FACTORS AFFECTING VALUE-ADDED TAX COMPLIANCE AMONG E-COMMERCE SMALL AND MEDIUM ENTERPRISES IN WESTLANDS NAIROBI, KENYA

BY

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A RESEARCH PROJECT SUBMITTED TO THE SCHOOL BUSINESS AND OF ECONOMICS DEPARTMENT OF ACCOUNTS AND FINANCE IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTERS IN TAX ADMINISTRATION

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DECLARATION

Declaration by the Student

This research project is my original work and has not been presented to any other examination body. No part of this research work should be reproduced without my consent or that of the Moi University

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DEDICATION

This project is dedicated to my family: My beloved wife Mercy Ndetto and our two children, namely; Shawana Adisa and Shaan Amani. For their sacrifice, understanding, support and encouragement as I undertake my master's degree course.

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ABSTRACT

Value Added Tax compliance is presently a topical coverage issue, mainly in growing nations, as governments are in search of approaches to enhance performance in tax revenues to finance their budgets. It is a challenging issue to many SMEs, mainly for SMEs engaged in E-commerce businesses hence the focus of this study. Therefore, this study was to determine the factors affecting value-added tax compliance among e-commerce small and medium enterprises in Kenya, a case of small and medium enterprises in Westlands Nairobi County. The specific objectives of this study were to establish the effect of tax knowledge, tax Moral, technological factors and enforcement measures on VAT in SMEs engaged in E-Commerce businesses. The data reviewed that led to the problem statement for the study covered three years between 2018 and 2020. The theories supporting these study variables included the Economic deterrence theory, Fiscal psychology theory, Tax morale theory and Ability to pay theory. This study adopted explanatory research design to determine the causal relationship between tax knowledge, tax Moral, technological factors, and enforcement measures and VAT compliance. The target population of study included 1,223 small and medium enterprises E-commerce businesses in Westlands Nairobi County. Yamane formula was used to determine the sample size selection of 301 respondents for this study systematic sampling technique was used. Piloting of the questionnaire was carried out on SMEs in Nairobi central business district to test its validity and reliability. The study collected primary data through close-ended questionnaire, with a response rate of 83%. The data was analyzed using descriptive and inferential statistics to determine the association between variables, with the measurement of variables based on 5-point Likert Scale. Correlation and regression analysis provided an understanding of the relationship between the study variables. On Regression, tax knowledge, tax Moral, technological factors and enforcement measures had a strong positive correlation with value added tax compliance up to 61.3% or (R= 0.613). (R^2) of 0.375 reveal that when other factors are held constant, tax knowledge, tax Moral, technological factors and enforcement measures caused a variation of 37.5% on VAT compliance. The study findings indicated that tax knowledge, tax Moral, and enforcement measures had a statistically positive significant effect on VAT compliance as per Beta coefficients of tax knowledge ($\beta_1=$ 0.220, p=0.000<0.05), tax Moral ($\beta_2=$0.449, p=0.000<0.05) and enforcement measures ($\beta_4=$0.221, p=0.003 <0.05). However, technology factor showed no significant relationship with VAT compliance ($\beta_3=$ 0.075, p=0.302>0.05). The study results concluded that tax knowledge, tax Moral, and enforcement measures affect VAT compliance. Based on the findings, the study recommended that the government should adopt modern tax remittance platforms for ease of value added tax remittance. The study further recommends future studies can be conducted on different variables such as on effect of administrative reforms on VAT compliance among E-commerce large taxpayers to provide additional insights and add to the existing understanding of issues explored in this study.

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ABBREVIATIONS

B2B   Business to Business transactions between VAT registered entities

B2C   Business to Consumer transactions where the business is registered for VAT while the consumer is a person not registered for Value added Tax

CPA   Consumer Protection Act

EU   European Union

ILO   International Labour Organisation

KRA   Kenya Revenue Authority

OECD   Organisation for Economic Cooperation and Development

SAS   Self-Assessment System

SMEs   Small and Medium Business

UNCTAD   United Nation Conference on Trade and Development

VAT   Value Added Tax

OPERATIONAL DEFINITION OF TERMS

E-Commerce: The sale or buy of products or services, carried out over laptop networks with the aid of using strategies mainly designed for the cause of receiving or setting of orders". The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. United Nations Conference on Trade and Development (UNCTAD, 2010)

Tax Knowledge: The ability of taxpayers to be aware of the general, procedural, and legal requirements of the tax base to which they are obligated to pay to relevant tax authorities (Barefoot, 2018).

Value Added Tax: Commonly abbreviated as VAT, this is a levy that is charged on goods and services at consumption or at the point of exchange (Zachary, Kariuki, & Mwangi, 2017).

Enforcement Measures: In the context of this study, this is the application of laws that govern remission of tax and compliance (OECD, 2019).

Tax Moral: These are intrinsic characteristics such as perceptions and beliefs that inform of a taxpayer's willingness and ability to effectively accept the requirements of their tax obligations and make informed decision to comply through tax declaration, tax filing and payment of tax due (Alm, 2012).

Small and Medium Enterprises: Kenya's small and medium Enterprises Act 2012, micro enterprises are defined as a firm, trade, service, industry or a business activity whose annual turnover does not exceed Kshs. 500,000 and whose total employees are less than 10 people. The same statute defined a small enterprise as that which has an annual turnover of between Ksh0.5 - 5 million, with the number of employees in the range from 10-50 people. (IEA, 2015)

Tax Compliance: Is the timely filling and reporting of required tax information, the correct self-assessment of taxes owed, and the payment of those taxes without enforcement action (Jones, 2009).

CHAPTER ONE

INTRODUCTION

1.0 Overview

This Chapter explains the VAT concept for businesses that engage in E-commerce among Small and medium business. It also defines and describes the concept of E-commerce on VAT compliance and outlines the problem statement, objectives, and hypothesis and finally scope of the study.

1.1 Background of the Study

Compliance to taxation policies has been a challenge among developing and developed countries around the globe (Charlet & Owens, 2010). Majority of the countries which have economic stability have been associated with efficient and effective taxation policies and systems that enhance individual and organizational compliance to taxation policies. Developed countries of the world ranging from The United States of America, China, Japan and Germany have efficient taxation systems that monitor and track individuals and firms to comply with submission of taxes at the right time without evasion and this can be considered to be the major reasons for the ability to mobilize adequate resources for socio-economic developments (Arum, 2012).

Globally, the trend has been moving from direct taxation to indirect taxation. Apparently, indirect taxes are becoming more important as the burden of direct taxation fall globally. It is important to note that countries all over the world have reformed or are attempting to reform their tax system. This is after the realization that taxation is a sensitive instrument and if properly used, it can give handsome dividend. If resorted to indiscrimination, it can damage the very foundation of progress. According to Chad and Wolf (1973), several countries have made efforts to deal with

weak tax administration as well as reduced tax evasion and avoidance. Chad and Wolf (1973), indicate that as in other economic policies where reforms have been successful, a number of common elements have been present and these include a well thought program of action support for major policy makers and systematic implementation and monitoring, aiming at broader and simpler tax basis on which lower rates are imposed. Procedural demands that complicated administration is minimized (Chad and Wolf, 1973).

Regionally, it is observed by Olowookere and Fasina (2013) in Nigeria, that tax penalties, service quality and compliance costs on the other hand are attributed to enhanced performance of tax collection institutions in form of levies submitted at a given period of time regardless of the legal or administrative sanctions imposed on tax violators. Individual financial situations and rising costs of living can make members of the public blatantly violate submitting taxes on time as required by law.

Subsequently, it is noted by Aksnes (2014) in Egypt that the cost of operating business in developing countries such as India and Namibia are a key factor that influences business entities not to adhere to VAT policies. The Organization for Economic Co-operation and Development (OECD), a 36-member organization of industrialized countries has made numerous contributions to the literature of taxation of E-trade. The first convention held in Turku; Finland was titled 'Dismantling the limitations to Global digital trade' November 1997. South Africa's E-commerce sector was recorded as worth over USD600 million in 2013. As the largest economic system in Africa, the E-commerce sector, in absolute terms, will evidently be larger compared to its smaller neighbours. However, at 12% the E-commerce sector accounts for the biggest percentage of any African nation's Internet associated GDP. There is a legitimate concern by certain governments that the improvement of the

internet might additionally shrink the tax base, subsequently lowering tax revenue. The reasons behind these concerns are on the one hand the difficulties inherent in defining jurisdiction in cyberworld; and on the other hand, the problem of administration and enforcement.

In spite of branding SMEs as the engine of growth in many developing countries, the small and medium scale sector still remain fluid as there is no concrete regulatory policy in place to monitor its activities thereby making it almost difficult to tax if not difficult to tax (Antwi, Inusah,& Hamza, 2015). SMEs are less tax compliant in comparison to large businesses and are considered the hard to tax group from the informal sector (Akinboade, 2015). Many SMEs either deliberately evade tax payment or are not captured by the net of the revenue authority (Antwi *et al*., 2015). Moreover, greatest number of SME fail to willingly enlist with tax authorities, whereas the few which list regularly miss to maintain sufficient records, file tax returns, and honour tax obligations punctually (Terkper, 2003).

In diverse studies carried by Nahida *et al*. (2014); Osebe (2013); Chebusit *et al*. (2014); Tusubira and Nkote (2013), several factors have been hypothesized to influence tax compliance by SMEs. These factors include tax compliance costs, fines and penalties, tax knowledge and the tax system. A tax compliance cost is expenditure incurred by a firm in conforming to government's tax legislation requirements (Nahida *et al*., 2014). For individuals, these costs would include the financial and time costs of acquiring fiscal knowledge to meet their legal obligations; the costs in the form of time lost in filing up the tax returns, obtaining, filing and storing the data to facilitate the completion of returns (Chattopadhyay & Das-Gupta, 2002).

Fines and penalties act as tax deterrence sanctions, which many governments have adopted as tax compliance administrative measures (Tusubira & Nkote, 2013). The goal of fines and penalties is to foster voluntary tax compliance hence efficient tax administration (Palil, Akir & Ahmad, 2013). The economic deterrence serves as the theoretical foundation, which support the imposition of fines and penalties (Ali, Fjeldstad & Sjursen, 2013). Similarly, punishment and sanctions influence individuals' tax compliance behavior. For instance, Sapiei, Kasipillai and Eze, (2014) observe that an upsurge in the proportion of penalty charged and a larger likelihood of detection reduces the level of non-compliance.

Tax knowledge could be one of the important factors influencing individual's tax attitudes. Importance of this issue stems from the fact that tax law is generally considered as difficult, complicated and beyond one's depth (Kołodziej, 2012).

Consequently, taxpayers appropriately assess their tax obligation and submit tax returns promptly (Palil *et al*., 2013). By means of taxpayer knowledge and taxpayer service, citizens can be informed and educated about the tax system and be assisted in their attempts to comply with the tax system (International Tax Compact, 2010).

Value Added Tax is regarded as a form of indirect tax imposed on goods and services produced in a country (Schenk & Oldman, 2007). In addition, VAT involves the cost and overheads that a trader incurs and obtains respectively after purchasing and selling goods and services. Both developed and developing countries can change VAT policies from time to time based on several factors that range from policies, economic, social, technological and ecological and legal. Firms that engage in any commercial activities that involve the production, distribution of goods and the

provision of services are likely to comply with taxation policies of each country in which they operate (GoK, 2004).

The growth of ecommerce remains phenomenal with considerable benefits to businesses such as it is a faster, easier and a better way of doing business with consumers, suppliers and government agencies (Farrar, 2018). Modern e-commerce involves all types of economic actors including large manufactures, small-scale retailers and consumers. Direct e-commerce is composed of companies which sell products and services which are both purchased and delivered by electronic or digital means. The advent of e-commerce has thus facilitated increase in real-time and paperless transactions.

However, according to Mulondo, (2012) taxation in the e-commerce poses a huge challenge due to its online state of operations. The major problem is inherent dematerialization that leads to a situation where material assets lose their significance in favor of new intangible assets. The other challenge to a tax regime would be ability to adjust and adapt to the changing world (Omondi, and Mbugua, 2017). It is also recognized that the measures relating to electronic commerce cannot be efficiently taken by a single regime. Though some countries have embraced the changes brought about by ecommerce and have developed VAT regimes for e-commerce, this is yet to be fully established in Kenya. Therefore, the effects of VAT on ecommerce still remain unexplored and this study aimed at addressing this.

1.2 Statement of the Problem

The duty of the government is to provide public services including the health system, social security, welfare, education, infrastructure development and others. To manage these functions, the government obligates the citizen to pay taxes as with the

collective action, public interest and development are possible (OECD, 2018). These taxes are directly associated with economic growth and development. Kenya's budget according to the National treasury has been growing at an exponential rate therefore demanding for more tax collections to finance this budget The National Economic Survey by CBK noted that SMEs contribute to 3% of the total GDP (Kenyan SME Finance Survey).

