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**Relationship between Online Tax System and Tax Compliance among Medium Sized Enterprises in Kericho County, Kenya**

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**RELATIONSHIP BETWEEN ONLINE TAX SYSTEM AND TAX COMPLIANCE  
AMONG MEDIUM SIZED ENTERPRISES IN KERICHO COUNTY, KENYA**

**KIPLANGAT YEGON GEOFFREY**

**A Thesis Submitted to the Board of Graduate Studies in Partial Fulfillment of the  
Requirements for the Conferment of the Degree of Master of Business Administration  
(Accounting Option) of the University of Kabianga**

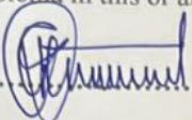
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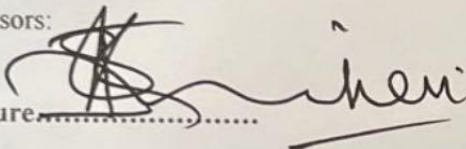
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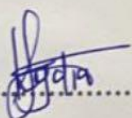
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## **DEDICATION**

This Thesis is dedicated to my family members who have been helpful in funding my MBA studies.

## **ACKNOWLEDGEMENT**

I would like to thank God for giving me the strength and good health all the way as I worked on my Thesis. I also acknowledge the help and support of my supervisors Prof. Naibei and Dr. Lydia. Thank you for the tireless work and for your time in making sure this study becomes successful. I would like to express my gratitude to my parents for their persistent concern, encouragement and support throughout writing this thesis and in my life in general.

## **ABSTRACT**

Major revenue administration reforms have been and are being initiated by revenue authorities around the world in an attempt to strengthen revenue administration, especially for Medium Sized Enterprises (MSEs). MSEs pose challenges for tax administration due to their large numbers and the informal nature of their businesses. The worst part is that the opportunities for tax evasion are high. A key feature of revenue administration reforms among others includes increased use of information and communication technologies by the revenue authorities. This study focuses on establishing whether tax compliance among medium-sized enterprises in Kericho County, Kenya, is associated with the online tax system, as the general objective. This research was built with four specific objectives which were to establish if registration for tax online and tax compliance among medium-sized enterprises in Kericho County Kenya are related, to ascertain if filing of tax online and tax compliance among medium-sized enterprises in Kericho County Kenya are related, to determine whether payment of tax online and tax compliance among medium-sized enterprises in Kericho County Kenya are related and to examine if the link between online tax system stability and tax compliance exist. This research adopted a correlational design. The target population was 102 registered MSEs located in Kericho County. Census survey was adopted while structured questionnaire was used to collect primary data. Validity and reliability of the data instrument was ascertained through pretesting. Descriptive statistics such as mean and standard deviation were used to summarize data while inferential statistics such as correlation coefficient and regression analysis were used to test non-causal and causal relationships respectively. Findings were presented using tables, graphs and discussions. SPSS software aided in data analysis. The study findings indicated that online tax registration, online tax filing and online tax payment had a positive and significant influence on tax compliance among MSEs. Online tax system stability had a negative and statistically significant influence on tax compliance among MSEs. Kenya. Conclusions can be made that online tax filing of VAT, individual income tax and rental income tax has significantly influenced tax compliance by MSEs. It can be concluded that MSEs operators' embracement of online payment of taxes will lead to increased compliance. This method is convenient as there is no need to travel to banks. Recommendations are made that KRA agency should encourage those taxpayers who have registered for tax obligations to file returns online in due dates so as to minimize cases where taxpayers go beyond due dates without having filed their returns. It is also recommended that KRA agency needs to enlighten the taxpayers on the advantages of online tax payments so that the taxpayers get to know how important it is for one to embrace online tax payment to enable them avoid unnecessary penalties and interests.

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## **LIST OF ABBREVIATIONS**

|              |                                          |
|--------------|------------------------------------------|
| <b>CEPS</b>  | Customs, Excise and Preventive Service   |
| <b>CRA</b>   | Canadian Revenue Agency                  |
| <b>EFTPS</b> | Electronic Federal Tax Payment System    |
| <b>E-Tax</b> | Electronic Tax                           |
| <b>FCTO</b>  | Federal Central Tax Office               |
| <b>GRA</b>   | Germany Revenue Authority                |
| <b>HMRC</b>  | Her Majesty's Revenue & Customs          |
| <b>ICT</b>   | Information and Communication Technology |
| <b>IRB</b>   | Inland Revenue Board                     |
| <b>IRS</b>   | Internal Revenue Service                 |
| <b>IRS</b>   | Internal Revenue Service                 |
| <b>I-Tax</b> | Integrated Tax                           |
| <b>KRA</b>   | Kenya Revenue Authority                  |
| <b>MSEs</b>  | Small and Medium Enterprises             |
| <b>PIN</b>   | Personal Identification Number           |
| <b>RRA</b>   | Rwanda Revenue Authority                 |
| <b>SARS</b>  | South African Revenue Service            |
| <b>TC</b>    | Tax Centre                               |
| <b>TIN</b>   | Taxpayer Identification Number           |
| <b>TRA</b>   | Tanzania Revenue Authority               |
| <b>TSOs</b>  | Tax Services Office                      |
| <b>UK</b>    | United Kingdom                           |

|             |                          |
|-------------|--------------------------|
| <b>USA</b>  | United States of America |
| <b>VAT</b>  | Value Added Tax          |
| <b>VATS</b> | Value Added Tax Service  |

## OPERATIONAL DEFINITION OF TERMS

**Tax Compliance** in relation to this research, this term means acting positively to file and pay tax due as provided by law. It is the positive response to satisfying the requirements of tax authorities.

**Non tax Compliance** According to this study, this term is taken to mean all deliberate measures towards evasion of tax, under declaration of income tax and claiming of tax reliefs and refunds one is not entitled to.

**Online Tax Filing** This means taking action of submitting tax statements concerning the tax status and position by individuals through wireless connections with the help of a tax software approved in advance by the related tax authority.

**Online Tax Registration** According to this study, it means all attempts to provide personal information over the KRA online platform so that the individual taxpayer is supplied with the Personal Identification Number. This number will be used to access the database of KRA and also the services offered by KRA. This is a way by which individuals try to identify themselves with KRA.

**Online Tax System** has been used to mean the KRA i-Tax platform which offers a variety of services to taxpayers, such as options to file tax returns, pay taxes, register as a new taxpayer, apply for waiver of interests and penalties and other services.

**Online Tax Payment** to this study, it means passing the required financial resources (taxes) by the individual taxpayer through electronic gadgets such as phones to the tax department using a specified number code connected with KRA accounts.

**System Stability** in relation to this research, it means a state of the online tax system in terms of reliability and consistency of the operation of the network system and the internet. It defines how strong the system can withstand the network stress and disconnections irrespective of the number of users over the interne

## CHAPTER ONE

### OVERVIEW AND BACKGROUND

#### **1.1 Overview**

This division presents the background of the study, the main study objective, the specific objectives and research questions, justification of the study, the significance, the scope and the assumptions of the study.

#### **1.2 Background of the Study**

The word ‘tax’ originates from Latin, taxare, meaning to censure, charge or compute. As extracted from Wikipedia.org, the word tax is provided by Hugh Dalton (1923) as the contribution which is compulsory, to the government, regardless of equal measure of service extended in return to the taxpayer and which is not enforced for commission of an offence which is legal. In the past, taxpayers used to determine their incomes generated from various sources, computed the tax to pay and took their tax returns personally to the government agencies responsible for collecting revenues. Government agencies on the other hand had to make personal visits to the premises where taxpayers undertook their operations and then assessed those taxpayers to determine taxable income for tax computation (Ngigi & Kioko, 2017).

Nowadays, many countries in the world have modern systems of taxation upon which citizens who pay taxes register, perform self-assessment and pay tax due to the government revenue collecting units. Taxpayers who fail to pay by way of evading or resisting to pay are punished by law. In American countries, (USA), the Treasury Department provides the services through an electronic system of payment called federal tax (EFTPS), an online tax platform for tax compliance. Taxpayers pay taxes either through telephone or online and the system can be accessed twenty-four hours in a day. The system is used by corporations and individuals who

want to pay their taxes on their income. This enables them to make payments without personally visiting relevant revenue collecting departments and thus allowing secure payments (Deyganto, 2018).

Internal Revenue Service (IRS) is the largest department concerned with collection and administering taxes in US. Firms and individuals who want to submit payments to the IRS use EFTPS but they must plan first prior to making such payments. The reason is that individuals and corporations who seek to make payment need to enroll first, a process that takes about two weeks. The system secures and simplifies payment of tax and requires users to take a few steps before making payments. There is initial taxpayer online registration followed by a mail which is sent to the address provided during registration. The mail has verification for bank account where payments are debited and a unique Personal Identification Number is generated, (Aondo, 2018).

Taxpayers use electronic passwords to access their accounts and also tax records. Even if EFTPS is not working or is not available, taxpayers must still make timely payment in person or through mail. With effect from April 2018, taxpayers accessed the EFTPS voice system which responds to taxpayer inquiries at 1-800-555-3453 and also at 1-800-555-4477 which is used to reach customer service agent or log on to EFTPS.gov. The website for EFTPS uses secure server, full of internal security policies and firewalls which prevents unauthorized parties from gaining access to users' financial information as well as the government agencies like IRS from accessing enrollees' accounts, (Kagan, 2018).

UK Government has a non-ministerial government department, Her Majesty's Revenue & Customs (HMRC) which was established in 2005. The department's task is to collect taxes, pay in support of the state as well as administration of other regulatory policies like the national

minimum wage. Income tax, corporation tax and capital gain tax, excise and stamp duty taxes are administered by the department among other taxes. HMRC is concerned with improving the extent which taxpayers pay for taxes due and receive credits and payment they are entitled, (HMRC Act, 2005). A UK employee has his/her regular contributions paid by an employer with regard to their income tax liability. If one is a resident taxpayer to UK, they need to declare their worldwide income by filing self-assessment form through online after having a unique reference number. Self-Assessment system is used by the UK tax office (HMRC) to collect income taxes. Automatic deduction of most taxes from salaries is done through the system. However, if one has other sources of income, they have to declare it at the year end. The tax systems in UK have been designed to get those who try to evade tax and punish those who try to steal from the government (Olatunji & Ayodele, 2017).

The government of Canada has established Canadian Revenue Agency which is responsible for administering tax laws and making legislations regarding international trade. The CRA has Tax Services Office (TSOs) whose tasks are audit and collection of revenues. It also constitutes Tax Centre (TC) whose responsibilities are to conduct tax returns as well as reviewing the filed taxes. Taxation system in Canada is based on mandatory compliance or self-assessment. Taxpayers are forced to file tax returns on time and late filing attracts penalties whereas outstanding amounts from taxpayers are also penalized and interests are compounded on daily basis on such amounts owed (Mustapha, & Obid, 2014).

Canadians utilize NETFILE system which was introduced in 2001 to submit returns for their income tax to the Canada Revenue Agency (CRA), through the internet. Return of tax through NETFILE should be first prepared using NETFILE-certified product. Through web application, a tax file is produced and becomes uploaded independently to CRA to constitute a tax filing. From

CRA, 26% of the total 2014 tax returns were sent to Netfile. A certified tax program listed on CRA website is what users need. Most tax returns are processed by CRA and offer limited reviews and issues promptly the assessment notice. This assessment notice is a document which is legal containing a summary of income of the entity, deductions and credits. If there is disagreement on the taxpayer with regards to assessment, he/she can file an appeal to challenge that assessment in the court related to tax (CRA, 2001).

Canadian Revenue Agency constitutes compliance programs with many auditors who work on files related to audit. Results from audit may lead to reassessment on the taxpayer and the taxpayer is supplied with a tax bill which indicates the tax due, penalties and interest attracted. All in all, the tax system of Canada under CRA is perceived by the taxpayers to have brought benefits to the taxpayers and the government agencies. The system is secure and guarantees confidentiality; tax refund is faster taking a maximum of eight days and is very accurate. The federal government, the state and the municipalities levy taxes in Germany. Like in other countries, taxes which are directly levied and the ones indirectly levied and VAT form part of the major state funds sources. Tax from income and VAT generate the highest revenue to the state. Revenues from the mentioned source are allocated through quota to states and federation. The state shares part of the revenues to the municipalities. Administration of tax is the task done by federal authorities and state authorities for tax who process tax returns (CRA, 2001).

With effect from 2009, every taxpayer and business firm received tax identification number from the central federal office for tax (FCTO) which is the competent authority in Germany. According to Germany Revenue Authority (2007), a business firm is required to make filing for trade tax with office for tax through integrated fiscal unit. The local tax office takes into consideration any allowance and compute the earnings from trade in a firm which will be used to

assess tax payable to the state. Tax paid is sent in a bracket of ten days of quarter calendar to the tax office, which is an advanced return computed from the preceding calendar quarter. Tax returns are filed online and submitted to the government agencies for review.

Ghanaian Authority for Revenue (GRA) is an agency whose task include calculation, collection and accounting for tax collected in Ghana. The authority's core mandate is ensuring maximum compliance with related laws for sustainable stream of revenues to the government. For compliance improvement, it is a requirement for the authority to help citizens who pay to understand and pay tax due through advice provision. According to Ghana Revenue Act (2009), GRA has integrated three institutions responsible for revenue handling namely; Customs sections, Excise sections and Preventive Service sections (CEPS), the Value Added Tax Service (VATS), Revenue Agencies Governing Board (RAGB) and Internal Revenue Service (IRS). These institutions are responsible for administering taxes in Ghana. Establishment of GRA enables management and integration of custom duties and domestic taxes as well as keeping customs activities and domestic tax modernized by reviewing processes and procedures in administering revenues with Information and Communication Technology (Tarmidi, Fitria & Purwaningsih, 2017).

