unit results to w to increase in the level of tax compliance by 0.664. Therefore, the tax compliance level is 5 times more given the change in the level of tax awareness ($t = 4.689$). increasing online filing process by one unit results to increase in tax compliance by 0.352 and that tax compliance level would be approximately 3 times higher given the change on online filing process ($t = 2.845$). An increase in the level of information sharing measures by one unit results to increase in the level

of tax compliance by 0.287 with twice likely to increase the level of compliance ($t=2.130$). furthermore, from the table above the three variables (namely application for tax register at points of sales, online filing processing and information sharing) affects tax compliance significantly (since the p-values for the three variables are less than 5 percent level of significance).

The analysis of the R-square value is represented by the table 4.12 below

Table 4.12: Analysis of the R-Square

<i>Model</i>	<i>R</i>	<i>R Square</i>	<i>Adjusted R Square</i>	<i>Std. Error of the Estimate</i>	<i>R Square Change</i>	<i>Sig. F Change</i>
1	.945 [*]	.865	.885	.3278	.869	.025

From the above table, a strong linear relationship exists between the level of tax compliance and the respective independent variables. The adjusted R-Square (0.885) indicates that 88.5 percent of the variation of the level of tax compliance is directly attributed to the changes of the independent variables

4.7.3 Analysis Of Variance-ANOVA

The analysis of variance (ANOVA) was carried out and the findings were summarized and presented as follows;

Table 4.13: ANOVA table

<i>Model</i>	<i>Sum of Squares</i>	<i>df</i>	<i>Mean Square</i>	<i>F</i>	<i>Sig.</i>
<i>Regression</i>	132.341	4	33.085	65.4242	.000*
<i>Residual</i>	30.967	61	0.5057		
<i>Total</i>	163.308	65			

From the table above the P-value (0.000) is below 0.05 then we conclude that the resultant regression model was significant. The table therefore implies that there is strong relationship between tax compliance and the independent variables.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Summary of findings

The study sought to examine factors influencing VAT compliance among SMEs in Mombasa County.

5.2.1 Electronic Resources at Point of sales

On whether respondent's opinion on whether the business was registered for VAT with KRA 20% of the respondents strongly agreed, 18% agreed, 38% disagreed and 22% strongly disagreed, 2% of them were undecided. The respondents' opinions on the daily use of an ETR machines; 15% of the respondents strongly agreed, 30% agreed, 27% disagreed and 13% strongly disagreed, 5% of them were undecided. Regarding whether the business uses KRA calibrated ETR Machine; 20% of the respondents strongly agreed, 20% agreed, 45% disagreed, 5% of them strongly disagreed 10% were undecided. On the opinion that KRA checks the firm's ETR machines periodically 10% of the respondents strongly agreed, 25% agreed, 40% disagreed and 20% strongly disagreed, 5% of them were undecided. Concerning whether the business issues ETR receipt to customers for all transactions carried out 20% of the respondents strongly agreed, 20% agreed, 50% disagreed and 5% strongly disagreed, 5% of them were undecided. Regarding whether the business files monthly returns for all ETR transactions 10% of the respondents strongly agreed, 30% agreed, 50% disagreed and 10% strongly disagreed, 10% of them were undecided.

5.2.2 Online Filing Process

The respondents' opinion on whether their businesses have registered themselves for VAT and Income Tax; 30% of the respondents strongly agreed, 30% disagreed and 20% strongly disagreed, 5% of them were undecided and 15% agreed.

Concerning whether businesses file monthly VAT returns on I-tax; 30% of the respondents agreed and 40% disagreed, 10% of them strongly disagreed, 5% were undecided and 15% strongly agreed. Regarding whether the businesses post all transactions on I-Tax 30% of the respondents agreed, 50% disagreed and 10% strongly disagreed, 5% of them were undecided and 5% strongly agreed. On opinion that businesses spend a short time to file tax returns in I-Tax; 20% of the respondents strongly agreed, 30% agreed and 20% disagreed, 5% of them were undecided and 25% strongly disagreed. Concerning whether businesses use of I-Tax has increased the level of compliance; 45% of the respondents strongly agreed and 45% agreed, 2% of them were undecided, 8% disagreed and none strongly disagreed. On whether I-tax has eased payment of Taxes through online invoicing; 35% of the respondents strongly agreed, 45% agreed and 10% disagreed, 5% of them were undecided while 10% strongly disagreed. Regarding whether small businesses easily understand their tax liabilities on I-tax platform 15% of the respondents strongly agreed, 20% agreed and 40% disagreed and 25% strongly disagreed, none of them were undecided.