Kenya has seen tremendous boom in ICT within the previous couple of years. Over the last ten years alone, on-line business and sales in Kenya has grown to worth of Kshs. 390 billion in 2018 up from Kshs. 345 billion in 2017, driven by growth in virtual or digital economy (Kenya National Economic Survey, 2019). Statistics from the Kenya National Bureau of Statistics (KNBS) further shows that the value of mobile commerce transactions was estimated at over 6 trillion in 2018. The government collected Sh1.58 trillion in revenue for the financial year ending June 2019 compared to Sh1.435 trillion collected in financial year 2017/18.This amount represents a deficit of Sh25 billion as the National Treasury had projected a collection of 1.605 trillion, (National Treasury, 2019).

Consequently, VAT accounted for 25.6% of total exchequer collections, but it failed to meet the set National Treasury target of Kshs. 241B against an actual of Kshs. 230B, Kenya National Bureau of Statistics Economic Survey DPP (2019). With enhancement of voluntary compliance still being a struggle for KRA, enforcement measures present the next best option for collection of taxes. The Value Added Tax Act (VAT Act) has provisions that may apply to e-commerce. The VAT Act recognizes e-commerce as a trade mediated by information technology in section 8(3) that defines electronic transactions as transactions conducted through a telecommunications network. However, the Act fails to comprehensively cover E-

commerce as a unique business environment and create suitable provisions to regulate E-commerce transactions. Further, tax experts note that the Kenyan government does not allocate adequate resources to the tax authorities to monitor and regulate the sector.

E-commerce business among SMEs in Kenya is generally inadequately regulated hence largely remains non-compliant due to tax loopholes, and with technology advancements leading to wider growth in the business, KRA is likely to continue losing billions of shillings which affects government's ability to achieve its revenue targets and consequently its development agenda. The study seeks to identify the factor affecting VAT compliance to enable KRA to improve on its VAT collection among SMEs in E-commerce business.

1.3 Research objective

1.3.1 General Objective

This study's main objective was to establish factors affecting value-added tax compliance among e-commerce small and medium enterprises in Kenya. a case of enterprises in Westlands Nairobi County.

1.3.2 Specific Objective

i. To establish the effect of Tax knowledge on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

ii. To determine the effect of Tax Moral on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

iii. To ascertain the effect of Technological factors on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

iv. To determine the effect of Enforcement measures on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

1.4 Research Hypothesis

H_{01} -Tax knowledge has no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

H_{02} - Tax Moral has no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

H_{03} - Technological factors have no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

H_{04} - Enforcement measures have no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County.

1.5 Significance of the Study

The research results of this study will give more insights to the Kenyan government on the efforts in bringing on board SMEs in E-commerce business by enhancing the government understanding of the sector. Henceforth, enabling them to build and develop strategies to enhance VAT compliance. Furthermore, it will highlight the key challenges faced by SMEs on their VAT knowledge and practice to ensure higher efficiency in VAT remittance to the government by adopting modern tax remittance platforms for ease of VAT remittance, Finally, this study's results will act as a

reference by future researchers, scholars, and students on the same field of study in identifying topics that require further research. This study will fill a knowledge gap by elucidating the variables affecting VAT revenue output in Kenya as administered by the Kenya Revenue Authority

The findings of this research is of significance to SMEs as it will help them to determine the relationship between tax knowledge, tax Moral, technological factors and enforcement measures on Value Added Tax The research will be of significance to the general public domain as it extends the knowledge base of the problem currently existing in the sector. The concept of tax compliance especially with small businesses is relatively new to them and sometimes not perceived to be within their capability. This will therefore raise awareness among the potential application and benefits of preventing non-compliance.

1.6 Scope of the study

The study was undertaken in Westlands of Nairobi region, Kenya. The study was carried out during the last three financial years between 2018-19, 2019-20 and 2020-21. This study was based on explanatory research design and a population of 1,223 SMEs engaged in E-commerce business with a sample size of 301 SMEs was selected. The study used questionnaires for data collection on specific objectives relating to tax knowledge, tax Moral, technological factors and enforcement measures on VAT compliance.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, both the theoretical and empirical literature is reviewed on the dynamics of E-commerce tax compliance by reviewing the concept and theories of the study. This progresses from an overview of how World bodies have contributed into the literature in acceleration of E-commerce taxation which finally leads us to the discussion of a conceptual framework.

2.2 Conceptual Review

This section contains review of concepts studies related to the variable of the study. The concept of the study was to establish factors affecting value-added tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County, Kenya. Specifically on tax knowledge, tax Moral, technological factors and enforcement measures.

2.2.1 Value-Added Tax Compliance

Value Added Tax is regarded as a form of indirect tax imposed on goods and services produced in a country (Schenk & Oldman, 2007). In addition, VAT involves the cost and overheads that a trader incurs and obtains respectively after purchasing and selling goods and services. Both developed and developing countries can change VAT policies from time to time based on a number of factors that range from policies, economic, social, technological and ecological and legal. Firms that engage in any commercial activities that involve the production, distribution of goods and the provision of services are likely to comply with taxation policies of each country in which they operate (GoK, 2004).

Moreover, it is argued by Olowookere and Fasina (2013) that most of the taxpayers are likely to voluntarily cooperate to submit taxes if they perceive the political and economic frameworks of the State to be transparent. Although, researchers such as Yayuk et al. (2017) contend that age, income, education level, ethics, legal sanctions, and fairness of the tax system are strong predictors of taxpayers' VAT compliance. A tax regime can be regarded as a legal system by which government facilitates the collection of revenue from its citizens to meet their expenditures (KNBS, 2012). Taxation is seen as the only source through which governments can mobilize resources to fund public expenditures. It is regarded as a mechanism of enhancing equity and minimizing taxation impediment effects in a country. Most countries have different sources of collecting revenues which range from trade taxes, value added tax and income tax (Schenk & Oldman, 2007).

2.2.2 Tax Knowledge

Researchers have focused a significant amount of attention on finding ways to improve tax compliance, and studies suggest that tax compliance can be improved by increased tax knowledge (Huang, 2019). Kamleitner, Korunka, & Kitchler (2012) argue that it is important to improve small business owners' level of tax knowledge to enable taxpayers to be able to understand and cope with the administrative and legal requirements of revenue bodies. In view of the assumption that compliance with applicable tax legislation is dependent on being able to understand the legislation (Huang, 2019), enhancing taxpayers' tax knowledge may be one way of promoting tax compliance (Yee, Moorthy, Choo, & Soon, 2017).

It is therefore considered a useful attempt to conceptualise a framework of "tax knowledge" as a factor affecting VAT compliance and thereby adding to the understanding of tax compliance behaviour. In review of relevant literature, it was

found that the term "tax knowledge" is interpreted in different ways by tax scholars. The term is used in ways ranging from an umbrella term for different types and levels of tax knowledge, to a one-dimensional interpretation. It is therefore submitted that the gap in the literature is that the concept of tax knowledge is not well-defined in tax compliance research and is generally used in a broad sense.

The tax compliance literature does not present a single definition of "tax knowledge" but instead uses it in many different contexts. (Palil, 2005) supports the notion that tax knowledge is not a clear construct and Udin (2015) strongly advocates that there is a need for an acceptable and specific measurement of individual taxpayer's knowledge variables to provide meaningful and comparable research findings.

Tax literature shows that having knowledge of the VAT system can change taxpayers' attitudes and tax morale (Eriksen & Fallan, 1996). Similarly, Fjelstad & Heggstad, (2012) found that specific tax knowledge influences taxpayers' attitudes and Niemirowski et al. (2002) state that there is a significant relationship between tax knowledge and a positive attitude towards tax, while a lack of knowledge can bring about a negative attitude towards tax.

Tax knowledge can therefore change people's behaviour towards being compliant with tax laws. Given that taxpayers' attitudes are important for their tax behaviour, it is likely that it is possible to affect taxpayers' behaviour by efforts to increase their tax knowledge (Fjelstad & Heggstad, 2012).

Tax knowledge is a necessary component of a voluntary tax compliance system (Kasipillai, 2000) and is particularly important in relation to determining an accurate tax liability (Saad et al., 2003). Studies undertaken in Malaysia (Loo et al., 2008, 2009) suggest that tax knowledge may be the most significant determinant of

taxpayers' compliance behaviour in a self-assessment system. This is empirically established by other studies (Kasipillai and Jabbar, 2003; Kirchler et al., 2006), which documented that increased tax knowledge led to higher voluntary compliance.

Palil's (2005) study supports the notion that tax knowledge is one of the most essential elements enabling taxpayers to assess their own tax payable. It is also a major factor in determining the accuracy of a tax return. Similarly, Udin (2015) is of the opinion that knowledge concerning the computation of a taxpayer's tax liability is one of the most important aspects to enable taxpayers to calculate their tax liability correctly. The authors do, however, acknowledge that there are studies which found that respondents' tax knowledge is not significantly correlated with their tax compliance behaviour in general (Engida and Baisa, 2014; Collins et al., 1992).

2.2.3 Tax Moral

An increasing number of studies have explored the factors that shape tax morale in an attempt to gain a broader understanding of this issue (Togler, 2017). However, there is still a lack of empirical evidence on the link between attitudes and behaviour in the tax compliance literature. Torgler and Schneider (2007a, 2009) show that that improving governance and institutional quality and tax morale helps lessen a possible incentive to go underground.

Torgler and Murphy (2004) report a strong increase of tax morale in Australia during the 1980s and 1990s. In early 1980s, the government faced numerous complaints about the existing income tax system (Smith, 1993). There was prevalent perception amongst the public that many were not meeting their taxation obligations and it was clear that taxpayer compliance had eroded. A failure of a country's legal system undermines tax morale and tax compliance. Also, regulatory restraints and

bureaucratic procedures limit the operation of markets, enhancing the incentives to act in the shadow economy or to evade taxes. A more legitimate and responsive state appears to be an essential precondition in generating compliance. If individual and business contracts are not enforced and productive efforts not protected, the incentive to be active illegally increases.

Citizens feel cheated if corruption is widespread, their tax burden is not spent well, and that they are not protected by the rules of law (Owsiak, 2007). A respectful and fair treatment of taxpayers induces respect for the tax system and thus leads to co-operation. On the other hand, a higher perceived tax burden and inefficiencies and unfairness in the interaction between the tax administration and the taxpayers crowds out the intrinsic motivation to pay taxes. Togler, (2017) no matter how good political institutions may be; however, countries will always encounter difficulties in dealing with distributive issues. How one thinks about taxes and inequality reflects ideas of fairness or social justice (Bird et al., 2006).

2.2.4 Technological Factors

Information Communication Technology (ICT) continues to play a significant role in transforming the administration of tax. It improves interaction between government and its citizens, transactional and informational. Today, taxation-related services are among the most developed e-government services all over the world. At the same time, e-taxation services are among those most used by clients in many countries, sometimes even because clients are forced to use them. For instance, the e-Europe measurement reports indicate that year after year the services included in the income-generating cluster (income and corporate tax, social contributions for employees,

value-added tax (VAT), customs declarations) were and remain the most developed (Baležentis & Paražinskaitė, 2012).

Hamza *et al* (2021) conducted an analysis on the impact of Information technology on Efficient tax Management. The purpose of this study was to investigate the influence of information technology on tax administration in the Kurdistan. The impact of information technology on tax productivity as well as the link between information technology on tax implementation and tax planning were especially studied in this study. In this study, a descriptive research approach was adopted, with a questionnaire being used to collect data, which was then analyzed using multiple regression and Pearson product moment correlation. The findings of the study revealed that information technology (online tax filing, online tax registration and online tax remittance) has a positive impact on efficient tax management.

Kgonare (2017) focused on the impact of information technology on tax administration. This study adopts a systematic literature review approach. Academic articles published between 2007 and 2017 are reviewed to assess the impact of ICT on tax administration. These academic articles were sourced from renowned databases, namely: Scopus, Web of Science and Proquest. Only highly rated ABDC journal articles were analysed for the purpose of this study. Results: A total of 18 academic journals were sourced which specifically discuss ICT and tax administration. The study revealed that ICT positively impacts on tax administration. It creates an enabling environment for effective and efficient tax administration through simplification and continued audits through improved techniques and tools

2.2.5 Enforcement Measures

Enforcement measures are imbued in the economic models that have deterrence effects on VAT non-compliance which in effect raises VAT revenue. The economic models predict that higher penalties and audit probabilities should discourage noncompliance. Enforcement measures are based on the concept that the risk of detection and punishment will improve compliance behaviour (OECD, 2010). Deterrence can be achieved through some approaches, punitive and persuasive which may take the form of increasing the chances of detection, increasing tax rates or by imposing higher penalties (Ahmed & Kedir, 2015). The relationship between deterrence and tax compliance is complex. Research on the effect of deterrence conducted by revenue bodies and academic research show different results. (Braithwaite, 2008) describes deterrence as a double-edged sword.