GRA establishment is part of reforms and modernization to revenue collection in Ghana. Taxpayers and revenue agencies benefit through the integration of revenue institutions in the following ways; improvement of information flow within department, better delivery of service, reduced administrative and tax compliance cost and enhanced revenue collection. GRA functions in Ghana include; calculation and tax collection, charging interest and penalties on taxes due to the state with optimum efficiency, combating fraudulent acts in tax and evasion and co-operating in that manner with other competent agencies who enforce laws and revenue agencies in other

countries, making payments of the totals collected into the Consolidated Fund and promoting tax compliance and tax education. All these functions are geared towards obtaining maximum tax compliance from taxpayers.

The government of Rwanda like other governments has formed an agency, through its parliament, whose task includes collection of tax revenue on its behalf. The agency is Rwanda Revenue Authority and its charge is to enforce, assess, collect and account for all taxes imposed in Rwanda. Two service departments within the agency are the Customs Services Department and the Domestic Taxes Department, (RRA, 2017). Electronic Tax payment in Rwanda has been integrated with commercial banks and facilitates duties and taxes due payment. When assessment for taxes to be paid is done, numbers identifiable with documents are used to process electronic payment by various ways which commercial banks have provided, including over the counter, internet banking and mobile banking.

A reference used for customs declaration payment, after customs assessment, is generated by the system and sent to the importer through his/her email. Importers need to register with their commercial banks for mobile and internet banking before paying for custom taxes. Taxpayers can register through SMSs, mail or application form, sign and submit to any custom office electronically on [reswteam@rra.gov.rw](mailto:reswteam@rra.gov.rw). After receiving the signed application form, registration starts immediately. Taxpayers must ensure they provide accurate details like phone numbers and email addresses. The system will provide information at levels of custom that declares processes like calculation, payment, order release, modification and exit. Information is sent to the taxpayer through his/her mobile or email as per their choice. The system facilitates taxpayer compliance to tax payment to RRA.

Tanzania Revenue Authority (TRA) is an agency in Tanzania located in Dar es Salaam which manages assessment, collects and accounts for all central government revenue. It is regulated by law and administers impartially different types of taxes of the state, (TRA 2017). Registration of tax is done at TRA tax Centre nearest business location and tax paid at banks. Taxpayer Identification Number (TIN) is required of every taxpayer to register for before starting any business in Tanzania. Both direct and indirect taxes are levied by the TRA on behalf of the central government. VAT is applied for through online form filling or manually where TRA inspects the site of business before registration approval. The taxpayer is required after registering to make submission related payment of VAT, before 20<sup>th</sup> of the month following the month of business, to repay nil return.

Kenyan Government has its agent whose mandate is to manage tax assessment, collects and account for the revenue collected from taxes on central government behalf and in accordance with the laws of Kenya. In Kenya, the responsibility of administering taxes is the Revenue Authority of Kenya, (KRA) whose establishment took effect in 1995 under Chapter 469, Act of Parliament, with its parent agency being Ministry of Finance. KRA is headed by the Commissioner of Income Tax (Maundu, 2015).

KRA has six departments which include department of corporate support services, department of technical support services, department for customs, and services department for domestic taxes for medium and small taxpayers, department of investigations and enforcement and department for domestic taxes related to large tax payers. It also has four service departments which coordinate operations' efficiency that include, department of ethics and integrity, department of risk management and internal audit, department of information communication technology and legal service department (KRA, 2016).

The statement ‘Kulipa Ushuru ni Kujitegemea’ emphasizes the need for compliance by the taxpayers to contribute a given set amount out of their total incomes either from salaries or businesses or both to the government so as to be used in providing services to every citizen even those who have no ability to contribute. KRA introduced a technology, Electronic Tax Register (ETR), for administration of tax whose main purpose is to boost VAT compliance and administration. This is in accordance with Advanced Taxation, Strathmore University Study Pack (2017).

The taxpayers are required to register online through iTax, an online system platform that taxpayers utilize to apply for Personal Identification Number (PIN). The same platform offers varieties of online tax services such as enabling taxpayers’ self-assessment, filing for personal and business returns as well as submission of returns and nil returns to the KRA agency. It also facilitates payment of VAT to the KRA by taxpayers who have registered for VAT and facilitates registration of Turnover tax among others. The KRA website enables taxpayers to download various forms they need to fill for tax payment reasons.

In Customs department, there is an automated system called the Simba System designed to modernize operations of the customs areas. It increases efficiency in tax collection across customs and excise departments. Customs authorities, through the Simba System, require one to register as a clearing agent so that they can electronically lodge documents. All these reforms and KRA modernizations are driven towards improving tax compliance with regards to taxpayers.

At the moment, pressure is rising on the part of governments to improve the public services delivery in the most economical manner with the least cost possible. According to Amitabh (2008), KRA is switching to e-government as major reforms in tax administration as better

solutions, for instance, the electronic tax filing system. Nowadays, ICT usage of great importance in both businesses and taxation matters. Online tax administration systems are in use by tax authorities all over the world to interact with taxpayers in collection of tax, compliance and in administration of revenue collected. The way one works has been influenced by technology especially in interacting with the public. Dowe (2008) asserts that use of technology in boosting the efficiency and effectiveness in tax administration, expansion of taxpayer services, and enhancement of tax compliance has attracted attention in transitional countries.

Taxation is a necessity for sustaining economic development and administration of tax is the primary role of a successful nation. In Kenyan economy, the leading source of revenue to the government is tax. Provided it's a central function, revenues collected in form of taxes have been utilized to achieve two objectives. The first objective is raising enough revenue to provide public goods with no need to go for excessive public borrowing. The other objective is that it is used in mobilizing revenue in a way that is equitable and in a manner which minimizes its discouraging effects on economic activities (Moyi Ronge, 2006).

Taxation proves to be the major revenue source to the government for the developed and developing economies. Though that is the case, there are challenges that compromise this method of government financing one of which is the deliberate failure to pay tax. Transitional economies face this adverse challenge. In a review by GIZ (2010), the observation made is that countries which are more developed report relatively higher tax compliance levels of about (35%), whereas African countries record less than 23%. There are shortfalls in budgets and revenue gaps are realized in the budgets, resulting to overreliance on external sources that are unsustainable such as high interest loans from banks and multilateral donors. Countries which

are developing are therefore needed to establish and implement appropriate policies that will reduce the prevailing tax shortfalls and unhealthy overreliance on donor funds.

### **1.2.1 Tax compliance and Non-compliance**

Braithwaite (2009) coined that the full payment of all taxes due is termed as tax compliance. Tax non-compliance on the other hand is defined the actual amount of taxes paid minus the amount of taxes due. The difference arises as a result of overstatement and understatement of expenses, income and deductions. Non-compliance consists of intentional evasion and unintentional non-compliance, which is as a result from errors of miscalculation and minimum knowledge and understanding of laws relating to taxation.

Tax compliance according to Jones (2009) refers to the filling and delivering reports on information relating to tax as well as performing self-assessment of taxes outstanding and paying those taxes without being forced to do so. This definition contains three dimensions which can be deduced to mean tax compliance and they are the reporting, filing and payment compliance. Filing compliance implies that the taxpayer did submission of the correct forms to the revenue authority. Reporting compliance means the accurate return was done while payment compliance refers to whether the taxpayer paid the amount, he/she was supposed to pay as reported tax liability in a timely manner. Any taxpayer qualifies to be not complying if these aspects are not met.

According to Tendai (2018), as cited in Muita (2011), the taxpayer finds paper returns to be tedious to file and reconcile by the authorities. Because of that reason, it required the use of electronic filing whose purpose involved keeping the accuracy and reconciliation of data in a timely manner therein since the SAP systems of ZIMRA performed automatic validation and reconciliation of the returns. Tax compliance is therefore the ability to pay taxes as well as

reporting of the correct and accurate tax information on time. Most definitions relating to tax compliance focus on the information accuracy while making returns and the cost involved in making those tax returns. Auyat (2013) for instance, gave a definition for compliance as submission of correct and accurate, lodging income tax return with the expected payments as and when they fall due. As per Mandola (2013), tax compliance is of two types; involuntary and voluntary. Voluntary tax compliance does not require authorities to compel the taxpayers to comply with requirements for tax unlike involuntary tax compliance. Tax compliance concentrates on timely, correct and accurate remittance of tax and other tax information to the KRA. Nakiwala (2010) asserts that levels of tax compliance are influenced by online filing system. The system ensures that a taxpayer fills all mandatory fields before being allowed to proceed to the next level. This assures the revenue authority, reception of a relatively higher quality data than the manual returns of the data. Mandola (2013) further explains that online tax filing ensures that there is no missing information, inconsistencies or unintentional errors made.

In developing countries, the income tax compliance has been affected by continuous changes that have been made in laws relating to tax. They are complex and only the experts in taxation can understand them. Additional problems have risen on the matters compliance by the taxpayers who have no access to competent specialists who are knowledgeable on tax issues, (Oberholzer, 2008). In addition, enforcing these laws has no tendency to reduce non-compliance on part of taxpayers since certain tax policies put small and medium taxpayers under pressure of high liquidity, most being forced into the category of informal sector (Terkper, 2003).

The choice of the taxpayer to file and submit tax return to the KRA depends on many factors which are from within the individual taxpayer or external. For instance, Azjen (1991) and Peter (2012) assert that factors relating to psychology, including morality as well as ethics contribute a

lot at influencing a taxpayer behavior. Azjen developed the theory of planned behavior in 1991. Peter (2012) cited that the theory talks of taxpayers' behaviors being influenced by a number of factors which arise from a given reason and emerge in various ways which are planned. Basing his arguments on the theory, Peter does not agree with the theory that compliance is affected by psychological factors.

### **1.2.2 Measurement of Compliance and Non-compliance**

Measurement of compliance and non-compliance could be done in a qualitative manner. This could be achieved through observing the number of those taxpayers who have registered using the online tax system, those who have and are making their tax returns filed as well as those who are electronically ensuring that taxes get paid as and when they fall due among the medium sized enterprises in Kericho County. This can be done by examining the total registered medium sized enterprises with the KRA office in the County and comparing those who do what is expected of them by the KRA against those who are not despite their registration. Compliance and non-compliance measurement could also be done by comparing the number of cases of penalties that have been imposed on various different medium sized enterprises that fail to disclose their performances and pay tax over the previous periods to date. This will show whether the penalty rates have reduced or have increased and by that one could tell whether compliance has been achieved or not (Ngigi & Kioko, 2017).

### **1.2.3 Online Tax System and Compliance**

Some of the recent researches by various scholars have found out an existence of a relationship in online tax system and tax compliance by taxpayers. Some scholars have identified registration of tax online, filing of tax online and payment of tax online as contributing to taxpayer

compliance. For instance, Maina (2015) found out that compliance by medium sized enterprises with tax policies is influenced by integrated tax management system.

Introduction of iTax platform by KRA has boosted tax compliance by taxpayers. Taxpayers' understanding of the procedures they are required to follow has eased online tax registration. As per Muita (2011), manual tax filing which has been tedious on the part of the taxpayer and on the part of KRA has resulted to electronic filing which has ensured that reconciliation of tax returns is realized accurately and in a timely manner since iTax has enabled automatic validation of those returns.

Penalties and fines imposed by KRA to taxpayers who do not comply have triggered punctuality on the part of taxpayers and they have been filing and submitting tax returns on time. Those taxpayers who have little knowledge about online submission of tax returns, but are aware of fines and penalties are nowadays queuing in tax consultancy offices trying to get assistance from those tax consultants. There is more compliance today than earlier times when returns were made through manuals.

#### **1.2.4 Statement of the problem**

MSEs are part of the major contributing enterprises to Kenya's economy through revenue collected by both county governments and the national government from them. They are viewed by the government as part of the major pillars of the vision 2030. Introduction of iTax was meant to boost administration and collection of tax on an effective and efficient manner across all the enterprises, MSEs included. There are many MSEs registered with KRA in Kericho County and it is the KRA's expectation that revenues collected should be directly related to the number of MSEs that have been registered. However, according to the conversation that the researcher engaged with the KRA agency in Kericho County, only a few MSEs have been able to file and

submit their tax returns over the last periods. For that reason, KRA has been registering lower revenue collection than always been expected. This has raised concerns from stakeholders as to the newly introduced iTax system's effectiveness and efficiency in administering and collecting taxes across the MSEs in the region. Consequently, speculations have been directed to the online tax system processes including registration of tax, filing of tax, payment of tax as well as the state of the online tax system stability as being connected to tax compliance by some of the medium sized enterprises in Kericho County. This has triggered the researcher to establish the possible answers to the low revenue collection experiences in KRA agencies concerning the MSEs in the region.

### **1.3 Purpose of the Study**

The purpose of this study was to determine the relationship between online tax system and tax compliance among medium sized enterprises in Kericho County, Kenya.

### **1.4 Specific Objectives**

This study aimed to achieve the following objectives:

- i. To establish the relationship between online tax registration and tax compliance among medium sized enterprises in Kericho County, Kenya.
- ii. To ascertain the relationship between online tax filing and tax compliance among medium sized enterprises in Kericho County, Kenya.
- iii. To determine the relationship between online tax payment and tax compliance among medium sized enterprises in Kericho County, Kenya.
- iv. To examine the relationship between online tax system stability and tax compliance among medium sized enterprises in Kericho County, Kenya.

## **1.5 Research Questions**

The study attempted to answer the following questions:

- i. What is the relationship between online taxpayer registration and tax compliance among medium sized enterprises in Kericho County, Kenya?
- ii. What is the relationship between online tax filing and tax compliance among medium sized enterprises in Kericho County, Kenya?
- iii. What is the relationship between the online tax payment and tax compliance among medium sized enterprises in Kericho County, Kenya?
- iv. What is the relationship between online tax system stability and tax compliance in Kericho County, Kenya?

## **1.6 Justification of the study**

Kericho County as the researcher's chosen study locale, has limited studies on the same topic. Because of that, the findings were to benefit these medium sized enterprises as the recommendations that were to be given later would be the basis upon which various considerations would be given to them.