5.2.3 Information Sharing

Regarding whether electronic sharing of taxpayer information 45% of the respondents strongly agreed that the use of electronic media has made it possible to know the taxpayer compliance of individual businesses, 45% agreed, 5% disagreed and none of them strongly disagreed or were undecided. Additionally, 40% of the respondents strongly agreed electronic sharing of taxpayer information has made non-compliant firms to lose business, 50% agreed and 10% disagreed, none of them were undecided, disagreed or strongly disagreed. Thirdly, 40% of the respondents strongly agreed that electronic taxpayer information has enabled the public to know your tax compliance status and 40% agreed, 20% disagreed and none of them strongly disagreed or were undecided. 25% of the respondents strongly agreed that electronic taxpayer information sharing

has made it mandatory for businesses to comply with taxation laws , 30% agreed and 40% disagreed 5% were undecided but none of them strongly disagreed

5.3 Conclusions

The study made the following conclusions:

5.3.1 Electronic Resources point of sales

The study concluded that over 40% of SMEs registered in Mombasa town have their businesses registered with KRA for VAT. 45% of the SMEs use ETR machine that has been accurately calibrated by KRA. 40% of the businesses subject their ETR machines for checks by KRA staffs and the businesses ensure that customers receive ETR machines receipts for all their transactions, 40% of the businesses surveyed filed their monthly returns using ETR machines. Online filing system that is versatile enough in terms of design, performance and usability is very essential to facilitate compliance among traders. Furthermore, the itax platform needs to be reviewed periodically to improve navigability download delay, site content, interactivity, responsiveness, and user's feedback on satisfaction. Use of ETR machines has increased the level of compliance as all the transactions are captured in the system.

5.3.2 Online Filing Process

The study also concluded that: 40% of the businesses surveyed were registered with KRA online i-Tax) platform as taxpayers. With 74% of the businesses registered themselves in 2019 compared to 36% registered in 2018. 45% of the businesses registered for both VAT and income taxes. 55% of the businesses do not file their VAT returns on i-tax systems. Additionally, 60% of the businesses did not post all transactions on i-Tax. 55% of the businesses surveyed generally agreed that filling tax returns in i-Tax takes a short time and that the i-Tax platform has facilitated tax compliance among individuals and organizations. The i-Tax system facilitates easy payment of taxes through online invoice applications, the importance of Technology

acceptance model adding that its full benefits are realized when intertwined with a more advanced model that boasts diverse variables with both social and human factors

5.3.3 Information Sharing

In regards to information sharing, this study concluded that the use of electronic media has enabled third parties to determine the level of tax compliance of SMEs. However, the level of information sharing has resulted to SMEs losing business as a result of non-compliance. 55% of the SMEs believe that information sharing has enforced mandatory compliance of tax regulations. The citizens ought to contribute toward government revenue proportionately to the level of revenue earned while operating within the country. As Taxpayers share information it becomes easy for KRA to collect the taxes hence increase in compliance.

Recommendations of the study

5.4.1 Electronic Resources point of sales

It was recommended that the government and KRA should encourage SMEs to register for VAT and facilitate them to carry out activities. This should be done through awareness creation, education and training and tax amnesties for those who have been defaulting.

5.4.2 Online Filing Process

The study recommends that the government and KRA should encourage most SMEs to use the online (i-tax) platform to register as tax payers as it is easier and less time consuming, they will not be required to spent time going to KRA to file their returns.

5.4.3 Information sharing

Finally the study recommends that tax compliant businesses should be encouraged to share their tax information with other businesses in order to encourage more SMEs to start complying with tax payment requirements.

5.5 Recommendations for further study

This research recommends additional research in the following areas:

- Further research should be carried out to determine the challenges facing SMEs in filling their tax return online.
- An assessment of the impact of demographic factors; such as age gender, size of income staff education and training on VAT compliance in SMEs.
- An investigation into how peer pressure influence VAT compliance in SMEs.

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APPENDICES

Appendix I: Consent Letter

Dear (Respondent),

RE: VOLUNTARY PARTICIPATION IN DATA COLLECTION

I am a student of Kenya School of Revenue Administration pursuing a Post Graduate Diploma in Tax Administration. As a requirement of the faculty, am conducting a study on the effects of information technology on vat compliance among SME traders in Mombasa County, Kenya

Your business has been selected for this study. Kindly respond to the questions in the attached questionnaire. The information provided will exclusively and solely be used for academic purposes and will be treated with the confidence it deserves. Upon request, you will be furnished with a copy of the final report.