Deterrence can strengthen the moral obligation to pay tax as it points out what is the right thing to do, unfortunately deterrence can also create resistance from the taxpayer by feelings of oppression.

Thus, deterrence can have a positive or negative effect on compliance. The question therefore is not whether revenue bodies should use deterrence, but how it can be used most effectively. (Muoki & Osebe, 2018) argues that taxpayers, when made to pay higher fines for evading taxes, deters them from future evasion. Tax penalties may have both positive and negative impact on taxpayers. If tax penalties are fair and acceptable, they strengthen taxpayers' compliance. If they are perceived as oppressive, they are likely to create resistance and result in even more non-compliance (Ali et al., 2017).

2.3 Theoretical Review

This section reviews the theories that explain the factors that affect VAT compliance. The study has borrowed from existing research that is increasing, hence influenced by the following theories which have been put across by various scholars regarding alterations in how business is conducted via e-commerce and its influence on VAT compliance in government authorities. This study will be guided by the following theories namely: economic deterrence theory, fiscal psychology theory, technology acceptance theory and ability to pay theory.

2.3.1 Economic Deterrence Theory

According to (Loo, 2000) Economic based theory is related to costs and benefits when performing an action. It also states that taxpayer behavior is influenced by factors determining the benefits and cost of evasion, such as the tax rate, the probability of detection and penalties for fraud (Allingham and Sandmo, 1972).

The Allingham and Sandmo model have been extensively criticized. Besides the inconsistent results generated by the application of the penalty to the undeclared income, another notable weakness is that it assumes audit probability to be constant (Andreoni, Erard and Feinstein, 1998). This assumption is, however, invalidated by economic realities. For example, the audit probability in the US depends on the amount of income reported. It has been shown that tax compliance is related not only to economic, but also to behavioral issues that impact the process of raising public levies.

The economic deterrence theory was originally developed by (Allingham Sandmo, 1972). This theory is based on the concept that, if the consequence of committing a crime outweighs the benefit of the crime itself, the individual will be deterred from

committing the crime. The economic deterrence theory states that taxpayer behaviour is influenced by factors determining the benefits and cost of evasion, such as the tax rate, the probability of detection and penalties for fraud (Ali et al., 2014). (Allingham Sandmo, 1972) argues that tax compliance depends heavily on the probability of detection ant the tax rates. The theory emphasizes the benefits that can accrue individuals who comply with the law. The model then predicts substantial noncompliance (Ali et al., 2014). Therefore, according to the theory, in order to improve compliance, penalties for non-compliance should be increased. Thus, there is a generally positive relationship between tax penalty and tax compliance. Increase in tax penalty would lead to an increase in tax compliance and vice versa (Oladipupo & Obazee, 2016).

The economic deterrence theories hold that taxpayers are a moral utility maximiser influenced by economic motives like profit maximization. Therefore, they analyse alternative compliance paths for instance whether or not to evade tax (Thananga et al., 2013). A moral but risk averse taxpayer, with true income would choose the fraction of income to declare to tax authorities to maximize her/his expected utility of income. This theory implies that the cost of tax compliance affects tax compliance. Taxpayers would evade tax when they perceive the cost of compliance is too high.

2.3.2 Fiscal Psychology Theory

The fiscal and social psychology theory says that the more the taxpayer's attitude in the payment of taxes, the bigger is their motivation in paying taxes (Schmolders, 1960). Taxpayers' motivation to comply with tax laws relates to the taxpayer's perception and attitude of the tax system (Strumpel, 1966). The theory pays attention to psychological variables like moral values, ethical values, and the fairness of the tax

system. Tax compliance theories assume that psychological factors in addition to moral and ethical values are important to taxpayers.

Under this fiscal psychology theory, is the theory of planned behaviour which states that the behaviour of an individual is under the influence of some factors that originate from certain reasons and emerge in a planned way (Ajzen, 1991). One's behavioural intention which is influenced by factors like attitude, subjective norms and perceived behavioural control influences the individual to behave in a particular way. The four factors fall under the influence of behavioural, normative and the control beliefs. Taxpayers may comply even where the probability of detection is low since the theory's focus is on morals and ethics. Under the psychology theory the emphasis is on change of the taxpayers' attitudes towards the tax system.

2.3.3 Technology Acceptance Theory

This is an information system theory that models how users come to accept and use a technology. This theory was developed from the Theory of Reasoned Action (TRA) by Azjen and Fisbein (1980). There are so many researches trying to compare between Theory of Reasoned Action (TRA) and Technology Acceptance Model (TAM) with the Theory of Planned Behaviour (TPB). Davis, Bagozzi & Warshaw (1989) found that TAM is better in explaining the desire to receive technology compared to TRA.

The Technology Acceptance Model (Davis *et al*, 1989), one of the most researched and accepted models that explains individual IT use at the acceptance stage, has identified two salient beliefs that predict information technology use: perceived usefulness and perceived ease-of-use. Perceived usefulness (PU) - This was defined as "the degree to which a person believes that using a particular system would enhance

his or her job performance". Perceived ease-of-use (PEOU) - Davis defined this as "the degree to which a person believes that using a particular system would be free from effort" (Davis *et al,* 1989).

This theory develops a framework to establish the effects of external variables on the system usage. According to this model, individuals accept a particular system if they believe in the system (Jullie, 2017). When taxpayers understand or learn the on-line tax filing system quicker, the filing efficiency and accuracy will be increased. Taxpayers can complete tax filing quicker (perceived usefulness) when they perceive the ease of use of the system is higher (Fu, Cheng, and Wen 2013).

The goal of TAM is to provide an explanation of the determinants of computer acceptance that is general, capable of explaining user behaviour across abroad range of end-user computing technologies and user population, while at the same time being both parsimonious and theoretically justified. This theory is relevant to this study as it posits that positive attitude towards the technnology as taxpayers perceive, that the system is easy to operate, they will have more positive attitude towards, lead to more declaration of taxes, payment and hence increased value added tax compliance.

2.3.4 Ability to Pay Theory

This theory has been advanced by Adam Smith. it assumes that the level of income is the determinant of one's ability to pay tax and is equivalent to progressive tax in which the tax rate rises with increase in taxable income (Odongo,2016). This theory is considered effective in addressing tax equity and justice as it assumes that people pay tax in accordance with their income. This implies that people earning more income ought to pay more tax and at a higher rate than the low-income earners, in Kenya income tax follows this theory (Wasao, 2014).

The theory has led to different interpretations of equity in taxation; equal absolute for all taxpayers, equal proportional sacrifice, and equal marginal sacrifice Clara Hein Online (2016). It is widely acknowledged as an independent source of tax law and applied as a parameter for designing fair tax systems in most countries especially in the European Union, Clara Maria (2015). The theory further stresses according (Kagan, 2020) that everyone should make an equal sacrifice in paying taxes, and because people with more money have less use for a given amount, paying more of them in taxes does not impose a greater burden.

The ability-to-pay theory also is commonly interpreted to mean as requirement that direct personal taxes have a progressive rate structure, although there is no way of demonstrating any particular degree of progressivity is the right one. This is because considerable part of the population does not pay certain direct taxes such as income and thus some tax theorists believe that a satisfactory redistribution can only be achieved when such taxes are supplemented by direct transfers or refundable credits (Blum & Kalven, 1952). Other scholars however argue that income transfers and negative income tax create negative incentives; instead, they favor public expenditure targeted toward low-income families as better means of reaching distributional objectives (Neumark et al, 2020).

Utz (2002), while writing on the ability-to-pay theory indicated that indirect taxes such as value added tax (VAT), excise duty, sales tax including in this case digital service tax, or turnover taxes can be adapted to the ability to pay criterion, but only to a limited extent, for example by exempting necessities such as food or by differentiating tax rates according to the urgency of need. Neumark, 2018), however disagrees that such policies are generally not very effective, moreover, they distort

consumer purchasing patterns and their complexity often makes them difficult to institute.

Other scholars (Due *et al*, 2018), held that throughout the 20th century, the distribution of the tax burden among individuals should reduce the income disparities that naturally result from market economy. However, Mill (1989) and other classical economists wore of the opinion that if taxes are levied in proportion to the incomes of the individuals, it will extract equal sacrifice. Yet, the modern economists assert that when income increases, the marginal utility of income decreases. The equality of sacrifice can only be achieved if the persons with high incomes are taxed at higher rates and those with low income at lower rates. The relevance of this theory to this study is it presents information on the dependent variable which is VAT tax compliance by identifying they ought to characterize a good tax system in respect to administration and its effect on entrepreneurship.

Ability-to-pay tax theory refers to the taxing of tax progressively and it maintains that tax should be charged according to the capability of a taxpayer. Kaldor (1958) assert that the ability-to-pay tax theory is the taxing of tax progressively. This methodology does encourage and increase tax burden of businesses and individuals. This approach argues that for businesses and individuals having high income should pay more tax according to their level of income as compared to low earners investors and individuals. The ability–to-pay tax theory is mandatory to every state to impose to its residents since it needs to contribute income to support its government (Smith, 2010).

This theory is mostly like mandatory to impose to residents since it a key to revenue collection within a country where people with different levels of income exist. This does create uniformity with the different classes of people within a country thus the

residents are comfortable and motivated to pay taxes according to their level of income (Awitta, 2010). This theory earns the government a lot of revenue because people with a lot of resources are able to pool their resources together and contribute to government where services like schools, roads, hospitals and public utilities are able to be put in a better and efficient position. Absence of this theory the government will have a flat rate where it will be forced to set a lower rate so as to accommodate everyone. This theory was important in that it identifies the level of ability in paying tax and places an increased tax burden to individuals, partnerships, corporations, trusts and certain estates with high incomes. However, there were critics that the approach is not fair and just because it tries to discourage those who work hard.

2.4 Empirical Review

Empirical research is based on observed and measured phenomena and derives knowledge from actual experience rather than from theory or belief. It helps this study answer the specific research objectives as discussed below.

2.4.1 Tax Knowledge and Value Added Tax Compliance

Knowledge can be defined as facts, information, and expertise obtained through experience or education. To achieve voluntary compliance, tax knowledge is important. This is because a taxpayer's ability to understand tax system depends on his/her knowledge on the tax system and law. For instance, the Self-Assessment System (SAS) holds taxpayers accountable to declare and compute their own tax. In addition, it also requires taxpayers to have additional record-keeping, advanced tax estimates, and monthly advanced tax payments. Knowledge in understanding the tax law will certainly help taxpayers to compute their tax when using SAS (Jabbar and Pope, 2008).

For that reason, (Redae 2018) state that understanding taxpayers' knowledge and compliance behaviour is a challenge for any government and tax authority especially when employing a self- assessment system. The interviews result from a study by (Saad, 2014) showed that taxpayers seemed to have a lack of knowledge on the technical aspects of the income tax system. Thus, tax knowledge is essential as it may affect taxpayers' understanding and indirectly may increase voluntary compliances and therefore, may cause a decline in tax evasion.

Knowledge of tax law and regulations is vital to create positive attitude among SMEs especially when using the SAS system which may reduce the inclination to evade taxes (Saad, 2009; Hai and See, 2011). Tax knowledge can be acquired through self-learning, attending formal education, and informal ones (Hastuti, 2014). Unfortunately, acquiring tax knowledge is a time-consuming process (Palil, 2010). Prior studies on "The impact of tax knowledge on the perceptions of tax fairness and attitudes towards compliance" (Tan, 2000) indicated that not only knowledge, but an understanding of the tax system may influence taxpayers' perceptions of fairness and attitudes towards compliance.

Tax research has shown that the degree of information is an important factor on the behaviour of taxpayers and how it influences tax evasion. Less educated taxpayers are less exposed to tax compliance information and are less informed about relevant tax compliance information and thus are more prone to tax evasion. (Andreoni & Erard, 1998). This complexity may lead to unintentional noncompliance if taxpayers have problems maybe in filling of tax returns.

2.4.2 Tax Morale and Value Added Tax Compliance

Tax morale is related to the concepts of personal and social norms as well as trust in authorities. This indicates that high tax morale will contribute to high tax compliance. Previous studies have differentiated between personal and social norms (Hoffman, 2019). Basically, personal norms cover inequality aversion, ethic reasoning, personal values, and deal with what is generally perceived as good or bad. For instance, voluntary compliance may be influenced by the religion of individuals (Togler, 2017).

According to Konrad and Qari (2012) social norms are related to socially shared beliefs on how members of a group should behave. This indicates that tax compliance is mostly influenced by the people around us such as friends, colleagues, or neighbours. Another important factor for tax morale is the trust in authorities where authorities are represented by public institutions where the perception of fairness and efficiency play an important role.