The issue of iTax is a newly introduced part of the KRA system as a result of tax reform and modernization in the country. This area has not been examined deeply for better understanding of its functioning by various affected parties. This study therefore, was done as an attempt to further add knowledge on to the existing few related literatures across the country but not in Kericho County.

## **1.7 Significance of the study**

The government of Kenya depends on great extent on funds raised from taxes to provide its citizens with public goods and services. An increment or reduction in revenues from tax directly

affects the economy of Kenya as a country. This research is likely to show off the strengths or weaknesses which are associated with implementation of new technology and its benefits not only to the authority but also to taxpayers thereby, enriching knowledge to other government institutions planning to embark on similar modernization programs.

This study will add to the already published literature. Scholars who would want to undertake research on the same topic and in the same place will have to review this work as one of the related literatures to find the knowledge gap as I believe that this work is not exhaustive. This work also will put forward areas for further studies and thus, the scholars to follow might find a research topic in future from this work.

The study will also be beneficial to Medium sized enterprises as it will produce information regarding both compliance and non-compliance, including benefits of complying and penalties as a result of non-compliance as well as advantages of iTax to MSEs. They will be able to take keen notice when filing returns on the challenges and the benefits of paying tax. Moreover, the findings of this research will make a very good source reference to small and medium taxpayers globally in planning and adoption of new technology in filing tax.

### **1.8 Scope of the Study**

This research focused on MSEs in Kericho County. The variables covered the online tax system stability, online tax filing, online tax registration and tax payments as independent variables and tax compliance as the dependent variable. The study was going to cover the period between July and August 2022.

### **1.9 Assumptions of the study**

The researcher made an assumption that all respondents would take the minimum time to answer all questions in the questionnaires and return them. Secondly, the answers that were to be

provided would be assumed to have been given with the most objective view of the respondents.

Thirdly, the researcher assumed that all the questionnaires would be returned by the respondents.

This research was to rely on various assumptions and always, assumptions are not true measures of a given reality. The researcher would try as much as possible to stick to the principle of objectivity to avoid personal judgments as much as possible.

The variables to be used in the study were not exhaustive. Not all the variables were to be used by the researcher. The researcher would recommend a suggestion relating to the areas not covered for further research.

Financial resources were also constraints to this research. They were not sufficient to enable the researcher undertake extensive research on the topic. The resources were not enough for the researcher to print research instruments for all the respondents. The researcher had to sample the population so that research instruments were printed for the sample population. The use of budget enabled the researcher to follow strictly on it to avoid further unnecessary costs.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

The section presents the theoretical framework, empirical literature review, conceptual framework and knowledge gap.

#### **2.2 Review of Related Literature**

This section presents the work of other scholars who have done a research study on the similar area of study as this. It reviews the work of the related literature, the variables used in the study, the methodology adopted in the related study and the analysis of findings.

##### **2.2.1 Online tax registration and compliance**

Wasao (2014) studied about online filing system and the effect it has on compliance on MSEs in East of Nairobi District. The scholar's research questions focused on registration of tax online, filing of tax online and remittance of tax online and compliance. The scholar utilized quantitative and descriptive methodology while the sources used by the scholar to collect data were the primary sources and secondary sources respectively. Wasao analyzed data from primary sources with the help of SPSS version 20 and presented the findings in form of tables and graphs. The scholar's findings were that compliance by medium sized enterprises was influenced by online tax system as far as registration of tax online, filing of tax online and online tax remittance were concerned. The scholar concentrated only on the compliance part and failed to bring out the issue of tax noncompliance.

Dome (2013) recognized four major dimensions of tax compliance including registration of a taxpayer on satisfaction of a criteria, submission of tax returns on or before due date, payment of tax due on or before due date and reporting tax liability accurately for example declaring correct

income, expenditure as well as tax relief. The scholar as well mentioned one pillar of tax compliance to be the registration of individuals contributing to tax as and when one meets criteria which have been set by the Kenya Revenue Authority. He also notes major areas of non-compliance as the avoidance of registration and incorrect filing of taxes.

The researcher therefore notes that the focus of all governments is to influence all the citizens to pay their taxes with passion for this will help the country not to go for public debt whose principal amount and interests would take years to clear. The task involving revenue collection has never been that simple until the introduction of reforms and modernization on the part of information technology which has simplified all these activities. Advancement in tax compliance has focused at improving the administration of fiscal systems (Teltscher, 2002). When most of the taxpayers voluntarily submit tax returns and make payment of resultant outstanding tax as stated in the tax laws without tax authorities intervening through enforcement, tax compliance is achieved. But if voluntary compliance is very low, enforcement techniques for example audit and back duty and investigation as well as collection of tax in arrears are applied. In an attempt to adopt the modern changes in the ICT, tax authorities have come up with various online tax systems that have led to online electronic submission of tax returns, online tax payments and online access of returns.

In their study on factors of the tax system which influence taxpayers' compliance in Mekele City Ethiopia, Engida and Baisa (2014) adopted cross-sectional survey research design. They used secondary sources of information to collect the data. On the other hand, Pearson's correlation coefficient was used in their study to analyze data. Their findings revealed that there were nine determinants of compliance by taxpayers: perceived government spending, audit probability,

perceived equity and fairness, penalty, current government policy changes, financial constraint, tax knowledge, referral group and the tax authority roles.

Engida and Baisa's study was different from Wasao (2014) study on the aspects of independent variables. Engida and Baisa's study used nine independent variables whereas Wasao's study used four independent variables all of which were totally different from the ones used by Engida and Baisa (2014). The countries of study as depicted by the two studies were different being Ethiopia and Kenya respectively. Both study methodology designs were different as well but both concentrated on tax compliance.

A study by Lubua (2014) tried to check if ICT had influence on tax compliance among MSEs in Tanzania. The scholar's study was achieved with the help of a case study design whereby, Kinondoni tax region was taken for that case. Lubua's study also adopted survey questionnaire instrument to collect data as well as obtaining information from secondary sources. The scholar analyzed the findings by use of Spearman correlation and presented the data by using percentages and tables. Lubua's findings were that business experience, knowledge of tax laws, employees' integrity, infrequent visitation by tax personnel and training requirements influenced voluntary compliance. Lubua's research independent variables varied greatly with those of the reviewed scholarly work. The scholar's research methodology and design also were different from the methodologies adopted in the other scholars' studies. None of the preceding reviewed literature was related in the study location as Lubua's. Lubua's study was different in all aspects from the preceding literature except for the instruments used to collect data which were similar with those of the preceding related literature reviewed.

Mustapha and Obid (2014) undertook a study on the technological characteristic and its influence on online tax usage. Their case study was on Nigerian self-employed taxpayer. They

identified technological characteristics which influence online tax usage as perception on ease of usage, perception on usefulness and perceived innovativeness. Their research design was a case study design and their mode of data collection was questionnaire which they then analyzed by structural equation model so as to determine the significant influence of those characteristics. Their findings revealed all factors of technology to be significantly and statistically indicating a measure of online tax system and that the factors of technology were positively and directly related to online tax system. Mustapha and Obid's study general objective were totally different because their study failed to touch on compliance or non-compliance point of view. Mustapha and Obid's study design was similar to the study design adopted by Lubua (2014), the case study design. Mustapha and Obid's country of study was different from the countries where preceding reviewed scholarly work was done. Methods of data collection were common across all the reviewed studies.

In Philippine, a study was undertaken to determine the satisfaction levels of electronic filing and payment systems of Bureau of Internal Revenue. Public Practitioners CPAs in Baguio City were taken to be the taxpayers. The researchers were Caasi, Dangpa, Fadullon and Gallardo, (2015). The methodology they adopted was descriptive design and data from primary sources was collected by scholars using questionnaires. They analyzed the results using ANOVA and findings presented by use of tables. They found that respondents were satisfied with use of electronic filing and payment systems provided by Bureau of Internal Revenue. It was also found that availability and convenience of the system resulted to an increment in tax collection. Likewise, their findings revealed that electronic filing and payment system could not improve collection of tax and the reason being that the system was costly and time consuming. The study by Caasi *et al* (2015) was similar in the methodology with the study which was done by Wasao

(2014). Likewise, two of the independent variables used by Caasi *et al* were also similar with the independent variables which were used by Wasao (2014). The findings of their study differed greatly. The main objective of Caasi *et al* study did not incorporate the aspects of compliance nor noncompliance. Their country of study also differed from the countries where the previous reviewed studies were conducted.

Xin, Khai, Fong and Chen (2015) carried research on factors which can affect an individual taxpayer's compliance concerning the tax filing system in Malaysia. Their methodology was based on the method of data collection where they collected data from the primary sources and secondary sources. Their data was analyzed by use of SPSS software and Pearson correlation moment. The scholars presented data in tabular form. Their findings showed that tax knowledge, compliance cost reliability of tax agent significantly related with the behaviors for tax compliance. Xin *et al* study main objective had incorporated the aspect of compliance like the studies done by Wasao (2014), Baisa (2014) and Lubua (2014) respectively. Xin *et al* study methodology was not clearly defined. Again, Xin *et al* country of study was dissimilar to the previous reviewed scholarly work countries of study. The independent variables used by Xin *et al* were also dissimilar to the independent variables used by the reviewed scholarly work.

A study was conducted by Mongwaketse (2015) in South Africa on e-filing and the perceived effects on tax compliance in a district municipality. The methodology that was adopted by the scholar was quantitative design with data collection being from primary sources. Questionnaires were administered by the scholar to aid in data collection and the scholar analyzed the data by using SPSS software. The result of the scholar's analysis was tabulated and also showed in bar graphs. The findings by the scholar were that tax authorities who had used e-filing had experienced reduced costs of handling tax returns, shorter time of processing and assessing the

returns and improved compliance. On the other hand, factors like cost-benefits analysis, attitude, system's credibility, security, perception on usefulness and ease of usage influenced the perception of the taxpayer. The scholar's study independent variables were different from the independent variables of the earlier reviewed scholarly work. The country of study by Mongwaketse was different from the countries of study where the preceding studies were done. The methods of data collection adopted by the scholar were similar to the methods that were adopted by the studies of the preceding scholars reviewed. Like Wasao (2014), Baisa (2014) and Lubua (2014) studies, Mongwaketse (2015) focused on tax compliance and failed to touch on non-compliance. Mongwaketse's study independent variables were different from those independent variables which were used the preceding studies done by various scholars.

Another study about online tax system and its effect on tax compliance among MSEs in Meru County was conducted by Kiarie and Muturi (2015). The scholars succeeded in their study by using descriptive research design. They collected data using structured questionnaire, whereby 60 samples of taxpayers in Meru County tax District were covered. Data obtained were analyzed by the scholars using SPSS (version 20). They also used correlation and regression analyses in addition to descriptive statistics and summaries presented. Their study found out that online tax system affects tax compliance level among small taxpayers in Meru County. They recommended in their study for further studies that other factors that affected tax compliance among small tax payers to be established. Kiarie and Muturi's study methodology was similar to the methodology which was adopted in the studies which were done by Wasao (2014) and Caasi *et al* (2015), the descriptive research design. Like Wasao (2015), Kiarie and Muturi's study was conducted in Kenya but the counties of studies varied. Wasao conducted the study in Nairobi while Kiarie and

Muturi did theirs in Meru County. The aspect of tax compliance was also focused on by the scholars but they failed like the other reviewed work to discuss on the aspect of non-compliance.

Research by Ondimu (2015) about tax reforms and how it affected compliance of MSEs in Kenya, a case of Kisumu Town, presented the findings that tax reforms and tax behaviors have significant effect on MSEs compliance in Kisumu Town. Ondimu adopted both descriptive and exploratory research designs as well as simple random sampling and census sampling designs. The scholars collected data from the primary sources and secondary sources and analyzed the primary data with the help of descriptive statistics, Pearson Moment correlation and the SPSS software. Like Wasao (2014), Caasi *et al* (2015) as well as Kiarie and Muturi (2015), Ondimu adopted descriptive research design. The research independent variables used by the scholar were different from the independent variables which were used by the preceding scholars in the reviewed scholarly work. Ondimu (2015) focused on tax compliance and failed to discuss on the non-compliance aspect. Likewise, to Wasao (2014) and Kiarie and Muturi (2015), Ondimu conducted the study in Kenya but in Kisumu County.

Maisiba and Atambo (2016), found that electronic tax payment system held by KRA was good and that most of the KRA officials were well trained and were conversant with its use. In their study, the respondents cited the difficulty of use stating the reasons being lack of knowledge related to computer, poor internet connections and unreliable power supply. In their study however, the reasons stated did not prevent the taxpayers from paying tax on time. Other findings were that tax collection improvement had been achieved via online tax registration, tax filing and tax payment. Maisiba and Atambo used similar independent variables like Wasao (2014). The main objective by the scholars was different from the main objective of the study by Wasao (2014) in the aspect of compliance. Maisiba and Atambo (2016) never discussed on

compliance nor noncompliance based on the independent variables. Their study was conducted in Kenya just like Wasao (2014) study.

Through their study, Engida and Baisa (2014) supposed that tax evasion could arise when there is a choice between payment to be made to acquire the primary needs and wants for survival for instance, clothing, food and accommodation and the payment for taxes due provided that finance is insufficient to take care of all the demands at once. For that reason, taxpayers become very vulnerable and are most likely to fail in submitting their tax returns as and when due. As mentioned by Engida and Baisa (2014), there are additional economic factors influencing tax compliance which include perception on government spending, audits on tax and tax rates. Engida and Baisa believe that the main objective of carrying tax audits is to boost taxpayers' voluntary compliance. Palil (2010) suggests that tax audits should be done frequently and conducted thoroughly to reduce the likelihood of under-declaration of income as well as over-statement of expenses and also encouraging taxpayers to be prudent in the manner they make declarations.