Your cooperation will be highly appreciated.

Yours faithfully,

Laura Wawasi Mwafwaida

HDB336-C016-2065/2016

Appendix II: Research Questionnaire

Part 1: General Information

1. Is your SME registered for VAT with the KRA?

Yes () No ()

2. Indicate your opinion on the following statements regarding use of electronic tax registers in your business. Indicate your opinion as either: 5 – *Strongly Agree*, 4 – *Agree*, 3 – *Neither Agree Nor Disagree*, 2 – *Disagree*, 1 – *Strongly Disagree*.

	5	4	3	2	1
a. My business is registered for VAT with KRA					
b. We have an Electronic Tax Register Machine (ETR) for the business					
c. Our ETR Machine has been calibrated by the KRA					
d. We submit our ETR Machines for audit by qualified tax agent					
e. We subject our ETR machines to KRA for checks					

f. All transactions carried out are issued with ETR receipt					
g. We do monthly returns for all transactions with ETR					

Part 2: Online Tax Filling

3. Is your business registered with the KRA online (I-Tax) platform as a tax payer?

Yes () No ()

4. If yes, when did you register as a tax payer?

2014 () 2015 ()

5. What is your opinion on the following statements regarding use of I-Tax in the sector?

Indicate your opinion as either: 5 – Strongly Agree, 4 – Agree, 3 – Neither Agree Nor Disagree, 2 – Disagree, 1 – Strongly Disagree.

	5	4	3	2	1
a. We have registered for all Tax categories (VAT and Income Tax)					
b. We ensure that all VAT returns are made on I-Tax every month					
c. All transactions are posted through the I-Tax					
d. The time take in filling tax returns in I-Tax is very short					
e. The use of I-Tax has increased the number of people complying with Tax requirements					

f. I-tax enables easy payment of Taxes through online invoice applications					
g. I-tax has made it possible for small businesses to understand their tax liabilities					

Part 3: Electronic Taxpayer Information Sharing

6. Have you ever had your tax information shared with other parties?

Yes () No ()

7. What is your opinion on the following statements regarding taxpayer information sharing? Indicate your opinion as either: 5 – *Strongly Agree*, 4 – *Agree*, 3 – *Neither Agree Nor Disagree*, 2 – *Disagree*, 1 – *Strongly Disagree*.

	5	4	3	2	1
a) Use of electronic media has made it possible to know the taxpayer compliance of individual businesses					
b) Electronic sharing of taxpayer information has made non-compliant firms to lose business					
c) Electronic taxpayer information allows anyone to know your tax compliance status					
d) Use of electronic taxpayer information sharing has made it mandatory for businesses to comply with taxation laws					

Part 4: Tax Compliance

8. With reference to your business, indicate your level of agreement with the following statements regarding income tax compliance. *Use the Scale: 5 – Strongly Agree, 4 Agree, 3 – Neither agree nor Disagree, 2 – Disagree, 1 – Strongly Disagree.*

	5	4	3	2	1
a) My business is registered with KRA as an independent tax payer					
b) We ensure that we file tax returns on time					
c) We ensure accurate disclosure of all income to KRA for purposes of tax calculation					
d) All taxes due are paid on time in the business					

Thank You

APPENDIX III: BUDGET

DESCRIPTION	COST PER ITEM	TOTAL AMOUNT (Kshs)
Stationery		5500.00
Photocopying papers	10 reams @550/=	
Pens, pencils, rubbers		
Ink cartridge (Printer)		
Files (12 rim binders)		
Personnel		30,000.00
Questionnaires administrators		
Stastician		
Transport and subsistence		4,000.00
Vehicles		
Subsistence allowance		
Communication		2,000.00
Telephone		
Internet		
Other Services		15,000.00
Library services		
Purchase of periodicals and books		
<u>Total expected cost</u>		<u>56,500.00</u>

APPENDIX IV –WORK PLAN

ACTIVITY	NOVEMBER(2	DECEMBER(JANUARY
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	019	2019	(2020)
Draft proposal			
Proposal presentation			
Designing the research instrument			
Proposal defense			
Field work & data Compliance			
Data Entry / Analysis			
Report Writing			
Presentation of 1 st draft			
Presentation of 2 nd draft			
Submission of final report			