Basically, taxpayers expect the government to provide good and services in exchange of with their tax payments. Therefore, tax compliance will be higher in situations in which taxpayers are satisfied with the services provided by the government (Barone & Mocetti, 2011). In addition, (Alm, 2006) states that the trust in public leadership and public administration would contribute to more voluntary tax compliance. Doerrenberg and Peichl (2013) states that taxpayers in countries with a more progressive tax rate system are more likely to exhibit higher tax morale and will contribute to high tax compliance. In an experimental study, (Feld & Bruno, 2002) found that tax compliance is higher on average in an endogenous fine treatment in which subjects are allowed to approve or reject the proposal of a fine as compared to an exogenous fine treatment where the fine is imposed by the experimenter. The main

explanation why people show higher tax morale if they are allowed to vote on a fine is legitimacy.

Compliance rates are higher if the fine is accepted than in the case the fine is rejected. Subjects who reject the proposal of the fine show a higher compliance rate than subjects in the exogenous fine treatment even if they know that the dominant strategy under the existence of the low fine is non-compliance. Combining econometrics and surveys methods, (Spicer & Lundstedt, 1976) sought to investigate impact of attitude and social norms in the evasion decision; the data were collected from a 1974 survey in USA.

Bird et al., (2006) Econometric results revealed that the propensity to evade taxation was reduced by increased probability of detection. Surprisingly, an increase in income reduced the propensity to comply. In regard to attitude an increase in both inequity of taxation and the number of taxpayers who evade taxes known to a taxpayer made evasion more likely. This study also revealed that the experience of taxpayer of previous audits by the income department influences the compliance rates.

2.4.3 Technological Factors and Value Added Tax Compliance

Governments today are under an increasing pressure to improve the delivery of public services in cost-effective ways. To meet this challenge for example tax authorities are turning to government led solutions like electronic tax filing (e-filing) (Amitabh et al., 2008). To date, the use of ICT is prominent in business and tax settings. Notably, tax authorities around the world are using electronic tax administration systems to interact with taxpaying public in tax collection, administration and compliance settings. Technology has influenced the way we work, play, and interact with others. The use of technology to improve the effectiveness of tax administration, expand taxpayer

services, and enhance tax compliance has come to attract increasing attention in developed and developing countries (Dowe, 2008).

In Malaysia, Ling and Nawawi (2010) carried out a survey on Integrating ICT Skills and tax software in tax education. The respondents were the tax practitioners and the study aimed at establishing the necessary skills required by taxpayers to fully utilize a tax online system. The study found that three skills are needed by a taxpayer to interact well with technology based tax system namely, spread sheet software, word-processing software and e-mail.

The findings of this study has got implications on the current study in that in analysing the effectiveness of electronic filing system, one must not ignore the mandatory skills that would be users of the system need to have. Failure to consider such skills may make the intention of the system not to be realized as confirmed by Maede (2002). He confirmed that despite the heavy investment that the Malaysian tax authority put in new online system, only 20% of the targeted taxpayers were able to use it after three years of implementation. This was mainly attributed to lack of necessary user skills like computer literacy; however, taxpayer's behaviour also played a role.

In Kenya, especially in Kenya Revenue Authority, different studies have been done on the subject of technology and tax compliance with specific reference to tax filing (Muita, 2010; Makanga 2010). Makanga (2010) did a study on the adoption of technology as a strategic tool for enhancing tax compliance in Kenya. The case study was based on Large Taxpayers which included companies with a turnover Kshs. 750 million and above, or government ministries and corporations. The objective of the study was to evaluate the role Technology would play in Kenya to enhance tax

compliance among large taxpayers. The study found that in the fast-changing business world, technology has become part and parcel of any business growth.

Either KRA or Large Taxpayers must embrace modern technology to enhance efficiency in tax compliance. Muita (2010) in her MBA thesis has also done a related study on the factors that influence adoption and use of e-filing system among Large Taxpayers in Kenya. The study examined the skills required by the users of e-filing, the technology required and the tax authority's preparedness in enhancing the adoption of tax compliance-based technology. The study found that for e-filing to effectively take off in Kenya skills, infrastructure and a conducive business environment are needed.

2.4.4 Enforcement Measures and VAT Compliance

An important property of the tax system is to generate automatic growth in fiscal revenues over time without necessarily resorting to discretionary policy or inflationary financing (Moyi and Ronge, 2006). The key claim made by advocates of the VAT is that it is a particularly effective way of raising tax revenue. Cnossen (1990) for example, argues that 'purely from a revenue point of view, VAT is probably the best tax ever invented'. Advocates have also long recognized, of course, that the VAT, like any other tax, is vulnerable to evasion and fraud, but stress distinctive features of the VAT that may make it less vulnerable than other forms of taxation (Keen & Smith, 2007).

Over the last few years, however, there has been a marked increase in concern with losses of VAT revenue through evasion and fraud. For example, Germany's current VAT revenue has recently been decreasing in spite of the recent growth in GDP. While many causes, such as changes in the legal framework and increased accounts of

business failure have been offered to explain this fact, there is significant reason to believe that tax evasion has been the most detrimental factor contributing to VAT revenue losses (Dziadkowski, 2002).The European Commission (2004), for example, reports that losses for fraud- most famously, 'carousel fraud; - have recently amounted to 10 per cent of the net VAT receipts in some member states.

A study conducted by Porcano (2013), evaluated deterrence and morale on taxation in Switzerland. In their empirical analysis, they used cross section time series data from 26 cantons over the period 1975-1995. Their enforcement technique was represented by the authoritarian procedure of the tax agency in which standard penalties and audit rates were increased. The results surprisingly showed that the probability of detection through audit was statistically significant (at the 5% level) and had a theoretically unexpected positive sign. This suggested that a higher probability of being caught through audit raised (rather than lowered) tax evasion which affected tax revenue. However, an increase in standard penalty lowered tax evasion in a statistically significant way (1%) which corresponds to the theoretical expectations. They observed that enforcement measures are not the sole contributors to increased compliance and how taxpayers view treatment from tax agency also contributed to compliance.

Slemrod, Blumenthal, and Christian (2001) studied the impact of messages sent to 1,724 randomly selected taxpayers in Minnesota as well. The message informed taxpayers that the returns they were about to file would be closely examined. The result was that those in the treatment group (individuals who received the letter) increased their average tax payments. In the same vein, Kleven et al. (2011) conducted a randomized field experiment over a representative sample of 40,000 taxpayers in Denmark. In the first stage, half of the population was randomly selected

to be audited, while the rest was deliberately not audited. In the second stage, they sent threat-of-audit letters to a random sample in the two groups. Both the audits and the letters had a significant positive effect on self-reported income. Similar results were found by Pomeranz (2013), who finds that random audit announcements are transmitted up the VAT chain and increase compliance by firms' suppliers.

Tax evasion generates billions of dollars of losses in government revenue and creates large distortions, especially in developing countries. The compliance gap in VAT has not improved since the replacement of sales tax with VAT. Tax evasion is affected among other things by enforcement policies. Such policies vary widely across countries. According to OECD (2009), the Australian Taxation Office (ATO) audits 8% of VAT registrants each year, compared to 20% for Her Majesty's Revenue and Custom (HMRC) in the United Kingdom. Also, maximum sanctions for fraudulent reports differ significantly between these two countries: penalties may reach 50% of the amount of evaded tax in Australia, against 100% in the United Kingdom. Although less public data are available, there is also evidence that tax enforcement varies across economic sectors within a given country. According to the French Court of Audit (2010), law, finance, insurance, and health services firms were almost never audited in the Rhône-Alpes-Bourgogne region between 2003 and 2007.

VAT enforcement measures are imbued in the economic models that have deterrence effects on VAT non-compliance which in effect raises VAT revenue. The economic models predict that higher penalties and audit probabilities should discourage noncompliance. Though both have a deterrence effect, their degree of impact differs with 9 higher audit probabilities probably having more impact than higher penalties (Andreoni et al, 1998; Hessing, Elffers, Robben and Webley, 1992). The results of several surveys have indicated that self-reported non-compliers are less likely than

compliers to believe that such acts would result in apprehension and punishment (Hessing, Elffers & Weigel, 1988). There has been a considerable amount of research into tax compliance over the last 25 years (Andreoni al, 1998). Many new models of the compliance process have been devised and there has been a wide range of empirical studies. However, nearly all of these studies have focused on personal income tax compliance: business tax in general and VAT compliance has received very little attention (Murray, 1995).

2.5 Summary of Literature Review

From the review of literature, it is clear to date, that existing studies reveal that tax compliance is influenced by various factors. Factors identified from the empirical studies shows that they have an influence on tax compliance. Furthermore, there exist increasing research studies exploring factors that affect tax compliance among SMEs.

However, the main objective of this study is to identify the factors that affect VAT compliance among SMEs engaged in E-commerce business. The research study is to be focused on three variables namely, tax knowledge, tax Moral and tax compliance costs. The research outlined in this study aims to address VAT gap on non-filing, nil filers, under reporting and under payment. The specific aim of the research is to gain insight into the factors that affect VAT compliance among SMEs engaged in E-commerce business due to their virtual nature, with a key focus on the businesses situated Westlands of Nairobi, Kenya. It is expected that the findings will help decision makers and particularly K.R.A gain a better understanding of SMEs engaged in E-commerce to enable them to plan, design and enforce their services.

2.6 Conceptual Framework

A conceptual framework is a structure which the researcher believes can best explain the natural progression of the phenomenon to be studied (Camp, 2001). It is linked with the concepts, empirical research and important theories used in promoting and systemizing the knowledge by the researcher (Peshkin, 1993). This study conceptualizes that value added tax compliance could be affected by tax knowledge, tax Moral, technological factor and enforcement measures.

Independent variable   **Dependent variable**
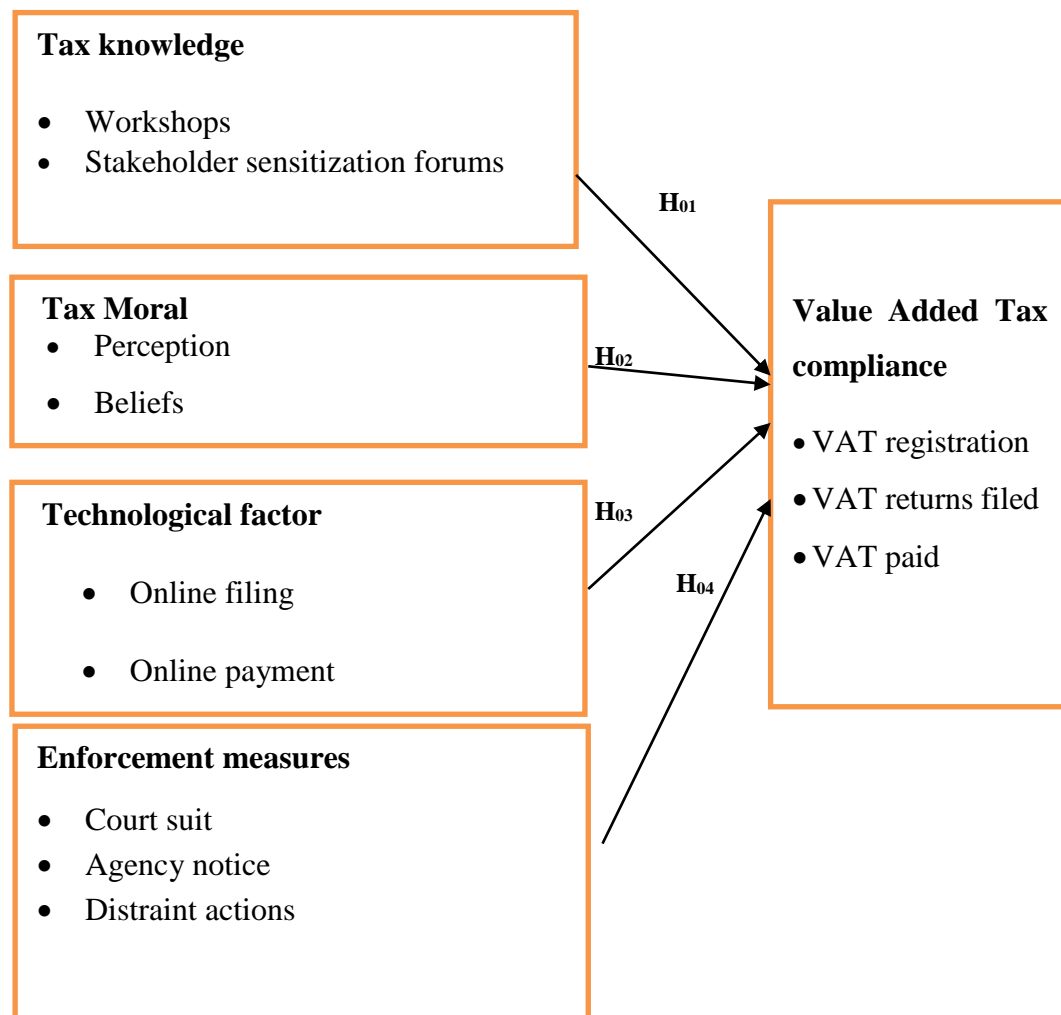
Figure 2.1: Conceptual Framework
Source: Researcher (2022)

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the research methodology that was used to carry out the study. Research methodology gives details regarding the procedures used in conducting the study.