Another factor which influences tax compliance according to Loo (2010) is the cost associated with complying. As stated by Loo, those costs were the ones which taxpayers incurred in the process of complying. Eichfelder and Schorn (2009) further added that the cost of compliance was dependent on the level of compliance and for that reason high costs could lead to increase in the levels of tax evasion.

### **2.2.2 Online tax filing and tax compliance**

Gwaro, Maina and Kwasira (2016) studied about filing tax online and its effect on tax compliance by MSEs in Nakuru Town. The study utilized computer literacy, system security and system stability as independent variables. The scholars used descriptive research design in the

study and they collected data through administering questionnaires using a sample of 100 MSEs as respondents. The scholars analyzed the data by use of Pearson moment correlation and regression model. The scholars presented the findings by tabulating the results. Their findings were that tax compliance was significantly related to the level of literacy on computer. The other two independent variables i.e., security and stability of the system did not significantly relate with tax compliance. The scholars concentrated on tax compliance like some of the preceding reviewed studies for instance Wasao, Baisa and Lubua (2014) studies respectively. Gwaro *et al* did not discuss on the non-compliance part in their study. Gwaro *et al* used different research independent variables from the independent variables which were used by the various scholars whose work had been reviewed earlier. The study methodology which was adopted by Gwaro *et al* was similar to the one adopted by Wasao (2014), Caasi *et al* (2015), Kiarie and Muturi (2015) as well as Maisiba and Atambo (2016). Gwaro *et al* study findings were different from the findings each preceding scholarly work presented. Just like Wasao (2014) study, Gwaro *et al* conducted their study in Kenya, Nakuru County.

In an attempt to determine the effect of attitudes on tax compliance in Colombo District, Srin Lanka, Jayawardane (2016) observed that there were high tax rates and unfair tax systems. From the scholar's findings, insufficient tax audit systems, weak detection systems and weak enforcement by Internal Revenue Department, tax system complexity and the attitude of government spending affected tax compliance decisions by taxpayers. Jayawardane's study methodology was a survey study design with survey of 200 taxpayers being studied. The scholar collected data from primary sources by administering the five-point likert scale questionnaires. The scholar discussed only on compliance and failed to bring out the aspect of non-compliance. Jayawardane's study methodology was different from each methodology adopted by every

scholar in their studies. The scholar used unique independent variables for the study which resulted to totally different findings from the reviewed scholarly work. The technique for data collection which was used by the scholar was similar to the methods of data collection each and every scholar used in their reviewed work.

Malonza (2016) carried out a study to check if corporation compliance by medium corporate taxpayers in Kenya was affected by iTax. The scholar used descriptive research design for the study while data was collected by the scholar using structured questionnaires. Data analysis was done by the scholar with the use of SPSS and the findings were presented using tables and graphs. Malonza's findings revealed that iTax usage was the cause of increased compliance by medium corporate taxpayers. Malonza's study methodology was similar to the methodology which was adopted by Wasao (2014), Caasi *et al* (2015), Kiarie and Muturi (2015), Ondimu (2015) as well as Gwaro *et al* (2016), all studies adopting a descriptive research design. Malonza, like most of the scholars as depicted in their scholarly researches, concentrated only on the part of compliance but the scholar did not discuss the aspect of non-compliance.

In a study by Azmi & Kamarulzaman (2010), governments implement Information and Communications Technologies (ICT) as an attempt to boost taxpayers' convenience and improve government information accessibility as well as improving service delivery. Lai & Choong, (2010) assert that the adoption of the online tax filing has formed the major form of online services of the government. Most nations in the world are also introducing online tax filing so as to achieve tax administration as well as tax compliance efficiency (Mandola, 2013). As regards Young (2012), many governments are adopting electronic tax filing worldwide because of the various advantages associated with such an initiative.

Nyaga and Omwenga (2016) undertook research on factors which influence growth in tax revenue at KRA in Meru Station. They used staff ethics, Tax Administration, Tax Payers' awareness and Information Communication Technology as independent variables. The methodology of their study was descriptive research design. They used census method of sampling in their study and collected data by the help of closed ended and open-ended questionnaires. Analysis of data was achieved by the scholars with the use of computer excel package while presentation of data was in form of tables, pie charts and bar graphs. The findings of their study were that staff ethics, Tax Administration, Tax Payers' awareness and Information Communication Technology improved tax revenue growth. Nyaga and Omwenga's study location and the study design were similar to Kiarie and Muturi (2015) study. Their study methodology was also similar to the one which was adopted by Wasao (2014), *et al* (2015), Kiarie and Muturi (2015), Ondimu (2015) as well as Gwaro *et al* (2016). Nyaga and Omwenga used different and unique independent variables in their study from the ones each and every scholar in the reviewed studies had used.

A study by Bett and Omondi (2017) on iTax system and its contribution being a tactic for collecting revenue at KRA in Rift Valley Kenya showed that electronic tax payment, online tax return processing, online taxpayer registration, online compliance and monitoring activities contributed significantly on revenue collection at KRA, Rift Valley Region. Their methodology was a correlation research design and data collection was done by use of questionnaires. They used stratified random sampling design to select 76 respondents for their study. The scholars did data analysis using multiple regression models. Presentations of their findings were in form of tables. Some of the independent variables that were used by Bett and Omondi in their study were similar to the ones which were used by Wasao (2014). Bett and Omondi did not discuss the

independent variables on the basis of tax compliance nor tax noncompliance. The scholar's study methodology was unique from those adopted by the scholars who undertook the reviewed studies.

As cited in Tendai (2018), Palil (2010) suggested that non-simplicity of tax returns and administration of tax has had over time, a negative effect on behavior of tax compliance. Loo (2010) study proved that tax laws which were complex, confusing and dynamic could result to an increase in non-compliance and could not be intentional on the taxpayers. As a result of that, Palil's (2010) answer was to bring into use; detailed but simple tax returns to ease taxpayers' completion of their returns accurately. As suggested further by Okello (2014), tax forms must be simple, with more clarification on procedures concerning the completion of tax filing. Furthermore, tax return filing should be such that it is designed in a way that is convenient to the taxpayers for example i-Tax.

Tambun and Kopong (2017) carried research on electronic filing and its effect on compliance by individual taxpayer in Jakarta Indonesia. The scholar's findings were that e-filing influenced greatly individual taxpayer compliance. The methodology adopted in their study was a formal research design. The scholars collected data through questionnaires. Data analysis was done by the scholars with the help of smart software partial least square. They tabulated the results and the findings of their study were that tax compliance was significantly influenced by electronic filing. The scholars as well concentrated on compliance and never observed the non-compliance aspects.

### **2.2.3 Online tax payment and tax compliance**

A study to check if efficiency of tax collection at domestic taxes department of KRA in Rift Valley Region was affected by electronic tax system was conducted by Monica, Makokha and

Namusonge, (2017). Their study utilized a case study research design and data collection was achieved by the scholars by means of self-administered questionnaires and descriptive statistics, inferential statistics as well as SPSS were used to analyze data. Data findings were presented by the scholars in tabular format, charts and graphs. The scholars' findings were that electronic tax filing, electronic tax payment, staff competency and taxpayer's knowledge in operation influence tax collection efficiency. Monica *et al* study methodology was similar to the study methodology used by Lubua (2014) as well as Mustapha and Obid (2014), all studies were done with a case study design. In their study, Monica *et al* used filing and payment of tax among other independent variables just like Wasao (2014) as well as Bett and Omondi (2017) and the findings were also almost similar with respect to those similarities in independent variables.

Mulago (2017) undertook a study on tax reforms and effect they have on corporate compliance to KRA. The independent variables were administrative tax reforms, policy tax reforms and technological tax reforms. Descriptive design was adopted by the scholar in the study and data collection was done by the same scholar with the use of questionnaires. Analysis of data was achieved with the use of Analysis of Variance (ANOVA). The findings by Mulago were that corporate tax compliance was adversely affected by tax reforms. Like most of the scholars whose work has been reviewed, the scholar did not discuss the issue of non-compliance but concentrated on the compliance point of view. Mulago's study design was similar to the design which had been adopted by most of the scholars like Kiarie and Muturi (2015) and Caasi *et al* (2015) among others.

A study by Ngigi (2017) on integrated tax management system and the effect on tax compliance by medium sized enterprises in Central Business District in Nairobi County confirmed that tax compliance was influenced by integrated tax management system. Through the scholar's study, it

was revealed that penalties and fines paid as well as filing expenses which related to integrated tax management system significantly and positively related with tax compliance. The methodology which the scholar adopted for the study was descriptive design and data collected with the use of questionnaires. Data analysis was done by the scholar through correlation analysis. Ngigi as well did not incorporate the issue of non-compliance in the study. The study methodology which the scholar adopted was similar to the one adopted in the studies by Kiarie and Muturi (2015) as well as Caasi *et al* (2015) among others.

Olatunji and Ayodele (2017) did their research on information technology and how it impacted on tax productivity in Southwest Nigeria and found out that Online Tax Registration-OTR, (Online Tax Filing-OTF and Online Tax Remittance-OTRE affected productivity of tax. The methodology they adopted was a descriptive design study while data collection was done with the help of questionnaires. Data analysis was achieved through multiple regression and Pearson product moment correlation. The scholars' study location was similar to the location in which Mustapha and Obid (2014) undertook their study that's Nigeria. Descriptive design was adopted by the scholars, a design which was similar to the design in the study done by Caasi *et al* (2015) and Gwaro *et al* (2016) among others. Olatunji and Ayodele used independent variables which were exactly similar to the independent variables which were used by Wasao (2014). Like some of the scholars' studies reviewed, for instance, Monica *et al* (2017), Olatunji and Ayodele neither discussed the issue of compliance nor noncompliance in their main objective.

A study by Munyoro (2017) on iTax System and its effect on compliance regarding payments of VAT by MSEs in Makueni Kenya showed that most of the taxpayers had registered for VAT and income tax. Through the scholar's study, taxpayers gave the benefits of iTax as limited time required to file tax returns, simple to use and less costs incurred. On the other hand, from the

scholar's findings, non-registered taxpayers cited reasons for non-compliance which include insufficient information on where and when to register, lengthy registration procedures and KRA offices being located far away from Wote Town. The scholar, through the study, concluded that i-Tax had contributed much to VAT compliance as it had improved the number of registered taxpayers since it was established in the year 2014. The methodology that was used by Munyoro was a descriptive study design. The scholar collected data using questionnaires and stratified random sampling was applied in selecting the respondents. Presentation of data was achieved by the scholar with the use of tables and the analysis of the same data was done by use of ordinary linear regression model. The scholar's data collection technique was similar to the data collection methods used in the preceding studies which have been reviewed. Munyoro focused on the compliance point of view only and left out the issue of non-compliance. The study methodology which Munyoro used was similar to the methodology which was adopted by most scholars in the reviewed studies for instance Ngigi (2017), Gwaro *et al* (2017) and Ondimu (2015).

Simplicity of tax and tax compliance among the rental income earners in Eldoret is positively and significantly correlated, (Serem, Kinanga & Ondiba, 2017). This finding was arrived at through explanatory research design. Data was collected by the scholars through questionnaires where a simple random sample of 181 was selected from the total population of 332 respondents and analyzed by the scholars with the use of descriptive design and inferential statistics by the help of SPSS. Hypotheses were tested by use of CHI-square values. The methodology adopted by the scholars was similar to the one of which was adopted by Ondimu (2015), the exploratory design. The scholars as well discussed the issue of compliance with respect to independent variables, leaving out the non-compliance point of view.

Bett, Tanui and Osodo (2017) did a study by collecting views about taxpayer registration online and tax returns processing and their effects on revenue collection at KRA, Rift Valley region. Their research utilized correlation research design and the respondents were employees from department for domestic taxes at KRA. Collection of data was done by the scholars through five-point likert scale structured questionnaire and a sample of 76 respondents was selected from the population of 114 respondents. Analysis of data was done by the scholars through descriptive and inferential statistics. The findings by the scholars were presented in table form. Their results of the study showed that tax return processing was significantly contributed by online taxpayer registration to KRA, Rift Valley region. Bett, Tanui and Osodo (2017) used independent variables which were similar to the ones which Bett and Omondi (2017) used in their study. Bett, Tanui and Osodo never discussed on compliance or non-compliance with respect to their independent variables like some of the scholars in the preceding reviewed literature.

A study by Tarmidi, Fitria and Purwaningsih (2017) on implementation of online tax application and its impact on tax compliance in KPP, Madya Jakarta Timur, suggested that the implementation significantly and positively affected tax compliance. Their study methodology was causal design and data collection was achieved by the scholars with the use of questionnaires with 150 tax professionals as representatives of taxpayers. Data analysis was done with the help of regression and Smart Partial Linear Scale software version 2.0. Tarmidi, Fitria and Purwaningsih as well did not discuss the issues compliance or non-compliance in their study. Data collection method which was used by the scholars was similar to the data collection methods which were used by the preceding studies.

A study to check on factors which affected tax compliance among MSEs in Naivasha Sub-County Nakuru County was done by Aondo (2018). The study utilized tax knowledge, tax rates,

filing procedures and tax accountability as independent variables. The scholar's study methodology adopted was descriptive research design. Data collected by the scholar was from primary sources with the use of questionnaires as the research instrument for the study. The analysis of data was conducted with the help of SPSS and descriptive statistics. The scholar presented the findings using tables and figures. The findings by the scholar from the study were that tax rate, filling procedures, knowledge of tax by taxpayer and accountability affect tax compliance among MSEs in Naivasha Sub-County. Aondo only discussed the issue on compliance and failed to uncover the issue on non-compliance with respect to independent variables.

Another study by Deyganto (2018) was carried out in Southern Ethiopia. The study was on factors which affect voluntary tax compliance attitude of the taxpayer with the tax system. The study methodology employed by the scholar involved both quantitative and qualitative research designs. The scholar gathered the data from primary sources and secondary sources with questionnaires being used in aid of collecting data from primary sources while secondary data collection was done by the review of the existing related literature. Data was analyzed by Deyganto with the use of software application stata version 12.0 and SPSS version 23.0. Presentation was done by tabulating the findings. The findings were that out of fourteen independent variables which were used by the scholar in the model, seven variables including probability of being audited age, gender, simplicity of tax system, lack of tax knowledge, awareness on penalty, and perceived tax rate were confirmed to affect voluntary compliance of taxpayers on the use of the tax system in the location of study. On the other hand, variables which included perception on government speeding, tax authority efficiency, occupation, education level, peer influence, income level of taxpayers, fairness perception and equity did not

significantly influence voluntary compliance attitude of taxpayers. The independent variables which were used by the scholar were all unique compared to the ones which were used in the preceding scholarly work. Deyganto did not touch on non-compliance as well like the rest of the scholars in the preceding reviewed scholarly work.

According to Loo (2006), factors in economics like costs and benefits are directly influenced by the taxpayers' activities which relate to compliance. According to the scholar, economic deterrent theory has an intention to encourage compliance through restrictions and punishments inflicted to non-complying taxpayers in a way that the cost of committing the crime of not paying tax exceeds the gains of committing such a crime (Peter, 2009, Enigma & Baisa, 2014). This therefore subjects an individual taxpayer to make informed judgment of whether they can proceed to evade tax or comply and pay taxes. The economic deterrent theory is further founded on the proposition that all individuals can differentiate between that which is right and that which is wrong. As cited in Engida & Baisa (2014), Hasseldine coined that taxpayers act rationally and therefore evade tax by comparing costs and benefits of tax evasion.

Engida and Baisa (2014) noted that taxpayers were most likely to make their declaration voluntarily if they were observing that the government is using the collected tax revenue wisely for instance, incurring expenditure on education, security, health services and on establishing public transportation infrastructure as well providing the basic services to the citizens.

#### **2.2.4 Online tax system stability and tax compliance**

According to South Africa Revenue Service (SARS) annual report 2012/2013, non-compliance is caused by adverse economic conditions whereby taxpayers are tempted to reduce their inflows of cash through understatement of sources of their revenues. The approach which SARS is applying to improve the services, expand education and increase activities to in an attempt to achieve

effective enforcement to compliance clarified to the taxpayers who are considered traders that non-compliance will result into punitive measures imposed to them and also that there are negative repercussions for taxpayers who will not adhere to the tax laws and the tax legal requirements. For that case, administration of tax which is effectively contributing a lot by improving tax compliance due to the reason that it is perceived to encourage voluntary compliance by the taxpayers.

Gwaro, Maina and Kwasira (2016) studied about online tax filing and its effect on tax compliance by MSEs in Nakuru Town. The study utilized computer literacy, system security and system stability as independent variables. Gwaro *et al* used a descriptive methodology in their work and they collected data through administering questionnaires using a sample of 100 respondent MSEs. The scholars analyzed the data by use of Pearson moment correlation and regression model. The scholars presented the findings by tabulating the results. Their findings were that only literacy level on computer significantly related with tax compliance. The other two independent variables i.e., security and stability of the system revealed no significant relationship with tax compliance. Gwaro *et al* (2016) findings with respect to online tax system stability were related to tax compliance and not on non-compliance perspective.

A study by Terkper (2003) confirmed that most small and medium taxpayers don't voluntarily register with tax authorities. However, those who happen to register often keep inadequate and inaccurate records, fail to submit tax returns, and fail in settling their tax debts as required of them. Thus, small businesses have great chances to evasion of tax and their resources are mostly limited for them to get subjected to auditing. However high investments made in auditing, uncovering profits which were never reported might not be easy without sufficient audit trail, (Ahmed & Braithwaite, 2005).

## **2.3 Theoretical Framework**

This part highlights the theories which have been put forward by various scholars to support the relevant topics and studies. Related theories to this study are; ability to pay theory and the benefit theory.

### **2.3.1 Ability to pay theory**

Pigou and Smith advanced this theory in the year 1903. As per their statement, taxes should be paid in relation to the taxpayer's ability to pay, which was further supported by Muturi and Kiarie, (2015). The theory in its highlights, coined that taxpayers whose earnings are more are supposed to raise more in taxes, which Muturi and Kiarie, (2015) concurred. This theory gives further views on what should be based on in order to determine how much a taxpayer must pay in taxes as well as their ability. These include the ownership of property, using expenditure as a basis for tax and the use of income as basis for tax.

This theory is a principle of progression in that as individual incomes or earnings go higher, taxes on the same incomes become more and more rendering taxpayers for instance, individuals, corporations, partnerships, trusts and companies whose incomes have increased to pay more in taxes than low-income earners. With this theory, percentage of tax increases with income. The advantage of the theory is that those who are abler and having much resource contribute the required funds for provision of services which will be used by many for example police, school constructions and others. Moreover, this theory indicates that there is potential increment in government revenues as it argues that if the government was to use a flat tax rate instead, the rate could reduce to include the low-income earners and that could result to a loss in revenue arising out of insufficient funds remaining after paying taxes. For that case, allowing low-income earners to keep a larger part of their earnings would help in stimulating the economy.

The assumptions of the theory lie on the aspect that those who have more should contribute more in taxes. The limitation for this theory is that it reduces the incentives for individuals who would want to climb the ladder to high income earners. The theory imposes penalties on those who have worked harder and have risen to higher incomes. Critics of this theory cite that this theory is unfair to those individuals who are wealthy. The same critics prefer the benefit theory citing that the government should tax individuals according to the services those taxpayers receive.

This proposition is related to this study in that the more a taxpayer is able to pay taxes, the more he is willing to comply with taxation rules. The taxpayer will voluntarily seek to register, file and remit taxes as and when due because they have got the ability and would want to avoid the costs associated with non-compliance.

### **2.3.2 Benefit theory**

According to Wikipedia.org, Knut Wicksell and Erick Lindahl developed this theory in 1896 and 1919 respectively. This theory observes that the state should collect revenues in form of tax from its people with regard to the benefits that the nation offers them. The implication is that payment of taxes should be done by the people who derive direct benefits from the programs and projects from the government, which are provided out of the tax paid. The benefit theory's objective is the accurate determination of the optimal revenue amount that the government should expend on public utilities.

This theory has been praised by most taxpayers as they cite it to be fairer as taxpayers, like consumers for goods, would have to pay for they actually receive. Accordingly, consumers are given more power that their preferences are considered more and given weight rather than the government planners. This theory also is seen to be better in that it advocates for efficient allocation of limited resources that will check on overinvestment of funds in low priority areas

and projects. One limitation of the theory is that the less advantaged regions of the state could remain underdeveloped as more resources would be channeled only to where more taxes were raised by the government. This could lead to continuous slack in developmental programmes in those regions. The theory can suppress the principle of equity.

This theory is relevant to this study as compliance by taxpayers is triggered and strengthened when the taxpayer feels the benefits, he/she receives from the government, especially if the benefits are directly attributed to taxes collected from them.

After reviewing the theories and their relevance, one could also use them to design a methodology as to whether to criticize or to add values and new concepts into the existing theories. Reviewing of theories is important as far as research is concerned.

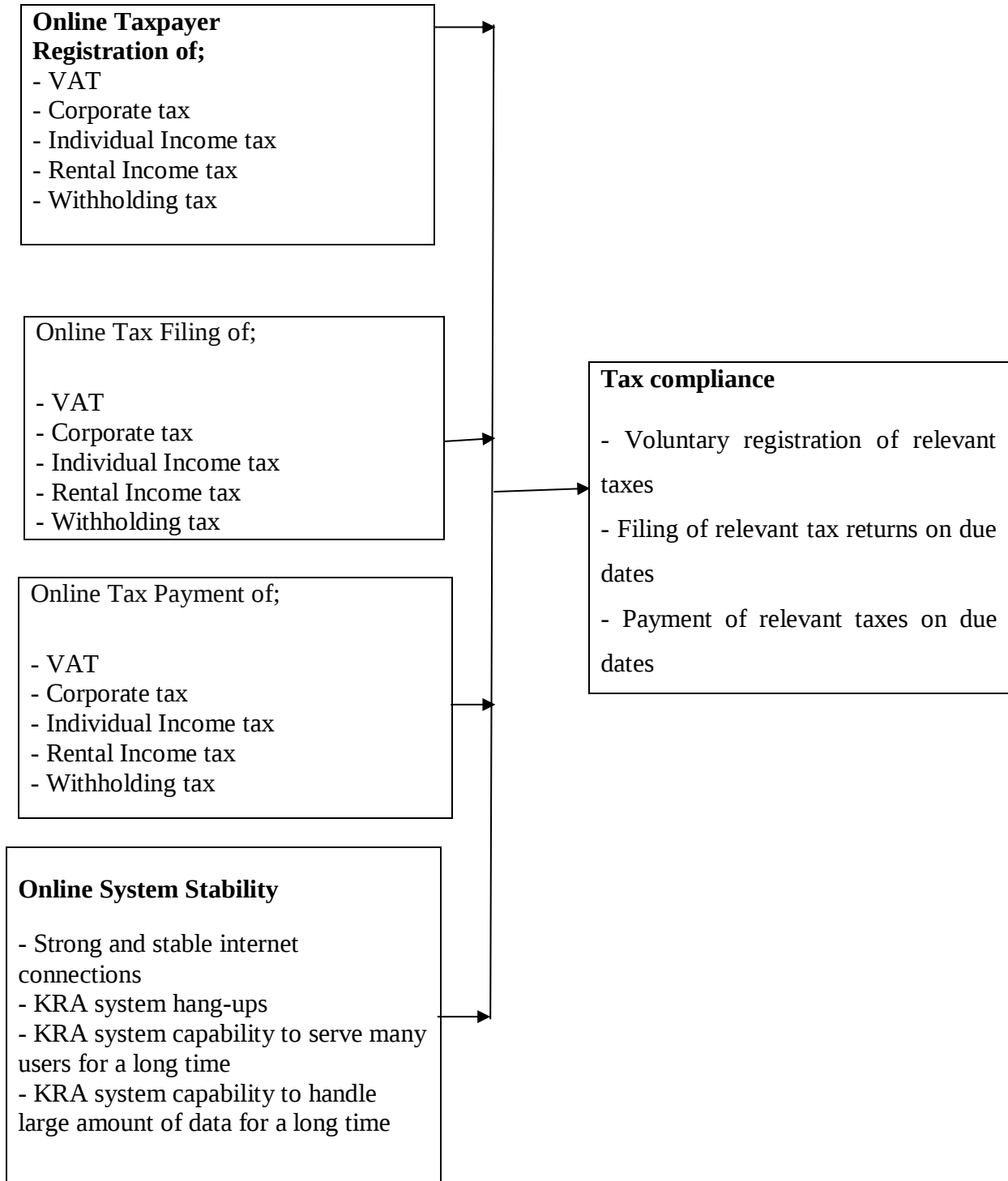
The following section is presenting the conceptual framework which will explain some sort of association that the independent variables have with the dependent variables under this study.

## **2.4 Conceptual Framework**

Mugenda and Mugenda (2003) gave a definition of a conceptual framework being the outcome of when a researcher conceptualizes the association between variables in the study and shows the relationship graphic format or diagrammatically. According to Cooper and Schindler (2003), conceptual framework also presents the various variables in the study. The following figure represents the conceptual framework which tried to show some linkage between the various subsystems of online tax system and tax compliance.

## Independent Variables

## Dependent Variable



**Fig 2.1 Conceptual Framework**

From the diagram, the independent variables were conceptualized to be the online tax registration by taxpayers who operate MSEs, the online tax filing, the online tax payment and the tax system stability to operators of MSEs in Kericho County. Online tax registration was further conceptualized as VAT registration, corporation tax registration, individual income tax registration, rental income tax registration and withholding tax registration. Online tax filing was conceptualized as filing of VAT, corporation tax, individual income tax, rental income tax and withholding tax. Online payment is conceptualized to mean payment of VAT, corporation tax, individual income tax, rental income tax and withholding tax through online i-tax platform. Lastly, system stability has been conceptualized to mean strong and stable internet connections, system hang ups, KRA system`s capability to serve many users in a single time for a long time and KRA system`s capability to handle numerous data for a long time.

The dependent variable was conceptualized to be tax compliance. This further was conceptualized to mean voluntary registration of relevant taxes by taxpayers without being forced, filing of relevant taxes on due dates and payment of the relevant taxes on due dates.

## **2.5 Identification of Knowledge Gap**

The few researches relating to this study have indicated in their findings that tax compliance is positively related to online tax filing system. However, the methodology that has been adopted across most of the researches is the descriptive research design. To establish whether a relationship exists between the independent variables and the dependent variables, correlation design would have been appropriate. This study on the contrary will adopt the correlational design as the methodology.

Moreover, related studies have limited information on online tax registration, online tax filing and online tax payment as the independent variables which could have some influence on tax

compliance. These variables will be examined by the researcher so as to bring out a further understanding of their relationships with the tax compliance in addition to the limited researchers touching on these variables. The reviewed literature has concentrated so much on the compliance point of view with very little information on non-compliance. This study will strive to expound on the non-compliance point of view in addition to compliance.

## **CHAPTER THREE**

### **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This section describes the research methodology of the research. It explains the procedures and plan that was followed by the researcher to make valid, objective and economical as well as accurate answers to the research questions. This subsection of the study, therefore, describes the research design, study location, target population, sampling design, data collection instruments, validity and reliability, data analysis and presentation and finally the ethical issues.

#### **3.2 Research Design**

Phillips (1971) noted that the research design entails the blueprint for gathering, measuring, and analyzing data. It assists the scientist to allocate his limited resources by presenting very important choices. Research design encompasses a plan for collecting data and analyzing the same data to realize the objectives of being relevant and economical for this research work.