3.2 Research Design

The purpose of a research design is to ensure that the evidence gathered enables one to answer the initial research question as unambiguously as possible and without bias (Imenda, 2014). The study adopted an explanatory design research where gathering and collection of information was through the help of questionnaires. According to Leedy and Ormrod (2013), explanatory method assesses a phenomenon by looking principally at quantities or amounts which are then analyzed using generally accepted measurement standards. Explanatory studies are described through hypotheses that specify the nature and direction of the relationship between or among variables being studied. Explanatory research design seeks to identify causal links between the factors affecting VAT compliance and the main variables in the research problem being investigated. The factors that cause VAT compliance in E-commerce businesses trading as SMEs in relation to tax knowledge, tax Moral, technological factors and enforcement measures.

3.3 Study Area

The study focused on the SMEs which are based in Westlands of Nairobi and have their operations in Westlands of Nairobi of Kenya. The study specifically targeted the SMEs Owners or Owner managers. The geographical area of Westlands of Nairobi

was identified by the researcher due to its proximity to most of E-commerce SMEs in the region.

3.4 Target Population

According to (Kothari, 2004), population refers to a group of individuals, things, elements, households that are well-defined and which are being examined. Research should have a population onto which the study's findings are generalized. The target population for this study comprised of 1,223 SMEs premised Westlands of Nairobi, Kenya, KRA (2020). The target sample data was obtained through both personal interviews and questionnaires.

3.5 Sampling Frame

A sample is defined as subject of a population that has been selected to reflect or represent characteristics of a population. Cooper and Schindler (2006) a sample frame is a set of information used to identify a sample population for statistical treatment, the sample frames include identifying information on characteristics of the individual to aid in data analysis and allow for division of frames. A sample frame is the set of source materials from which the sample is selected. The definition also includes the purpose of sampling frames which provide a means for choosing the members of the target population that are to be interviewed in the research study.

3.6 Sampling Technique and Sample Size

Samples can either be probability or non-probability samples. With probability samples, each element has a known chance of being included in the sample while non-probability samples do not allow the researcher to determine this probability (Kothari, 2004). The study adopted a systematic sampling technique in selecting respondents. A sample is a subset of the population. By studying the sample, the

researcher should be able to draw conclusions that would be generalizable to the population of interest (Sekaran, 2003). Yamane formula was used for determining the sample size for this study because it assumes a normal distribution, same for the SMEs taxpayers in relation to the parameters under study involved Value Added Tax compliance. This formula also enables the selection of a sample that represents the population, with confidence and risk levels.

The Yamane formula is;

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

Whereby;

n   represents the sample size for target population,

N   represents the population size,

e   represents the error of sampling or precision/error limit at 95% level of confidence and 5% level of precision is required (Yamane, 1967) .

A sample size is the sub-set of the large population (Cooper & Schindler, 2006). The sample size is ascertained using Yamane's (1967) formula."

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

Where:

         N = Population size

         n = sample size

         e = Margin error of the study

Sample size therefore is:

$$n = \frac{1223}{1+1223(0.05^2)} = 301 \text{ SMEs premised Westlands of Nairobi,}$$

3.7 Data Collection Instruments

Kothari, (2004) terms the questionnaires the most appropriate instrument due to its ability to collect a large amount of information in a reasonably quick span of time. According to Mugenda and Mugenda (2003), questionnaires are commonly used to obtain important information about population under study. Questionnaires were used as the major data collection instruments. A questionnaire is a research instrument consisting of a series of questions and other prompts for the purpose of gathering information from respondents. The reason for using the questionnaire as data collection instrument is because it assisted in the collection of information from the respondents without affecting their schedules in their jobs and answers the questions at their own free time. The use of questionnaires reaches many respondents in a short period and researcher can allow more time for research participants to fill and respond to questions. Furthermore, questionnaires guarantee confidentiality of the respondents, as they are not required to indicate their identities unless specified.

3.8 Data Collection Procedure

Questionnaire is a tool for primary data collection in which respondents provide written answers to written questions (Albuquerque et al., 2014). The questionnaire was structured with close-ended questions and was hand delivered to the respondents for a period of two weeks. The questions were clearly phrased to make clear dimensions along which the respondents responded. Information was obtained from the taxpayers using questionnaires to generate primary data. The questionnaire

comprised closed -ended questions. This was mainly through administration of pre-
tested structured Likert-scale questionnaires in the field.

To ensure that the questions were effective a pilot test was conducted and improves
on the questionnaire.

3.9 Pilot Study

The pretest sample should be between 1% and 10% (Mugenda & Mugenda, 2003). In
this study, the questionnaire was piloted on 10% of the population to ensure that the
instrument is relevant and reliable. To ensure that the research instruments are able to
capture what they sought to answer, the researcher undertook a pilot study involving
30 respondents who in this case are small and medium enterprise in Nairobi central
business district.

3.9.1 Validity of Research Instrument

Validity is the degree to which an instrument measures what it is supposed to measure
(Kothari, 2004). Therefore, the term refers to the extent to which an instrument asks
the right questions in terms of accuracy. The content validity of the research
instrument for this study will be determined through piloting, where the responses of
the subjects are to be checked against the research objectives. For a research
instrument to be considered valid, the content selected and included in the
questionnaire must be relevant to the variable being investigated.

The researcher performed the pilot test with a randomly selected sample of three E-
commerce businesses premised Westlands of Nairobi County. Content validity of the
instrument was tested using a research expert's opinion, who is the research
supervisor. The research expert independently judged the validity of the items in the
questionnaire in relation to research objectives.

3.9.2 Reliability of Research Instrument

Reliability of an instrument is the measure of the degree to which a research instrument yields consistent results or data after repeated trials Cooper and Schindler (2006). Reliability refers to the measure of degree to which an instrument yields consistent measurement across time and across items in the instrument (Sekaran, 2010). The research took cognizance of test of equivalence (consistency of the results by different investigators or similar tests at the same time) and internal consistency (the measurement of the concept is consistent in all parts of the test). Reliability and validity tests are major indicators of the quality of the data collection instrument. According to Zikmund et al., (2010), a measure is reliable when different attempts of measuring something converge on the same result. Reliability is therefore an indicator of an instrument's internal consistency. The Cronbach's alpha coefficient (α) is the most applied estimate of a multiple-item scale's reliability. According to Nunnally (1978), there are many factors that can prevent measurements from being repeated perfectly. Cronbach's alpha was used to evaluate the set of scales items and compare the two scores obtained, Nunnally (1978) argued that a Cronbach's alpha value of 0.7 and above, proves that the research instrument used is reliable. This study adopted a coefficient of 0.7 as the benchmark for reliability.

3.10 Diagnostic Tests

In scientific research, diagnostic tests are usually carried out to empirically determine the quantitative effect of study design shortcomings of estimates of diagnostic accuracy (Lijmer *et al*., 1999). In this study, several diagnostic tests were done before data analysis was conducted to authenticate the accuracy of the research findings. The tests included normality and multicollinearity tests.

3.10.1 Normality Test

Multiple regression assumes that the data under test is normally distributed (Osborne & Waters, 2014). It is assumed that errors are normally distributed, and that a plot of the values of residuals was approximate a normal curve (Keith, 2006). Non-normally distributed variables can distort relationships and significance tests (Osborne & Waters, 2014). There are several ways of testing normality such as Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson Darling. Shapiro-Wilk test was used as it is the most powerful normality test (Razali & Wah, 2011). The results of the variables above 0.05 ($p > 0.05$) confirms data normality.

3.10.2 Multicollinearity Test

Multicollinearity is point where there is high correlation among the independent variables (Keith, 2006). "The researcher is able to interpret regression coefficients as the effects of the independent variables when there is low collinearity (Keith,2006). In order to test for multicollinearity, variance inflation factor (VIF) was computed using statistical packages for social science (SPSS). Multicollinearity increases the standard errors of the coefficients and thus makes some variables statistically not significant while they should otherwise be significant (Osborne and Waters, 2014). Bowerman and Connell (2006) stated that lower levels of VIF are more better, while higher levels of VIF are known to affect adversely the result associated with a multiple regression analysis. The authors argued that VIF above 2.50 start to indicate relatively high levels of multicollinearity.

3.10.3 Heteroscedasticity

The problem of heteroscedasticity occurs when the residuals of the regression are heteroskedastic. That is, the variance of residuals is not constant for all observations. In such case the standard OLS estimators no longer produce minimum variance. The

standard error of the coefficients gives inaccurate estimates. In the presence of heteroscedasticity, the estimated parameters may remain consistent but inefficient. In order to test for heteroscedasticity, the study performed Breusch Pagan (1979) test.

3.10.4 Autocorrelation

The Durbin-Watson test was conducted to indicate the level of autocorrelation. The statistic's value ranges from 0 to 4. Non-autocorrelation is shown by a number near 2; positive autocorrelation is indicated by a value near 0; and negative autocorrelation between independent variables is indicated by a value near 4, Brooks, (2010). If however the error terms are correlated it creates the problem of autocorrelation or serial correlation, which leads to make the standard error biased. Tests such as DurbinWatson (DW) is the simplest and commonly used to tests autocorrelation.

3.11 Data Analysis and Presentation

Saunders, Thornhill, and Lewis (2009) stated that the data collected should be processed to obtain more meaningful information. The collected data was screened for accuracy, consistency, completeness and then presented in the form of percentages, pie charts and tables. Regression analysis was carried out by the researcher to establish how the four variables affect VAT compliance in E-commerce businesses trading as SMEs in Kenya.

The regression model of the study is as per below:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \epsilon$$

Where;

Y = VAT Compliance

β_0 = Constant (Coefficient of intercept)

X_1 = Tax Knowledge

X_2 = Tax Moral

X_3 = Technological factors

X_4 = Enforcement measures

€ = Error Term

$\beta_{1\ldots\ldots}$ B_4 = Regression coefficient of the 4 variables

3.12 Measurement of Variables

Measurement of variables facilitates reduction of abstract notions of construct into observable behavior or characteristics so that they can be measured (Sekaran, 2012). VAT compliance was operationalized using sources of tax knowledge, tax Moral, technological factors and enforcement measures.

Table 3.1: Measurement of variables

Variables	Source/Authors	Data collection instrument	Measurement scale	
Independent variable				
Tax knowledge	Redae (2018)	Questionnaire	5-point scale	likert
Tax Moral	(Hoffman, 2019).	Questionnaire	5-point scale	likert
Technological factors	(Dowe, 2018).	Questionnaire	5-point scale	likert
Enforcement measures	(Ali et al., 2017).	Questionnaire	5-point scale	likert
Dependent Variable				
VAT Compliance	(KRA, 2020).	Questionnaire	5-point scale	likert

3.13 Ethical Considerations

The main aim of this study is purely for academia purposes. The study ensured knowledgeable consent for the participants before involving them in the research.

The study also ensured the right of access to data for participants and duty of confidentiality from any third parties. Ethics refers to the moral rules and guidelines that control the behavior of people in social affairs (Bennett *et al.,* 2018). In line with this, the research assistant obtained an informed consent from the respondents before undertaking to collect data. The research assistant always ensured high level of confidentiality by using codes on the data instruments thus names of respondents are not written and anonymity of the identity of the respondents safeguarded using numbers. The research assistant incorporated integrity, honesty and ensure confidentiality of data provided by the participants and their anonymity.