Kerlinger (1986) defined research design to be the plan and structure of investigation conceived to obtain answers to research questions and to control variance. It implies how the research objective will be reached and how the problem encountered in the research will be tackled (Kerlinger, 1973). This study adopted a correlational study design. The researcher adopted a correlational design as the researcher sought to examine the predictive relationship between the independent variables and the dependent variables.

#### **3.3 Study Location**

The location upon which the research was undertaken was Kericho County. The study focused attention on the Medium sized enterprises that have been established and registered in Kericho

County. The study location was chosen because there was limited information on a similar study across the region especially relating to the online tax system and tax compliance among MSEs.

### 3.4 Target Population

According to Mugenda and Mugenda (1999), the term target population is the complete set of objects, cases, or individuals with some characteristics to which the researcher wants to generalize the result of the study. The population is the full set of people or items under investigation (Lancaster, 2005). The population is the total collection of elements (people, firms, decisions, etc.) about which scholars wish to make some deductions (Cooper and Schindler, 2011). Population refers to the larger group from which a sample is taken (Orodho, 2005). The target population of this study comprised 102 MSE operators registered with the County government of Kericho and who are located in the Central Business District (Trade department, 2018). Table 3.1 shows target population distribution.

**Table 3.1 Target Population Distribution**

|              | <b>Sub-county</b> | <b>MSEs target population</b> |
|--------------|-------------------|-------------------------------|
| 1            | Bureti            | 25                            |
| 2            | Belgut            | 21                            |
| 3            | Ainapmoi          | 20                            |
| 4            | Kipkelion East    | 17                            |
| 5            | Kipkelion West    | 17                            |
| <b>Total</b> |                   | <b>102</b>                    |

### **3.5 Census Survey**

Since the target population of the study is small, a census survey was adopted where data was collected from all the registered 102 MSEs operators. For a small population, the results are likely to be accurate if a census technique is used in the study (Kumar, 2012).

### **3.6 Data Collection Instruments and Procedure**

This study used primary data. Primary data is data collected directly from firsthand experience. A structured questionnaire was used to collect primary data through the drop-and-pick method to conserve time and financial resources as well as to make it easier for analysis as they are in immediately usable form. A questionnaire can be defined as a collection of questions printed and have been intentionally designed and structured to be used to collect information from respondents. The structured questionnaire consisted of open and closed-ended questions. The researcher used the method of dropping and picking while collecting the data. This method involved handing out the research tools (questionnaires) to the respondents and picking them at a later date. This method was favored since it allows the respondent to have ample time in giving out their responses (Mugenda & Mugenda, 2003).

#### **3.6.1 Validity of Research Instruments**

This is the measuring instrument's ability to measure what it is designated to measure (Kumar, 2012). Mugenda and Mugenda (2003), assert that the instrument's validity is measured by the extent to which results that have been obtained from the analysis of the data represent the phenomena under study. To ensure the validity of the instruments, the study considered both the face value method and the content validity of the questionnaire. To ensure the validity of the instrument, face value validity was assessed by having all the questions phrased in line with the study objectives to reduce ambiguity to the lowest limit possible. Content validity was

undertaken through a review of the questionnaire by an expert in the study field. The researcher sought support, guidance and advice from the supervisor to assist in reviewing the content validity of the data collection instrument.

### **3.6.2 Reliability of Research Instruments**

Kothari (2003) coined reliability as the measure of the extent to which a research instrument yields consistent results after repeated trials. The instrument can give consistent results if it is administered to the same respondents twice or more. To establish reliability, the research instrument was piloted in Bomet County. This helped to remove ambiguities in the questions. Test-retest method was used where the research instrument was administered to the same respondent twice. After the first administration, a period was granted to pass long enough to make the respondents forget to give similar responses by remembering what they gave as answers in the first round. The estimated coefficient of reliability was obtained by correlating the scores on the two sets of measures. Computation of the coefficient was achieved with the help of Karl Pearson's product moment coefficient of correlations given as 'r'. The items in the instrument were scored individually and aggregated to get the total score on the whole instrument for both test and retest administration. The r value which was greater than 0.6 was considered good and the closer the R-value to 1, the better. Table 3.2 presents the reliability of the data collection instrument.

**Table 3.2 Reliability Results**

|                         | Pearson's Coefficient (r) | N (Items) |
|-------------------------|---------------------------|-----------|
| Online tax registration | 0.886                     | 7         |
| Online tax filing       | 0.795                     | 5         |
| Online tax payment      | 0.812                     | 6         |
| Online system stability | 0.841                     | 7         |

The findings in Table 3.2 show that Pearson's coefficients were above 0.70. This indicated that the scale used to measure these variables were consistent and for that case, reliable for the data collection

### **3.7 Data Analysis and Presentation**

The researcher employed quantitative techniques for data analysis. Descriptive statistics such as mean and standard deviation were used to summarize data while inferential statistics such as correlation and regression were used to examine the relationships. Correlation Coefficient was used to analyze the non-causal relationship between variables while regression analysis was used to test causal relationship between variables. Statistical Package for Social Sciences (SPSS) version 25 aided in the analysis. Data was presented using tables, pie charts, bar graphs and discussions. The following regression model was fitted.

$$Y = \alpha + \beta_1 TR + \beta_2 TF + \beta_3 TP + \beta_4 SS + \varepsilon$$

Where: Y = Tax Compliance

$\alpha$  = Regression constant

$\beta_1, \beta_2, \beta_3, \beta_4$  = Beta coefficients for independent variables

TR= Tax Registration

TF= Tax Filing

TP= Tax Payment

SS= System Stability

$\varepsilon$ = Error Term assumed to be normally distributed

### **3.8 Ethical Consideration**

The researcher adhered to the ethical issues observed during the research process. The researcher explained the purpose and objectives of the study to the participants so that they could conclude whether to take part or not in the study. The researcher also assured the participants of privacy and confidentiality. Participation in the research was voluntary and before answering the questions. To ensure the objectivity of the responses, respondents were at will to withdraw from the data collection exercise whenever they felt so. The researcher obtained permission from the research institutions such as NACOSTI and the institution where the researcher carried out the research study. The researcher, having satisfactorily satisfied the requirements of the research, the University of Kabianga granted permission to the researcher to undertake the research.

## CHAPTER FOUR

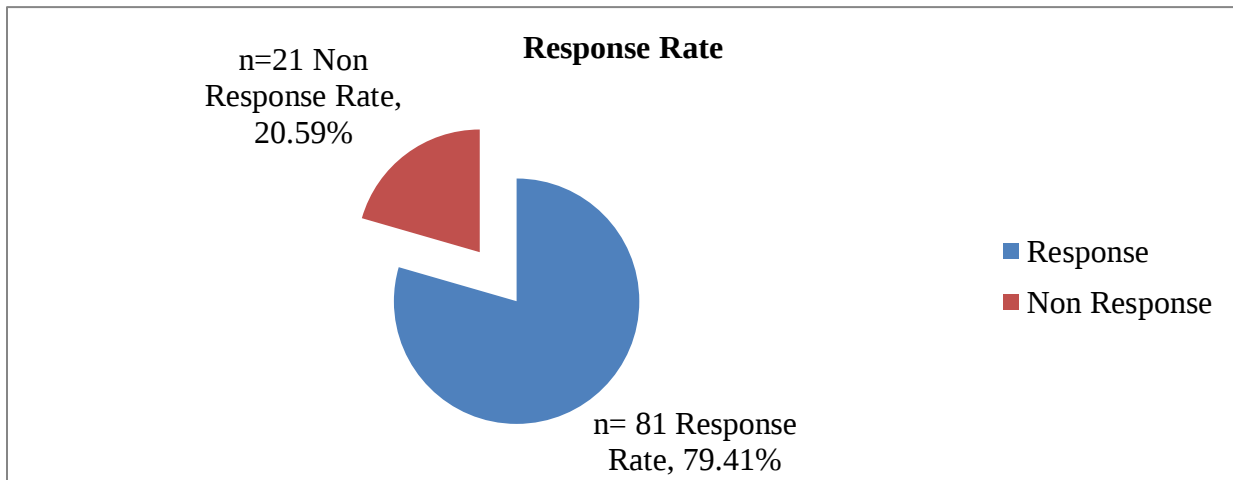
### RESULTS AND DISCUSSION

#### 4.1 Introduction

This chapter presents the results which have been obtained from the data collected and analyzed through use of various statistical tools which are the questionnaires and Statistical Package for Social Sciences. Descriptive and inferential statistics have been utilized whereas frequency tables and figures have been used to present the findings of the study for easier interpretation. The chapter also discusses the findings of the research study.

#### 4.2 Response rate

Out of the total 102 questionnaires which were administered to the respondents, 81 questionnaires were returned and the questions were fully answered. This translated to 79.41% while non response was 21 which translated to 20.59%. The response rate of the targeted population was as presented in figure 4.1.



**Fig. 4.1 Response Rate**

As shown by the figure above, the questionnaires which were fully answered and returned by the target respondents were 81. This translated to 79.41% responses of the target population while

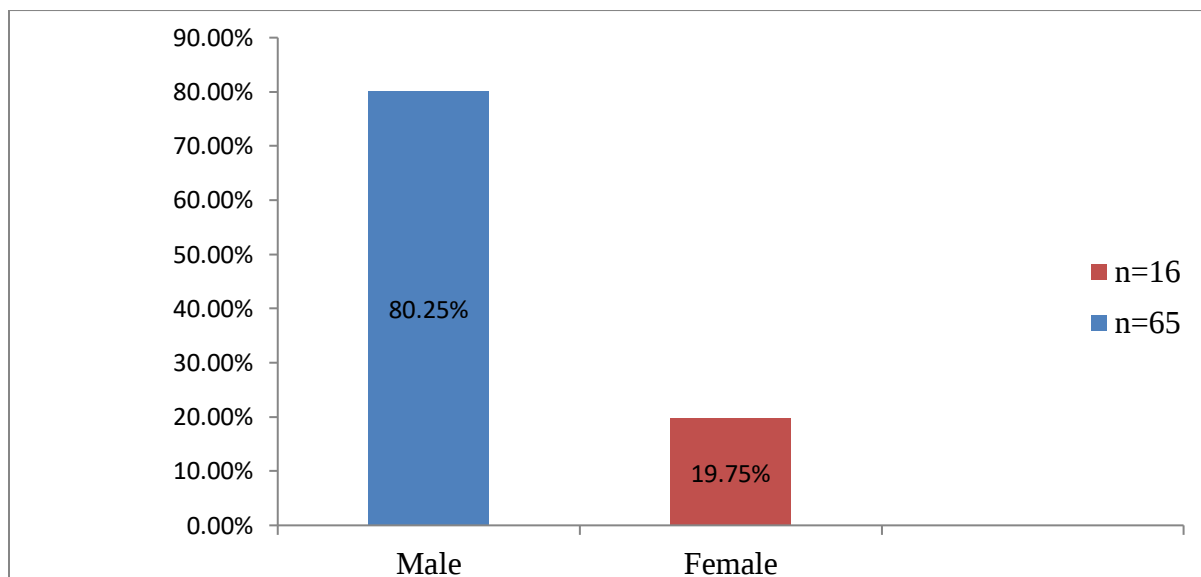
the number of questionnaires which were not returned was 21, translating to 20.59% of non-responses from the target population. This response rate is good for the study which according to Mugenda and Mugenda (2003), a response rate of 50% is good as a representative of the sample and that above 70% is excellent.

### 4.3 Demographic Results

This section presents the demographic results of the respondents.

#### 4.3.1 Respondents' gender

The study sought to establish the gender of respondents and the responses were as presented in figure 4.2.



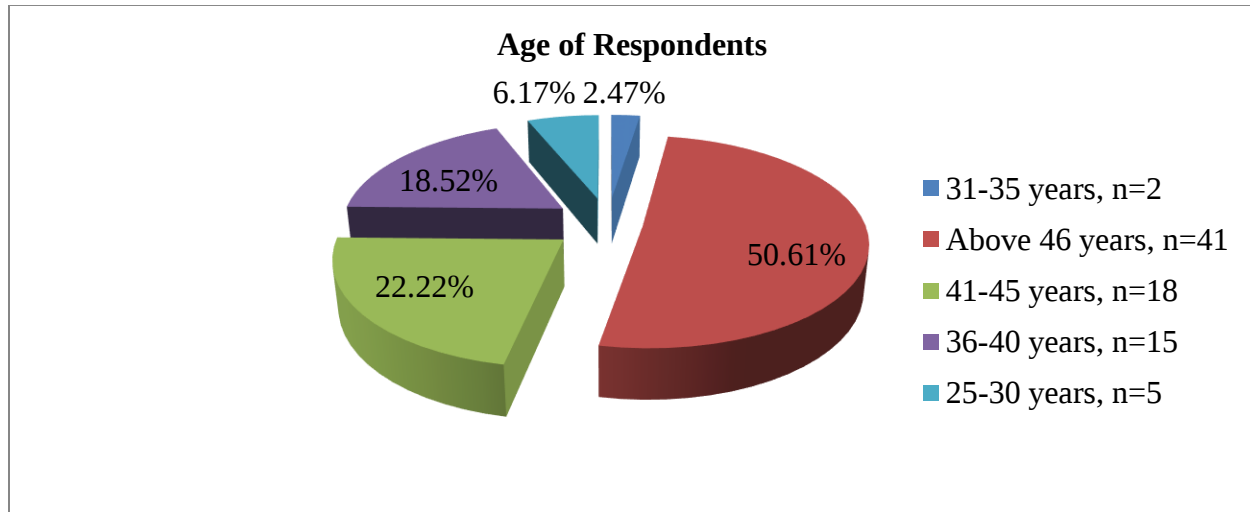
**Fig. 4.2 Respondents' Gender**

From figure 4.2, respondents who indicated that they were male were 65 in number, which translated to 80.25% of the total responses. Female as depicted by the figure were 16 and that translated to 19.75% of the total study responses. The results indicated that majority of the MSEs

operators were male. It can be implied that the responses were not fairly balanced based on the gender aspect due to male gender dominance in the responses. However, this did not affect the

#### 4.3.2 Respondents' age bracket

This study tried to gather information from the respondents concerning their age. The responses were as presented in figure 4.3.



**Fig. 4.3 Age of Respondents**

According to figure 4.3, MSEs operators who indicated that they were in the age bracket of 31-35 years were 2, translating to 2.47% of the responses. Those who indicated that they were above 46 years were 41, translating to 50.61% of the responses. Those between 41 and 45 years totaled 18 and that translated to 22.22% of the responses. As indicated in the figure, those who were in age bracket between 36 and 40 years were 15 which when translated to a percentage is 18.52% of the total responses. Finally, MSEs operators who were in age bracket between 25 and 30 years were 5 translating to 6.17% of the total responses. The results indicated that majority of MSEs operators had the age above 46 years. This implies that they had attained substantial skills and experience to run MSEs and had interacted with the online Tax system for quite longer periods.

### 4.3.3 Education qualification of the respondents

This research also sought to establish the education level of the MSEs operators. The findings so obtained were presented in table 4.1.

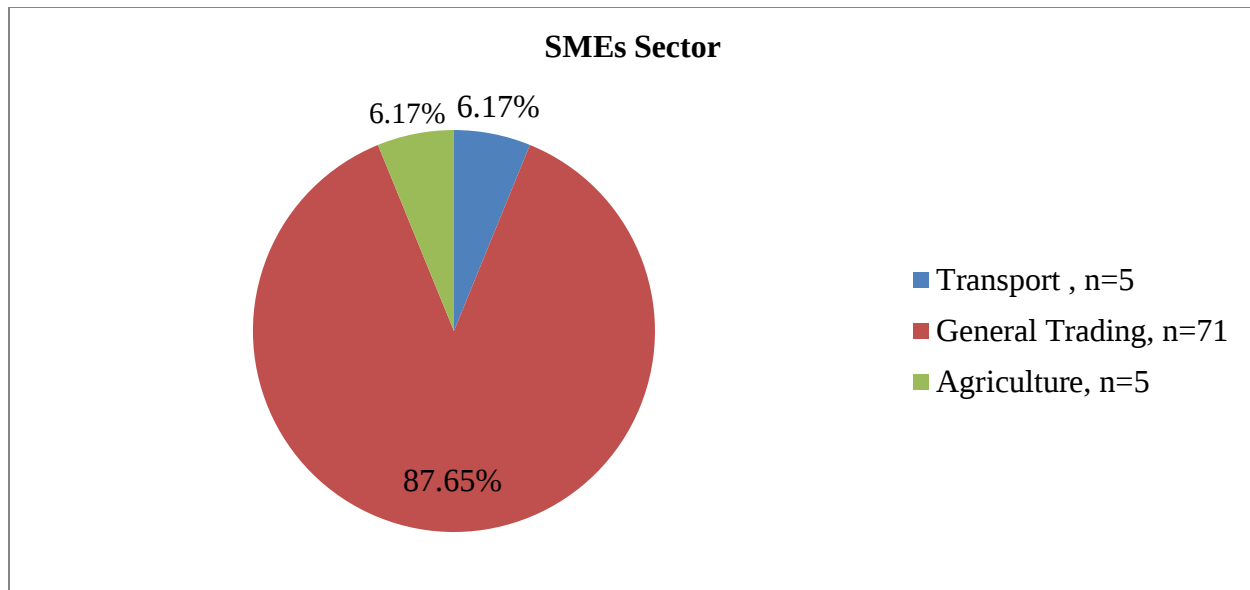
**Table 4.1 Education Qualification of the Respondents**

| <b>Level</b>       | <b>Frequency</b> | <b>Percentage</b> |
|--------------------|------------------|-------------------|
| Primary            | 6                | 7.41              |
| College/University | 58               | 71.60             |
| Secondary          | 17               | 20.99             |
| Total              | 81               | 100               |

From the findings presented in the table 4.1, the study shows that majority of the respondents (58 respondents translating to 71.60%) indicated that they had gone through either colleges or universities. 6 respondents translating to 7.41% of the total responses indicated that they attained the basic primary qualifications. 17 respondents with a percentage of 20.99 indicated that they had attained the secondary qualifications. The results suggested that majority of the respondents could not miss some knowledge concerning the online tax system.

### 4.3.4 The MSE sector

This study further tried to seek the knowledge about the sector in which each of the MSE operator was engaged in. The findings of the study were as presented in figure 4.4.

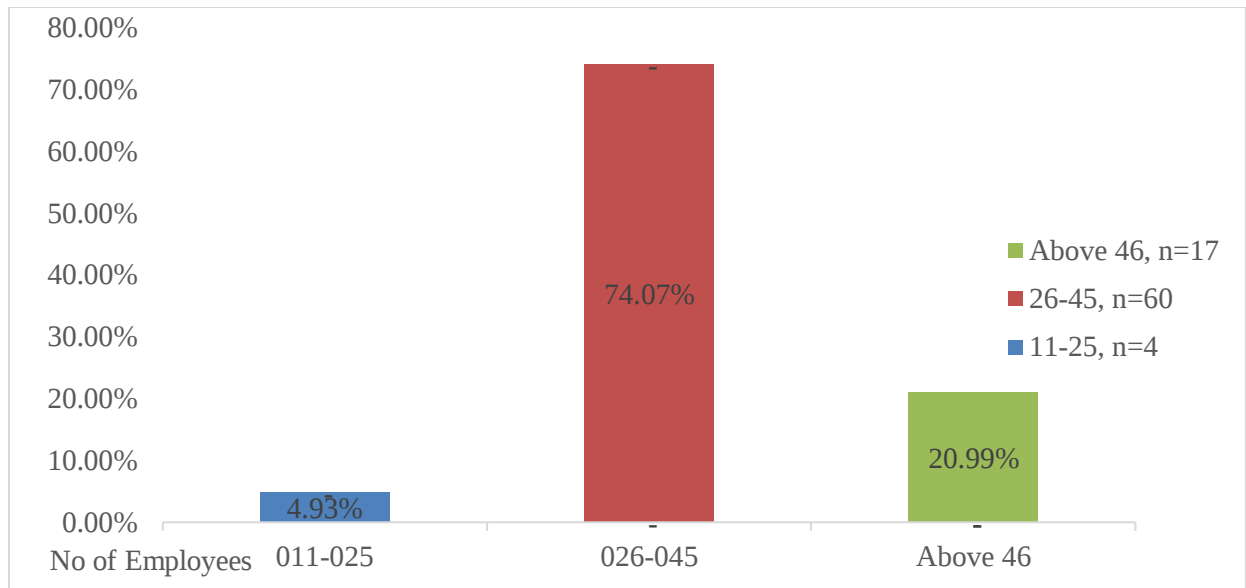


**Fig. 4.4 MSE Sector**

The findings of the study as depicted in the figure 4.4 indicates that 85.65% of the total responses indicated that most MSEs fall in the general trading sector. Both Agricultural and transport sector made 6.17% of the responses. The results therefore imply that majority of the MSEs operators undertake the general trading activities. This further suggested that the operators had a better experience about the various online tax system platforms to interact with.

#### **4.3.5 Number of employees**

The researcher intended to seek responses about the number of employees each MSE operator had employed in their premises. Through the research findings, the results are as presented in figure 4.5.



**Fig. 4.5 Number of Employees**

According to figure 4.5, the study findings indicate that 4.93% of the MSEs operators had employees between 11 and 25. 74.07% of the operators had employees between 26 and 45 while 20.99% of them had employees above 46. The results indicate that the number of employees as per each operator meets various definitions of an MSE around the globe where in some parts of the world, MSEs may be deemed to have a maximum of 50, 100 and 500 employees with no defined minimum number.

#### **4.3.6 Response on online tax system**

The study also sought responses on whether the MSEs operator businesses had done online tax registration, tax filing and online tax payment. The responses were tabulated as follows on Table 4.2.

**Table 4.2 Our business has registered for online tax**

|       | Frequency | Percentage |
|-------|-----------|------------|
| Yes   | 65        | 80.2       |
| No    | 16        | 19.8       |
| Total | 81        | 100        |

The findings of the study as presented in table 4.2 indicate that majority of the target respondents whose number was 65 and a percentage rate of 80.2 gave their response that their business had registered for online tax whereas 16 respondents with a percentage of 19.8 suggested they had not registered for online tax. This implies that the study was appropriate to be undertaken.

**Table 4.3 Our business has been filing tax returns online**

|       | Frequency | Percentage |
|-------|-----------|------------|
| Yes   | 64        | 79.01      |
| No    | 17        | 20.99      |
| Total | 81        | 100        |

As per table 4.3, MSEs operators who have been filing tax returns online are 64 translating to a percentage of 79.01% while those who have not been doing so are 17 in number, translating to 20.99%. This indicates that the research was appropriate in the area of study.

**Table 4.4 Our Business has been Paying Tax Online**

|       | Frequency | Percentage |
|-------|-----------|------------|
| Yes   | 60        | 74.07      |
| No    | 21        | 25.93      |
| Total | 81        | 100        |

As per table 4.4, MSEs operators who have been paying for tax online were 60 translating to a percentage of 74.07% while those who have been paying through other means are 21 in number, translating to 25.93%. This implies that those who registered the business for tax online do not necessarily file tax through online platforms while those who use online to file tax returns do not necessarily apply the same route to pay for taxes.

#### **4.4 Descriptive Statistics**

Descriptive statistics analysis for the research variables and discussions are presented. Descriptive statistics used included mean and standard deviation.

##### **4.4.1 Descriptive analysis for online tax registration**

Respondents were asked to indicate their agreement on the following items relating to online tax registration.

**Table 4.5 Descriptive Results for Online Tax Registration**

| <b>Statements</b>                                                                                                                                                     | <b>N</b>  | <b>Mean</b>  | <b>Std. Dev</b> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------|-----------------|
| Online VAT registration by enterprises has significantly influenced tax compliance especially by MSEs                                                                 | 81        | 3.438        | 1.262           |
| Online Corporation tax registration takes less time to complete by the taxpayers and has influenced tax compliance                                                    | 81        | 4.052        | 1.135           |
| Online Individual Income tax registration has enabled individuals who operate in MSEs to comply with tax requirements and has influenced tax compliance significantly | 81        | 3.886        | 1.195           |
| Online Rental Income tax registration by individuals who own rental houses has greatly influenced tax compliance since introduction of online tax system              | 81        | 3.798        | 1.130           |
| Online tax registration for Withholding tax by MSEs has significantly influenced tax compliance across Kericho County                                                 | 81        | 2.886        | 1.260           |
| <b>Average Score</b>                                                                                                                                                  | <b>81</b> | <b>3.612</b> | <b>0.207</b>    |

From the findings as presented in Table 4.5, respondents held neutral opinion on whether online VAT registration by enterprises has significantly influenced tax compliance especially by MSEs (mean=3.438, SD=1.262). There was agreement among most respondents that online corporation tax registration takes less time to complete by the taxpayers and has influenced tax compliance (mean=4.052, SD=1.135). Most respondents agreed that online individual income tax registration has enabled individuals who operate in MSEs to comply with tax requirements and has influenced tax compliance significantly (mean=3.886, SD=1.195). Most respondents were in

agreement that online rental income tax registration by individuals who own rental houses has greatly influenced tax compliance since introduction of online tax system (mean=3.798, SD=1.130) while most respondents disagreed that online tax registration for withholding tax by MSEs has significantly influenced tax compliance across Kericho County (mean=2.886, SD=1.260). On average, respondents were in agreement with online tax registration statements and there was no disparity in responses, given that the average mean value registered a standard deviation value which was less than 1 (mean=3.612, SD=0.207). The study findings are in agreement with Wasao (2014) findings that online tax registration influence tax compliance by MSEs. The findings also concur with Kiarie and Muturi (2015).

#### **4.4.2 Descriptive analysis for online tax filing**

Respondents were asked to indicate their agreement on various items relating to online tax filing. The responses were as presented in Table 4.6.

**Table 4.6 Descriptive Results for Online Tax Filing**

| <b>Statements</b>                                                                                                                | <b>N</b>  | <b>Mean</b>  | <b>Std. Dev</b> |
|----------------------------------------------------------------------------------------------------------------------------------|-----------|--------------|-----------------|
| Online tax filing of VAT has greatly influenced tax compliance by MSEs across Kericho County                                     | 81        | 4.254        | 0.993           |
| Online tax filing of Corporation Tax Return has significantly influenced tax compliance by MSEs in Kericho County                | 81        | 3.614        | 1.148           |
| Online tax filing of Individual Income Tax Return has significantly influenced tax compliance by MSEs in Kericho County          | 81        | 3.973        | 0.954           |
| Online tax filing of Rental Income Tax Return has significantly influenced tax compliance by individual owners in Kericho County | 81        | 3.991        | 0.916           |
| Online tax filing of Withholding Tax Return has significantly influenced tax compliance by MSEs in Kericho County                | 81        | 3.798        | 1.153           |
| On-line filing of related tax has improved tax compliance by MSEs in Kericho County                                              | 81        | 3.719        | 1.258           |
| <b>Average Score</b>                                                                                                             | <b>81</b> | <b>3.891</b> | <b>0.093</b>    |

From the findings as presented in Table 4.6, a larger majority of the respondents were in agreement that online tax filing of VAT has greatly influenced tax compliance by MSEs across Kericho County (mean=4.254, SD=0.993). According to most respondents, online tax filing of corporation tax return has significantly influenced tax compliance by MSEs in Kericho County (mean=3.614, SD=1.148) while online tax filing of individual income tax return has significantly influenced tax compliance by MSEs in Kericho County (mean=3.973, SD=0.954). Further, most respondents were in agreement that online tax filing of rental income tax return has significantly

influenced tax compliance by individual owners in Kericho County (mean=3.991 SD=0.916) with some agreeing that online tax filing of withholding tax return has significantly influenced tax compliance by MSEs in Kericho County (mean=3.798, SD=1.153). Respondents agreed that on-line filing of related tax has improved tax compliance by MSEs in Kericho County (mean=3.719, SD=1.258). On average, respondents were in agreement with online tax filing statements and there was no disparity in responses, given that the average mean value registered a standard deviation value which was less than 1 (mean=3.891, SD=0.093). The study findings are in agreement with Mongwaketse (2015) findings that e-filing results to reduced costs of handling tax returns hence improving tax compliance.