CHAPTER FOUR

ANALYSIS, INTERPRETATION AND PRESENTATION OF FINDINGS

4.1 Introduction

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

4.2 Response Rate

The researcher distributed 301 questionnaires out of which 259 were received, 8 questionnaires were rejected due to improper incompletion. Thus 251 questionnaires were accepted as correctly filled which represent a response rate of 83%. As indicated by Mugenda and Mugenda (2003), in his studies, 50% of reaction rate of above 70% rate, is very good. This means that a response of 83% was very good for data analysis. Based on these assertions, this implies that the response rate for this study was adequate. Figure 4.1 illustrate the level of response rate.
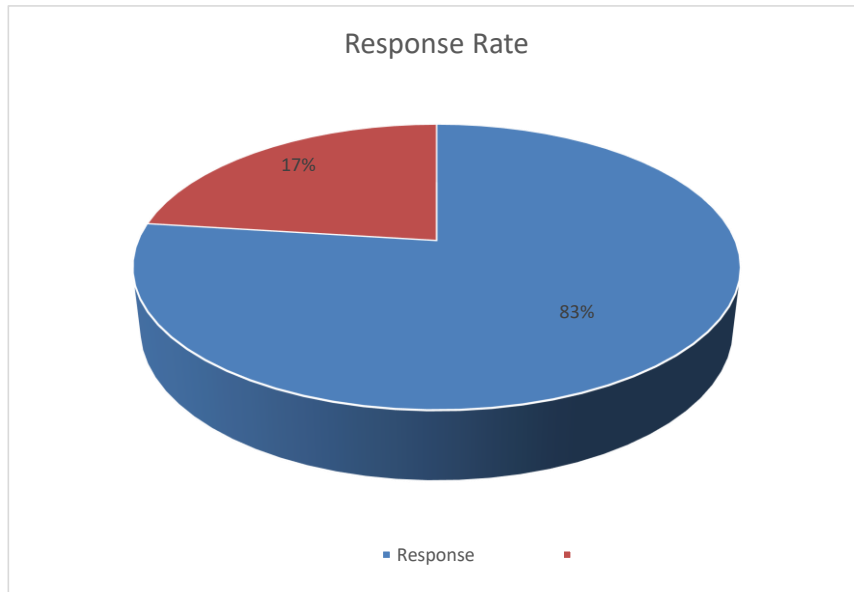
Figure 4.1: Response Rate
Survey Data (2022)

4.3 Reliability Test

Zikmund (2011) cited that a reliable study is consequent and trustworthy if the measures

yield the same results on other occasions, if similar observations be reached by other

observers and if there is transparency in how sense is made from the raw data. To test

for reliability, the researcher used the internal consistency technique by employing the

Cronbach Alpha test for testing the research tools. In the Table 4.1 show the results

were indicate that tax knowledge had a reliability of (0.845), tax Moral (0.783),

technological factors (0.901), enforcement measures (0.898) and lastly VAT

compliance (0.757). The highest instrument had Cronbach Alpha value of 0.901 while

the lowest had a reliability of 0.757 this implied that all instruments of the study were

reliable for measurement.

Cooper and Schindler (2013) argue that a Cranach's Alpha value equal or great than

0.5 is regarded to be an indication of reliability. While Zikmund (2011) proposed that

a coefficient scale between 0.80 and 0.95 are considered to have very good reliability, 0.70 and 0.80 are considered to have good reliability, 0.50 and 0.70 indicates fair reliability and coefficient 0.5 the scale has poor reliability.

Table 4.1: Test of Reliability

	Number of Items	Cronbach Alpha score	Conclusion
Tax knowledge	5	0.845	Reliable
Tax Moral	5	0.783	Reliable
Technological factors	5	0.901	Reliable
Enforcement measures	4	0.898	Reliable
VAT Compliance	3	0.757	Reliable

Source: Survey Data (2022)

4.3.1 Factor Analysis

The factor analysis matrix gives loading that is the correlation between each variable and each factor. A factor is an underlying dimension that account for several observed variables (Mugenda, 2002). The cells result from the Table 4.2 reveal factor loadings which gives values over 0.5 and none is more than 0.964 implying linear relationship, interval or near interval data lack of high multi-collinearity. Kervin (2009) suggested that any factor loading below 0.4 is weak and those between 0.5 and 0.6 are moderate. While values which are less than 0.3, the results of the factor analysis probably will not be very useful in the research. Thus, from results of the all the questionnaire was able to meet a significant value in the research findings.

Table 4.2 Factor Analysis

	TK	TM	TF	EM
Tax Knowledge				
I have information about VAT….	0.748			
I have attended seminars……	0.901			
Payment procedures are complex…	0.851			
Value Added Tax is easily accessible…..	0.706			
I am able to correctly calculate…	0.782			
Technological Factors				
Tax system has reduced cost…		0.750		
Online remittances of taxes are easy...		0.759		
Payment of taxes through mobile money...		0.834		
Adoption of Electronic Tax Register...		0.993		
Electronic tax system is simple…		0.964		
Tax records from itax is vital….		0.727		
Tax Moral				
My contribution does not count…			0.974	
Tax revenue is often lost due to corruption…			0.818	
The process of filing tax returns is too tedious…			0.735	
I trust the government with my tax…			0.887	
My faith often encourages me to pay taxes…			0.836	
Enforcement Measures				
Pin deactivated by the KRA for non-compliance…				0.885
KRA regularly uses court suit…				0.629
Distrain actions by tax officers…				0.829
Agency notices issued by KRA…				0.901

Extraction Method: Principal Component Analysis
Survey Data (2022)

4.4 Demographic Characteristics

This section provides information that posits the basic characteristics such as gender, age and level of education of respondents. The study established the gender of the respondents. Results revealed that 54.6% were female while 45.4% were male. The results demonstrated that Westlands of Nairobi was gender diversified since the number of female respondents is almost equal to that of male respondents.

Result on age composition shown that most were between 18-24 years at 5.2%, followed by 25-34years at 26.7%. Respondents of age 35.44 years had 31.1%. While 45-54 years had 24.3%. Lastly, respondents of above 55 years had 12.7%. This

implies that most trader were seasoned businesspersons. The results shows that 3.2% of the respondents were primary leavers, followed by 18.3% who had attained their secondary school certificate, 41.8% were diploma holders; lastly 36.7% had bachelor's degree. The study shows majority of traders were diploma holders and these signify the knowledge of Value Added Tax.

Table 4.2: Demographic Characteristics

Characteristics		Percent (%)
Gender	Male	45.4
	Female	54.6
	Total	**100**
Age	18-24yrs	5.2
	25-34yrs	26.7
	35-44yrs	31.1
	45-54yrs	24.3
	Above 55yrs	12.7
	Total	**100**
Level of Education	Primary	3.2
	Secondary	18.3
	diploma	41.8
	Degree	36.7
	Total	**100**

Survey Data (2022)

4.5 Descriptive Statistics

4.5.1 Tax knowledge

Table 4.3 illustrate I have information about VAT legislation and VAT procedures with a (mean=3.35, standard deviation= 0.816). I have attended seminars on Value Added Tax matters with a (mean=3.42, standard deviation (= 1.281). VAT filing and payment procedures are complex with a (mean=3.88, standard deviation= 0.782). In Kenya, information about Value Added Tax is easily accessible with a (mean=4.40, standard deviation= 1.674). I am able to correctly calculate the amount of VAT

payable based on the information that is available with a (mean=2.84, standard deviation= 1.384).

Table 4.3: Tax Knowledge

5 = Strongly Agree   **4 =** Agree   **3** = Neutral   **2** = Disagree   **1**= Strongly Disagree

	Mean	Std. Dev	Skewness	Kurtosis
I have information about VAT legislation and VAT procedures	3.35	0.816	-0.030	0.221
I have attended seminars on Value Added Tax matters	3.42	1.281	-0.509	-0.960
VAT filing and payment procedures are complex	3.88	0.782	-0.277	-1.360
In Kenya, information about Value Added Tax is easily accessible	4.40	0.674	-1.154	1.975
I am able to correctly calculate the amount of VAT payable based on the information that is available	2.84	1.384	-0.024	-1.403

Source: Researcher (2022)

4.5.2 Tax Moral

Table 4.4 illustrate the When I pay taxes, my contribution does not count due to misappropriation of tax revenue by the government with a (mean=3.51, standard deviation= 1.474). I feel that tax revenue is often lost due to corruption and that discourages me from being compliant with a (mean=3.46, standard deviation= 1.185). I think the process of filing tax returns is too tedious, and that often discourages me with a (mean=3.62, standard deviation= 1.334). I trust the government with my tax contributions, and this encourages me to effectively comply with all tax requirements with a (mean=3.22, standard deviation = 1.238). My faith often encourages me to pay all my taxes as provided for in tax laws because it is the right thing to do with a (mean=3.82, standard deviation= 1.346).

Table 4.4: Tax Moral

5 = Strongly Agree 4 = Agree 3 = Neutral 2 = Disagree 1= Strongly Disagree

	Mean	Std. Dev	Skewness	Kurtosis
When I pay taxes, my contribution does not count due to misappropriation of tax revenue by the government	3.51	1.474	-0.602	-1.151
Feel that tax revenue is often lost due to corruption and that discourages me from being compliant.	3.46	1.185	-0. 193	-0.992
I think the process of filing tax returns is too tedious, and that often discourages me.	3.62	1.334	-0.077	-1.792
I trust the government with my tax contributions, and this encourages me to effectively comply with all tax requirements.	3.22	1.238	-0.090	-1.005
My faith often encourages me to pay all my taxes as provided for in tax laws because it is the right thing to do.	3.82	1.346	-0.988	-0.350

Source: Researcher (2022)

4.5.3 Technological Factors

Table 4.5 illustrate Use of an internet enabled tax system has reduced cost of compliance hence motivating me to remain compliant with a (mean=3.69, standard deviation= 0.764). Online remittances of taxes are easy to track thus I can tell when taxes are due with a (mean=3.52, standard deviation= 0.875). Payment of taxes through mobile money has improved my VAT compliance with a (mean=4.07, standard deviation= 0.657). Adoption of Electronic Tax Register (ETR) has simplified VAT accounting, and this improves my compliance with a (mean=3.43, standard deviation= 0.927). Electronic tax system is simple to use, and this motivates me to comply with tax regulations with a (mean=3.81, standard deviation= 0.705).

Table 4.5: Technological factors

5 = Strongly Agree 4 = Agree 3 = Neutral 2 = Disagree 1= Strongly Disagree

	Mean	Std. Dev	Skewness	Kurtosis
Use of an internet enabled tax system has reduced cost of compliance hence motivating me to remain compliant	3.69	0.764	0.458	-0.922
Online remittances of taxes are easy to track thus I can tell when taxes are due.	3.52	0.875	-0.133	-0.663
Payment of taxes through mobile money has improved my VAT compliance.	4.07	0. 657	-0. 071	-0.673
Adoption of Electronic Tax Register (ETR) has simplified VAT accounting, and this improves my compliance.	3.43	0.9027	0.026	-0.681
Electronic tax system is simple to use, and this motivates me to comply with tax regulations.	3.81	0.705	0.123	-0.660

Source: Researcher (2022)

4.5.4 Enforcement measures

Table 4.6 illustrate Pin deactivated by the KRA for non-compliance is common method used by KRA to enforce compliance had (mean=4.00, standard deviation= 0.686). KRA regularly uses court suit to SMEs which break the VAT tax laws and regulations had (mean=3.97, standard deviation= 0.864). Distrain actions by tax officers to SMEs help in deterring tax evasion had (mean=4.09, standard deviation= 0.691). Agency notices issued by KRA to the SMEs help in deterring tax evasion had (mean=3.76, standard deviation= 0.859).

Table 4.6: Enforcement measures

5 = Strongly Agree **4 =** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	Std. Dev	Skewness	Kurtosis
Pin deactivated by the KRA for non-compliance is common method used by KRA to enforce compliance	4.00	0.686	-0.176	-0.322
KRA regularly uses court suit to SMEs which break the VAT tax laws and regulations	3.97	0.864	-0.445	-0.118
Distrain actions by tax officers to SMEs help in deterring tax evasion	4.09	0. 691	-0. 205	-0.585
Agency notices issued by KRA to the SMEs help in deterring tax evasion	3.76	0.859	-0.023	-0.846

Source: Researcher (2022)

4.5.5 Value Added Tax Compliance

Table 4.7 illustrate, I have registered for Value Added Tax with a (mean=3.66, standard deviation= 0.847). I file Value Added Tax returns on time with a (mean=3.98, standard deviation= 0.974) I pay the correct amount of Value Added Tax with. (Mean=3.36, standard deviation= 1.150).

Table 4.7: Value Added Tax Compliance

5 = Strongly Agree **4 =** Agree **3** = Neutral **2** = Disagree **1**= Strongly Disagree

	Mean	Std. Dev	Skewness	Kurtosis
I have registered for Value Added Tax	3.66	0. 847	-0.215	-0.176
I file Value Added Tax returns on time	3.98	0.974	-0.528	-0.674
I pay the correct amount of Value Added Tax	3.36	1.150	-0.180	-0.940
	3.69			

Source: Researcher (2022)

4.6 Assumptions of Regression

Prior to performing the inferential analyses, statistical assumptions were tested to establish if the data met the normality, linearity, homogeneity of variance and

collinearity assumptions, and it was based on these results, that tests of associations and prediction were performed.

4.6.1 Test of Normality

The Shapiro-Wilk test was employed to test for normality. This test establishes the extent of normality of the data by detecting existence of skewness or kurtosis or both. Shapiro-Wilk statistic ranges from zero to one with figures higher than 0.05 indicating that the data is normal (De Vos, Strydom, Fouche & Delport, 2011).

Normality was tested using the Shapiro-Wilk test and the results showed that all the variables were above 0.05 (p > 0.05) hence confirming data normality. Normality assumes that the sampling distribution of the mean is normal. P-values for the Shapiro-Wilk tests were 0.73 for tax knowledge, 0.61 for tax Moral, 0.68 for technological factors, 0.59 for enforcement measures and 0.80 for value added tax compliance. Since all the p-values were greater that the cutoff point of 0.05 at 95% confidence level, this confirms that that data was collected from a population which is normally distributed.

Table 4.8: Tests of Normality

	Shapiro-Wilk	
	Statistic	**Sig**
Tax knowledge	0.854	0.73
Tax Moral	0.990	0.61
Technological factors	0.975	0.68
Enforcement measures	0.872	0.59
VAT compliance	0.760	0.80

Lilliefors Significance Correction
Source: Researcher (2022)

4.6.2 Multicollinearity Test

Multicollinearity is the undesirable situation where the correlation among the independent are strong. It increases the standard errors of the coefficients using

collinearity statistics to get tolerance and variance inflation factor (VIF). To test for multicollinearity, VIF was computed using statistical packages for social science (SPSS). Multicollinearity increases the standard errors of the coefficients and thus makes some variables statistically not significant while they should otherwise be significant (Osborne and Waters, 2014).

Tolerance is the amount of variance in independent variable that that is not explained by the other independent variable. Bowerman and Connell (2006) stated that lower levels of VIF are better while higher levels of VIF are known to affect adversely the result associated with a multiple regression analysis. The authors argued that VIF above 2.50 start to indicate relatively high levels of multicollinearity. The Variance Inflation Factor test in the study regression model was 1.381 for tax knowledge, 1.250 for tax Moral, 1.899 for technological factors and 1.171 for enforcement measures. These values were lower than the 2.5 level; therefore, multicollinearity was not a problem on this analysis. Thus, the study findings were able to fulfill the threshold as shown in the table 4.9.

Table 4.9: Multicollinearity Test

	Collinearity Statistics	
(Constant)	**Tolerance**	**VIF**
Tax knowledge	0.900	1.381
Tax Moral	0.895	1.250
Technological factors	0.932	1.899
Enforcement measures	0.848	1.171

Dependent Variable: Valued Tax Compliance

Source: Researcher (2022)

4.6.3 Homoscedasticity test

Homoscedasticity means that the variance or spread of errors from the regression line is constant. According to Williams (2015), if error terms do not have constant

variance, they are said to be Heteroscedasticity, on the other side, when the variance of the error term is constant, it is called homoscedasticity. The assumption of linear regression is that the spread of the residual or the error term is constant and if this assumption is violated, the statistical results may not be trustworthy due to biased coefficients. Breusch/Pagan test was conducted, and the results shows F-statistic of 2.20147 p value >0.05. The test results concluded that the assumption for homoscedasticity is not violated.

Table 4.10 Homoscedasticity test

F-statistic	2.20147	Prob. F	0.3174

4.6.4 Autocorrelation test

This test was conducted to check whether the values of the residuals are independent and that was to ensure that the observations are independent from one another and uncorrelated. Marshall (2018) explained that The Durbin-Watson test was conducted to indicate the level of autocorrelation. The statistic's value ranges from 0 to 4. Non-autocorrelation is shown by a number near 2; positive autocorrelation is indicated by a value near 0; and negative autocorrelation between independent variables is indicated by a value near 4. Results from the Durbin Watson test showed the Durbin Watson result of 2.1022 which is between 1.5 and 2.5 thus this indicated no autocorrelation exists in the data set.

Numbers between 1.5 and 2.5 indicates no autocorrelation.

Table 4.11 Durbin Watson test

Model	Durbin-Watson
1	2.1022

4.7 Inferential Analysis

The study performed Pearson correlation analyses to assess both the respective strengths and direction of relationships among the independent variables and between the independent variables and dependent variables. The variables were computed with the aid of the Statistical Package for Socials Sciences. Multiple regression analysis was also conducted to determine the effect of the various independent variables on the dependent variable.

4.7.1 Correlation Analysis for Composite Variables

Table 4.10 presents the Pearson correlations for the relationships between the independent variables including tax knowledge, tax Moral, technological factors, enforcement measures and VAT tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. This formed the dependent variable. From the findings tax knowledge is positively correlated with VAT compliance (r= 0.029), tax Moral is positively correlated with VAT compliance (r= 0.490), technological factors are positively correlated with VAT compliance (r= 0.409), enforcement measures had the positive correlation with VAT compliance (r= 0.493) as shown in table 4.12.

Table 4.12: Correlation Analysis

		Tax knowledge	Technology factor	Tax Moral	Enforcement measures	VAT compliance
Tax knowledge	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	251				
Technology factor	Pearson Correlation	.340**	1			
	Sig. (2-tailed)	.000				
	N	251	251			
Tax Moral	Pearson Correlation	.423**	.592**	1		
	Sig. (2-tailed)	.000	.000			
	N	251	251	251		
Enforcement measures	Pearson Correlation	.344**	.634**	.679**	1	
	Sig. (2-tailed)	.000	.000	.000		
	N	251	251	251	251	
VAT compliance	Pearson Correlation	.029	.409**	.490**	.493**	1
	Sig. (2-tailed)	.642	.000	.000	.000	
	N	251	251	251	251	251

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

Source: Research Data, (2022)

4.8 Regression Analysis

In order to test how well the model works in explaining the relationship between tax knowledge, tax Moral, technological factors and enforcement measures on value added tax compliance regression analysis was conducted.

4.8.1 Model Summary

Table 4.13: Model Summary for independent and dependent variables

					Model Summary				
				Std. Error		Change Statistics			
		R	Adjusted	of the	R Square	F			Sig. F
Model	R	Square	R Square	Estimate	Change	Change	df1	df2	Change
1	.613[a]	.375	.365	.60914	.375	36.975	4	246	.000

a. Predictors: (Constant), tax knowledge, tax Moral, technological factors and enforcement measures
b. Dependent Variable: VAT Compliance

From the model summary, the R square value in Table 4.13 is 0.375 which clearly suggests that there is a strong relationship tax knowledge, tax Moral, technological factors and enforcement measures. Table 4.9 shows that adjusted R-Square value (coefficient of determination) is 0.365, which indicates that the independent variables

(tax knowledge, tax Moral, technological factors and enforcement measures share a variation of 36.5% of value added tax compliance. This means that 63.5% of value added tax compliance is influenced by other factors apart from the considered research variables.

4.8.2 Analysis of Variance

The overall model significance was presented using the ANOVA test table. The results in Table 4.14 below showed that the overall model was a good fit since (F-value=36.975 and p-value=0.000<0.05). The findings there imply that all independent variables were statistically significant in explaining Value Added Tax Compliance in Kenya. ANOVA was used to test whether the regression analysis model used is fit or the relationship of the variable just occurred by chance.

Significance of F ratio is used to determine whether model used was fit or not. If the F ratio is significant the model used is considered fit and vice versa. A P-value of less than 0.05 indicates that the F statistics is high and that the null hypothesis of independent needs to be rejected since it's not true. In this case the F ratio (F=36.975, P=.000[b]) was found to be significant hence the model used for analysis was fit.

Table 4.14: ANOVA[a]

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	54.880	4	13.720	36.975	.000[b]
	Residual	91.280	246	.371		
	Total	146.159	250			

a. Dependent Variable: VAT Compliance

b. Predictors: (Constant), tax knowledge, tax Moral, technological factors and enforcement measures

4.8.3 Regression Coefficients

The regression coefficient table 4.15 below showed all the coefficients of the predictor variables. The coefficient value for tax knowledge is -0.220, so we expect a 0.220 unit decrease in the value added tax compliance holding all other variables constant. The coefficient for tax Moral   is 0.449 so for every unit increase in tax Moral, we expect 0.449-point increase in value added tax compliance. For technological factors, is represented by a coefficient of 0.075, meaning for every increase in technological factors, we expect a 0.075-unit increase in value added tax compliance is predicted holding all other variables constant. The coefficient for enforcement measures is 0.221, meaning that we expect 0.391-unit increase in value added tax compliance is predicted al other variables constant.

Table 4.15: Coefficients of Overall Regression Model

		Unstandardized Coefficients		Standardized Coefficients		
Model		B	Std. Error	Beta	T	Sig.
1	(Constant)	1.967	.262		7.499	.000
	Tax Knowledge	-.240	.061	-.220	-3.916	.000
	Technology factor	.080	.077	.075	1.035	.302
	Tax Moral	.426	.070	.449	6.079	.000
	Enforcement measures	.214	.072	.221	2.963	.003

a. Dependent Variable: VAT Compliance
Source: Researcher (2022)

Régression Equation

From results on table 4.15 the following regression equation was obtained:

Y= 1.967 **-** .240**X_1** +.080**X_2** + .426**X_3** + **.**214**X_4** were significant with p–value of 0,000, 0.302, 0.000, 0.003 respectively.

Whereby:

Y = Value added Tax Compliance

$\beta_0 = $ is the constant

$X_1 = $ tax knowledge

$X_2 = $ tax Moral

$X_3 = $ technological factors

$X_4 = $ enforcement measures

$\varepsilon = $ error term

$\beta_1 \ \beta_2 \ \beta_3 \text{ and } \beta_4 = $ regression equation coefficient

4.8.2 Test of Hypotheses

The first hypothesis H_{01} stated that Tax knowledge has no significant effect on Value Added Tax Compliance among e-commerce small and medium enterprises in Westlands Nairobi County. The results on Table 4.16 reveal that the **p** value was less than 0.05, $\rho=0.000$ which implies that relationship was statistically significant therefore this hypothesis was rejected. Tax knowledge thus has a positive effect on value added tax compliance

The second hypothesis H_{02} stated that Tax Moral has no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. The results on Table 4.16 reveal that the p value was less than 0.05, $\rho=0.000$ which implies that relationship was statistically significant therefore this hypothesis was rejected. Tax Moral thus has a positive effect on value added tax compliance

The third hypothesis H_{03} stated that Technological factors have no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. The results on Table 4.16 reveal that the p value was greater than 0.05, $\rho=0.302$ which implies that relationship was not statistically

significant therefore this hypothesis was accepted. Technological factors have no positive effect on value added tax compliance

The fourth hypothesis **H04** stated that Enforcement measures have no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County.The results on Table 4.16 reveal that the p value was less than 0.05, $\rho=0.000$ which implies that relationship was statistically significant therefore this hypothesis was rejected. Enforcement measures thus has a positive effect on value added tax compliance

Table 4.16: Summary of Hypothesis Testing

No:	Hypothesis	P-Value	Decision
H01	Tax knowledge has no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County Tax	.000<0.05	Reject
H02	Tax Moral has no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County	.000<0.05	Reject
H03	Technological factors have no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County	.302>0.05	Accept
H04	Enforcement measures have no significant effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County	.003<0.05	Reject

Source: Researcher (2022)

4.9 Discussion of the Findings

This chapter presents discussion of the results of various tests carried out on the study. The results of each objective in this study are discussed.

4.9.1 Effect of tax knowledge on Value added Tax compliance

The first objective of the study was to establish the effect of Tax knowledge on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. From the findings of the study shows that the relationship between tax knowledge and VAT compliance was statistically significant at a p value of 0.000, which is less than 0.05 the convectional probability significance level, p = 0.000 < 0.05. It agrees with the study done by (Saad, 2014) showed that taxpayers seemed to have a lack of knowledge on the technical aspects of the income tax system. Thus, tax knowledge is essential as it may affect taxpayers' understanding and indirectly may increase voluntary compliances and therefore, may cause a decline in tax evasion. The tax compliance literature does not present a single definition of "tax knowledge" but instead uses it in many different contexts. (Palil, 2005) supports the notion that tax knowledge is not a clear construct and Udin (2015) strongly advocates that there is a need for an acceptable and specific measurement of individual taxpayer's knowledge variables to provide meaningful and comparable research findings.

4.9.2 Effect of tax Moral on Value added Tax compliance

The second objective of the study was to determine the effect of Tax Moral on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. From the findings of the study shows that the relationship between tax Moral and VAT compliance was statistically significant at a p value of 0.000, which is less than 0.05 the convectional probability significance level, p = 0.000 < 0.05. It findings were in agreement with Konrad and Qari (2012) on social norms are related to socially shared beliefs on how members of a group should behave. This indicates that tax compliance is mostly influenced by the people around

us such as friends, colleagues, or neighbours. Another important factor for tax morale is the trust in authorities where authorities are represented by public institutions where the perception of fairness and efficiency play an important role.

Alm (2006) states that the trust in public leadership and public administration would contribute to more voluntary tax compliance. Doerrenberg and Peichl (2013) states that taxpayers in countries with a more progressive tax rate system are more likely to exhibit higher tax morale and will contribute to high tax compliance. In an experimental study, (Feld & Bruno, 2002) found that tax compliance is higher on average in an endogenous fine treatment in which subjects are allowed to approve or reject the proposal of a fine as compared to an exogenous fine treatment where the fine is imposed by the experimenter. The main explanation why people show higher tax morale if they are allowed to vote on a fine is legitimacy.

4.9.3 Effect of technological factors on Value added Tax compliance

The third objective of the study was to establish the effect of Technological factors on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. From the findings of the study shows that the relationship between technological factors and VAT compliance was not statistically significant at a p value of 0.302, which is greater than 0.05 the convectional probability significance level, $p = 0.302 > 0.05$. This is contrary to the study done by Makanga (2010) did a study on the adoption of technology as a strategic tool for enhancing tax compliance in Kenya. The case study was based on Large Taxpayers which included companies with a turnover Kshs. 750 million and above, or government ministries and corporations. The objective of the study was to evaluate the role Technology would play in Kenya to enhance tax compliance among large taxpayers. The study found that

in the fast-changing business world, technology has become part and parcel of any business growth.

In Malaysia, Ling and Nawawi (2010) carried out a survey on Integrating ICT Skills and tax software in tax education. The respondents were the tax practitioners and the study aimed at establishing the necessary skills required by taxpayers to fully utilize a tax online system. The study found that three skills are needed by a taxpayer to interact well with technology based tax system namely, spread sheet software, word-processing software and e-mail.

The findings of this study have got implications on the current study in that in analysing the effectiveness of electronic filing system, one must not ignore the mandatory skills that would be users of the system need to have. Failure to consider such skills may make the intention of the system not to be realized as confirmed by Maede (2002). He confirmed that despite the heavy investment that the Malaysian tax authority put in new online system, only 20% of the targeted taxpayers were able to use it after three years of implementation. This was mainly attributed to lack of necessary user skills like computer literacy; however, taxpayer's behaviour also played a role.

4.9.4 Effect of enforcement measures on Value added Tax compliance

The fourth objective of the study was to determine the effect of enforcement measures on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. From the findings of the study shows that the relationship between enforcement measure and VAT compliance was statistically significant at a p value of 0.003, which is less than 0.05 the convectional probability significance level, $p = 0.003 < 0.05$. The findings concurred with the study done by

Kleven *et al*. (2011) conducted a randomized field experiment over a representative sample of 40,000 taxpayers in Denmark. In the first stage, half of the population was randomly selected to be audited, while the rest was deliberately not audited. In the second stage, they sent threat-of-audit letters to a random sample in the two groups. Both the audits and the letters had a significant positive effect on self-reported income.

The economic models predict that higher penalties and audit probabilities should discourage noncompliance. Though both have a deterrence effect, their degree of impact differs with 9 higher audit probabilities probably having more impact than higher penalties (Andreoni et al, 1998; Hessing, Elffers, Robben and Webley, 1992). The results of several surveys have indicated that self-reported non-compliers are less likely than compliers to believe that such acts would result in apprehension and punishment (Hessing, Elffers & Weigel, 1988).

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter provides a discussion on the thesis summary based on the earlier established research hypothesis. It further discusses major study findings, conclusions and eventually provides directions in the form of recommendations.

5.2 Summary of Findings

The overall objective of this study was to establish factors affecting value-added tax compliance among E-commerce small and medium enterprises in Westlands Nairobi County, Kenya. In particular the study sought to establish the effect of Tax knowledge on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County.To determine the effect of Tax Moral on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. To establish the effect of Technological factors on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County.To determine the effect of enforcement measures on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County

5.2.1 Specific Objective 1: Influence of Tax knowledge on Value Added Tax compliance

The first objective was to establish the effect of Tax knowledge on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. Correlation analysis showed that tax knowledge and value added tax compliance are positively and significantly associated. Also, the Regression analysis

shown there was a positive significant linear relationship between tax knowledge and value added tax compliance with evidence of (β_1) of 0.220 and (p=0.000<0.05).

5.2.2 Specific Objective 2: Influence of tax Moral on Value Added Tax compliance

The second objective was to determine the effect of Tax Moral on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. Correlation analysis showed that tax Moral and value added tax compliance are positively and significantly associated. Also, the Regression analysis shown there was a positive significant linear relationship between tax Moral and value added tax compliance with evidence of (β_2) of 0.449 and (p=0.000<0.05).

5.2.3 Specific Objective 3: Influence of Technological factors on Value Added Tax compliance

The third objective was to establish the effect of technological factors on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. Correlation analysis showed that technological factors and value added tax compliance is not positively and significantly associated. Also, the Regression analysis shown there was no significant linear relationship between technological factors and value added tax compliance with evidence of (β_3) of 0.075 and (p=0.302>0.05).

5.2.4 Specific Objective 4: Influence of Enforcement Measures on Value Added Tax compliance

The fourth objective was to determine the effect of enforcement measures on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County. Correlation analysis showed that enforcement measures

and value added tax compliance is positively and significantly associated. Also, the Regression analysis shown there was a positive significant linear relationship between enforcement measures and value added tax compliance with evidence of (β_2) of 0.221 and (p=0.003<0.05).

5.3 Conclusions

The study established that tax knowledge has a positive effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi. Based on the findings, the study made the following conclusion: In Kenya, information about Value Added Tax is easily accessible and taxpayer has attended seminars on Value Added Tax matters.

The findings established that tax Moral has a positive effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi. Based on the findings, the study made the following conclusion: That the respondent faith often encourages them to pay all my taxes as provided for in tax laws because it is the right thing to do.

In regards, technological factors, the study concludes there was no significant and positive effect on Value Added Tax compliance among e-commerce small and medium enterprises in Westlands Nairobi. However, respondents agreed to a great extent that taxpayer business spends money on accountant(s) to compute, file, and pay for the VAT returns due to Kenya Revenue Authority.

In conclusion, the study concludes that enforcement measure has a significant effect on value added tax among e-commerce small and medium enterprises in Westlands Nairobi and is found to play a significant role in the tax compliance. Agreement was

done by majority of respondent on Distrain actions by tax officers to SMEs help in deterring tax evasion.

5.4 Recommendations

5.4.1 Implications to Policy Makers

The findings revealed statistically significant relationship tax knowledge, tax Moral, technological factors and Enforcement measures on value added tax among e-commerce small and medium enterprises in Westlands Nairobi. The findings will be beneficial to policy makers in small and medium enterprises sectors enabling them to build and develop strategies to enhance VAT compliance. KRA should focus more on enforcement measures to regularly use court suit on E-commerce SMEs who break the VAT laws and regulations.

5.4.2 Implications to Theory

The findings from this study expands the frontiers of knowledge, adding to the existing literature by confirming empirically, that indeed tax knowledge, tax Moral and enforcement measures affects value-added tax compliance among e-commerce small and medium enterprises in Kenya. The result contributes to strengthen the literature by confirming the Economic deterrence theory, Fiscal psychology theory and Ability to pay theory.

5.5 Suggestions for Further Studies

The study was to establish factors affecting value-added tax compliance among e-commerce small and medium enterprises in Westlands Nairobi County, Kenya. The study therefore suggests that future studies focus on large taxpayers. The study suggests the needs for more studies focusing on other factors influencing value added tax compliance not included in the study. The study was only limited to tax

knowledge, tax Moral, technological factors and enforcement measures this calls the need for more studies on different variable such as on Effect of Administrative Reforms on VAT compliance among large taxpayers.

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APPENDICES

Appendix 1: Questionnaire for the SME owners

This research is meant for academic purpose. Kindly provide answers to the following questions precisely and honestly as possible. The responses will be treated as confidential. Please tick (√) where appropriate or fill in the information required on the space provided.

SECTION A: BACKGROUND INFORMATION

1. **Gender**

   Male ☐   Female ☐

2. **Age (in years)**

   18 – 24 ☐

   25 – 34 ☐

   35- 44 ☐

   45- 54 ☐

   55 and above ☐

3. **Level of education**

   Primary ☐

   Secondary ☐

   Diploma ☐

   Degree ☐

4. **How long has the business been in operation?**

   Less than 3years ☐

   4-6 Years ☐

   7-10 Years ☐

   More than 10 Years ☐

SECTION B: TAX KNOWLEDGE

The table below has statements that relate to tax knowledge. Indicate whether you

5 - Strongly agree: 4 - Agree: 3 - Neutral: 2 - Disagree: 1-Strongly disagree

Statements	1	2	3	4	5
I have information about VAT legislation and VAT procedures					
I have attended seminars on Value Added Tax matters					
VAT filing and payment procedures are complex					
In Kenya, information about Value Added Tax is easily accessible					
I am able to correctly calculate the amount of VAT payable based on the information that is available					

TECHNOLOGICAL FACTOR

The table below has statements that relate to technological factors. Indicate whether you

5-Strongly agree: 4 - Agree: 3 - Neutral: 2 - Disagree: 1-Strongly disagree

	1	2	3	4	5
Use of an internet enabled tax system has reduced cost of compliance hence motivating me to remain compliant					
Online remittances of taxes are easy to track thus I can tell when taxes are due.					
Payment of taxes through mobile money has improved my VAT compliance.					
Adoption of Electronic Tax Register (ETR) has simplified VAT accounting and this improves my compliance.					
Electronic tax system is simple to use and this motivates me to comply with tax regulations.					

TAX MORAL

The table below has statements that relate to tax Moral. Indicate whether you

5-Strongly agree 4 - Agree 3 - Neutral   2 – Disagree   1-Strongly disagree

	1	2	3	4	5
When I pay taxes, my contribution does not count due to misappropriation of tax revenue by the government.					
I feel that tax revenue is often lost due to corruption and that discourages me from being compliant.					
I think the process of filing tax returns is too tedious, and that often discourages me.					
I trust the government with my tax contributions, and this encourages me to effectively comply with all tax requirements.					
My faith often encourages me to pay all my taxes as provided for in tax laws because it is the right thing to do.					

ENFORCEMENT MEASURES

The table below has statements that relate to enforcement measures. Indicate whether

you **5-Strongly agree: 4 - Agree: 3 - Neutral: 2 - Disagree: 1-Strongly**

disagree

Statements	1	2	3	4	5
Pin deactivated by the KRA for non-compliance is common method used by KRA to enforce compliance					
KRA regularly uses court suit to SMEs which break the VAT tax laws and regulations					
Distrain actions by tax officers to SMEs help in deterring tax evasion					
Agency notices issued by KRA to the SMEs help in deterring tax evasion					

VALUE ADDED TAX COMPLIANCE

7. The table below has statements that relate to Value Added Tax compliance.

Indicate whether you

5-Strongly agree: 4 - Agree: 3 - Neutral: 2 - Disagree: 1-Strongly disagree

Statements	1	2	3	4	5
I have registered for Value Added Tax					
I file Value Added Tax returns on time					
I pay the correct amount of Value Added Tax					

Appendix II: Data Collection Permit

MOI UNIVERSITY
ISO 9001:2015 CERTIFIED
SCHOOL OF BUSINESS AND ECONOMICS

Tel   (053) 43153
Fax   (053) 43153

P.O Box 63056-00200
NAIROBI
KENYA

MU/NRB/KESRA/SA/01   1ST August 2022

National Commission for Science, Technology and Innovation
Upper Kabete
P.O. Box 30623 00100
NAIROBI

Dear Sir/Madam,

RE: REQUEST FOR RESEARCH PERMIT
BYRON MUSUNGU – ADM. NO. KESRA 105/00138/2019

This is to confirm that the above named is a Postgraduate student of Moi University, School of Business and Economics, registered for a Masters Degree in Tax and Customs Administration   course offered at Kenya School of Revenue Administration (KESRA), in Nairobi campus.

The student successfully defended his proposal and is due to proceed for his research data collection.

The research Title is – **"Factors Affecting Value-Added Tax Compliance among E-Commerce Small and Medium Enterprises in Kenya: A Case of Enterprises Located in West of Nairobi County."**

The student is in the process of obtaining a research permit to enable him visit the identified research center.

The University shall highly appreciate any assistance accorded to him.

Yours faithfully,

DR. ROBERT ODUNGA
COORDINATOR, POSGRADUATE STUDIES

0 1 AUG 2022

Appendix III: Research Permit

REPUBLIC OF KENYA

NACOSTI

NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION.

Ref No: **720130**

Date of Issue: **25/August/2022**

RESEARCH LICENSE

This is to Certify that Mr.. Byron Musungu Eyenga of Moi University, has been licensed to conduct research in Nairobi on the topic: **FACTORS AFFECTING VALUE-ADDED TAX COMPLIANCE AMONG E-COMMERCE SMALL** for the period ending : 25/August/2023.

License No: **NACOSTI/P/22/19905**

720130

Applicant Identification Number

Director General
NATIONAL COMMISSION FOR SCIENCE,TECHNOLOGY & INNOVATION

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Appendix IV: Plagiarism Report

FACTORS AFFECTING VALUE-ADDED TAX COMPLIANCE
AMONG E-COMMERCE SMALL & MEDIUM ENTERPRISES
LOCATED WEST OF NAIROBI COUNTY, KENYA

ORIGINALITY REPORT

10%	10%	2%	6%
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

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