#### **4.4.3 Descriptive analysis for online tax payment**

Respondents were asked to indicate their agreement on various items relating to online tax payment. The responses are presented in Table 4.7.

**Table 4.7 Descriptive Results for Online Tax Payment**

| <b>Statements</b>                                                                                                                  | <b>N</b>  | <b>Mean</b>  | <b>Std.<br/>Dev</b> |
|------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------|---------------------|
| Online VAT remittances has significantly influenced tax compliance by MSEs in Kericho County                                       | 81        | 3.937        | 1.034               |
| Online Corporation tax remittances has significantly influenced tax compliance by MSEs in Kericho County                           | 81        | 3.973        | 0.990               |
| Online Individual Income tax remittances has significantly influenced tax compliance by individuals working MSEs in Kericho County | 81        | 3.394        | 1.273               |
| Online Rental Income tax remittances has significantly influenced tax compliance by MSEs in Kericho County                         | 81        | 3.377        | 1.229               |
| Online Withholding tax remittances has significantly influenced tax compliance by MSEs in Kericho County                           | 81        | 3.719        | 1.237               |
| <b>Average Score</b>                                                                                                               | <b>81</b> | <b>3.680</b> | <b>0.127</b>        |

From the findings as presented in Table 4.7, most respondents agreed that online VAT remittances has significantly influenced tax compliance by MSEs in Kericho County (mean=3.937, SD=1.034). There was an agreement among majority of the respondents that online corporation tax remittances have significantly influenced tax compliance by MSEs in Kericho County (mean=3.973, SD=0.990). A fair majority of the respondents agreed that online individual income tax remittances has significantly influenced tax compliance by individuals working MSEs in Kericho County (mean=3.394, SD= 1.273). Further, there was agreement

among most respondents that online rental income tax remittances has significantly influenced tax compliance by MSEs in Kericho County (mean=3.377, SD=1.229). A larger majority of the respondents were in agreement that online withholding tax remittances has significantly influenced tax compliance by MSEs in Kericho County (mean=3.719, SD=1.237). On average, respondents were in agreement with online tax payment statements and there was no disparity in responses, given that the average mean value registered a standard deviation value which was less than 1 (mean=3.680, SD=0.127). The findings concur with those of Malonza (2016) that iTax usage was the cause of increased compliance by medium corporate taxpayers.

#### **4.4.4 Descriptive analysis for online tax system stability**

Respondents were asked to indicate their agreement on various items relating to online tax system stability. The responses are as presented in Table 4.8.

**Table 4.8 Descriptive Results for Online Tax System Stability**

| <b>Statements</b>                                                                                                                                                    | <b>N</b>  | <b>Mean</b>  | <b>Std. Dev</b> |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------|-----------------|
| Strong and stable internet connections have influenced tax compliance among MSEs in Kericho County                                                                   | 18        | 3.824        | 1.006           |
| System hang ups leads to incurrence of costs to pay third parties to file on behalf of MSEs hence significantly influencing tax compliance by MSEs in Kericho County | 18        | 3.377        | 1.124           |
| KRA System capability to allow many users to execute different instructions in i-Tax platform has influencing tax compliance by MSEs in Kericho County               | 18        | 3.500        | 1.161           |
| KRA systems' ability to handle numerous data for large number of clients for a long time has influenced tax compliance by great extent by MSEs in Kericho County     | 18        | 2.991        | 1.237           |
| System hang ups leads to unwillingness to file returns by MSEs hence significantly influence tax compliance among MSEs in Kericho County                             | 18        | 3.693        | 1.106           |
| <b>Average Score</b>                                                                                                                                                 | <b>81</b> | <b>3.477</b> | <b>0.143</b>    |

From the findings as presented in Table 4.8, Strong and stable internet connections have influenced tax compliance among MSEs in Kericho County (mean=3.824, SD=1.006) as agreed by the respondents. There was agreement among respondents that system hang ups leads to incurrence of costs to pay third parties to file on behalf of MSEs hence significantly influencing tax compliance by MSEs in Kericho County (mean=3.377, SD=1.124). Respondents, agreed that KRA system capability to allow many users to execute different instructions in i-Tax platform

has influencing tax compliance by MSEs in Kericho County (mean=3.500, SD=1.161). In addition, respondents held neutral opinion on whether KRA systems' ability to handle numerous data for large number of clients for a long time has influenced tax compliance by great extent by MSEs in Kericho County (mean=2.991, SD=1.237) while respondents agreed that system hang ups leads to unwillingness to file returns by MSEs hence significantly influence tax compliance among MSEs in Kericho County (mean=3.693, SD=1.106). On average, respondents were in agreement with online tax system stability statements and there was no disparity in responses, given that the average mean value registered a standard deviation value which was less than 1 (mean=3.477, SD=0.143). The findings indicate that online system stability influence tax compliance to some extent. These findings concur with the findings by Deyganto (2018) that simplicity of tax system affect voluntary compliance of taxpayers.

#### **4.5 Inferential Statistics**

This section presents inferential statistics tools that were used which included; regression analysis

##### **4.5.1 Correlation analysis**

Correlation analysis was used to test non-causal relationship between variables. Correlation analysis involves identification of interrelationship of the study variables. Pearson's correlation coefficient ( $r$ ) was used to determine the strength and direction of associations and how study variables were related. Table 4.9 illustrates the correlations between the dependent variable and predictors for this study namely control environment, risk assessment, information and communication system, control activities and monitoring. Values of correlation coefficients ( $r$ ) range between -1.00 and +1.00 in which a negative value is used indicate a perfect negative relationship while a positive number is used to indicate a perfect positive relationship. Values

between 0.8-1.00 are used to indicate a very strong relationship, 0.6-0.8 indicate strong relationship, 0.4-0.6 indicate moderate relationship, 0.2-0.4 indicate weak relationship while 0 .00-0.2 indicate very weak relationship. The test of the relationship between the study variables was at 1% significant level.

**Table 4.9 Correlation Analysis**

|              |                     | Compliance | Registration | Filing | Payment | Stability |
|--------------|---------------------|------------|--------------|--------|---------|-----------|
| Compliance   | Pearson Correlation | 1          |              |        |         |           |
|              | Sig. (2-tailed)     |            |              |        |         |           |
|              | N                   | 81         |              |        |         |           |
| Registration | Pearson Correlation | .978**     | 1            |        |         |           |
|              | Sig. (2-tailed)     | .000       |              |        |         |           |
|              | N                   | 81         | 81           |        |         |           |
| Filing       | Pearson Correlation | .918**     | .918**       | 1      |         |           |
|              | Sig. (2-tailed)     | .000       | .000         |        |         |           |
|              | N                   | 81         | 81           | 81     |         |           |
| Payment      | Pearson Correlation | .953**     | .953**       | .955** | 1       |           |
|              | Sig. (2-tailed)     | .000       | .000         | .000   |         |           |
|              | N                   | 81         | 81           | 81     | 81      |           |
| Stability    | Pearson Correlation | .911**     | .911**       | .955** | .978**  | 1         |
|              | Sig. (2-tailed)     | .000       | .000         | .000   | .000    |           |
|              | N                   | 81         | 81           | 81     | 81      | 81        |

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

Table 4.9 presents the findings that tax compliance has a very strong positive and statistically significant relationship with tax registration ( $r=0.978$ ;  $P<0.05$ ). The findings also indicate that tax compliance positively correlate with tax filing. The relationship is very strong and statistically significant ( $r=0.918$ ;  $P<0.05$ ). The correlation table also shows a very strong

positive and significant relationship between tax compliance and tax payment ( $r=0.953$ ;  $P<0.05$ ).

As indicated in the correlation analysis table, stability of tax system has a very strong and significant relationship with tax compliance ( $r=0.911$ ;  $P<0.05$ ). The results of the correlation indicate that there is a very strong positive and a high significant relationship among the study independent variables. The findings indicate that the highest, very strong positive and highly significant correlation is that between online tax registration and tax compliance ( $r=0.978$ ;  $P<0.05$ ). The table also indicates that lowest, very strong positive and highly significant correlation is that between system stability and tax compliance ( $r=0.911$ ;  $P<0.05$ ).

The study's correlation analysis findings agree with the findings of Olatunji and Ayodele (2017), that online tax registration, online tax filing and online tax remittance affected productivity of tax. This study finding agrees with the findings by Munyoro (2017) that most of the taxpayers had registered for VAT and income tax. Through the scholar's study, taxpayers gave the benefits of iTax as limited time required to file tax returns, simple to use and less costs incurred.

The study's correlation analysis findings also concur with the findings by Bett, Tanui and Osodo (2017) which showed that tax return processing was significantly contributed by online taxpayer registration to KRA. The findings also are in tandem with the findings by Tarmidi, Fitria and Purwaningsih (2017) which showed that implementation of online tax application significantly and positively affected tax compliance.

The findings are in contrary to the findings by Gwaro, Maina and Kwasira (2016). According to Gwaro, Maina and Kwasira (2016), online tax system stability and online tax filing had no significant relationship with tax compliance. However, the findings support the findings by

Monica, Makokha and Namusonge, (2017) that electronic tax filing and electronic tax payment influenced compliance by taxpayers.

The study findings also support the findings of Tambun and Kopong (2017). Tambun and Kopong (2017) findings revealed that e-filing influenced greatly individual taxpayer compliance. The findings also support Bett and Omondi (2017) which indicate that electronic tax payment, online tax return processing, online taxpayer registration, online compliance and monitoring activities contributed significantly on revenue collection.

#### **4.6 Regression Analysis**

Regression analysis was used to test causal relationship between variables. The dependent variable was tax compliance measured by voluntary registration of relevant taxes, tax filing on due dates as well as tax payments on due dates. Independent variables of the study included online tax registration, online tax filing, online tax payment and online system stability.

##### **4.6.1 Relationship between online tax system and tax compliance**

The study sought to examine the combined effect of all independent variables on the dependent variable. Table 4.10 shows that the overall  $R^2 = 0.924$  which indicates 92.4 percent of the variation in the dependent variable is explained by the independent variables that are included in the model. This implies that online tax registration, online tax filing, online tax payment and online system stability explain 92.4% variability in tax compliance among MSEs in Kericho County. The remaining 7.6 % variation in the tax compliance among MSEs in Kericho County is explained by other factors not included in the model denoted by ( $\varepsilon$ ) in the model.

**Table 4.10 Model Summary for the Relationship Between Online Tax System and Tax Compliance**

| Model | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
|-------|-------------------|----------|-------------------|----------------------------|
|       | .961 <sup>a</sup> | .924     | .921              | .15842                     |

a. Dependent Variable: Tax Compliance

b. Predictors: (Constant), tax registration, tax filing, tax payment, system stability

The results of the ANOVA on Table 4.11 indicate that the regression line fits the actual data since the mean square of the residuals is very small (0.025) compared to mean square of the regression (7.807). The F-statistics of the regression result is  $F_{(3, 77)} = 311.087$  while the reported  $p$ -value=0.000 which is less than the conventional probability value 0.05. The model applied can thus significantly predict the change of the dependent variable as result of the independent variables in the model. Thus, the coefficients of the model are not equal to zero, suggesting that the model fits the data significantly.

**Table 4.11 Analysis of Variance Results**

| Model        | Sum of Squares | Df        | Mean Square | F       | Sig.              |
|--------------|----------------|-----------|-------------|---------|-------------------|
| Regression   | 23.422         | 3         | 7.807       | 311.087 | .000 <sup>b</sup> |
| Residual     | 1.932          | 77        | .025        |         |                   |
| <b>Total</b> | <b>25.355</b>  | <b>80</b> |             |         |                   |

a. Dependent Variable: tax compliance

b. Predictors: (Constant), tax registration, tax filing, tax payment, system stability

As presented in table 4.12, it was established that there exists a statistically significant positive relationship between online tax registration and tax compliance among MSEs in Kericho County ( $\beta = 0.211$ ,  $p < 0.05$ ). The beta coefficient of 0.211 means that when online tax registration

increases by an additional unit, tax compliance increases by 0.211. Thus, it implies that there is a significant influence of online tax registration on tax compliance among MSEs in Kericho County. The results are in consistent with those of Olatunji and Ayodele (2017), who reported that online tax registration, online tax filing and online tax remittance, affects productivity of tax. The findings agree with those of Munyoro (2017) that most of the taxpayers had registered for VAT and income tax. Through the scholar's study, taxpayers gave the benefits of iTax as limited time required to file tax returns, simple to use and less costs incurred. These findings also agree with the findings by Tanui and Osodo (2017) which stated that tax return processing was significantly contributed by online taxpayer registration to KRA, Rift Valley region.

The results indicate that the relationship between online tax filing and tax compliance among MSEs in Kericho County was positive and statistically significant ( $\beta = 0.212$   $p < 0.05$ ). This means when online tax filing increases by an additional unit, tax compliance increases by 0.212. Thus, it can be implied that there exists a significant relationship between online tax filing and tax compliance among MSEs in Kericho County. This supports the findings by Gwaro, Maina and Kwasira (2016) that tax compliance was significantly related to the level of literacy on computer. The study findings agree with the study findings by Monica, Makokha and Namusonge, (2017) which depicted that that electronic tax filing, electronic tax payment, staff competency and taxpayer's knowledge in operation influence tax collection efficiency. The findings of this study agree with the findings of Olatunji and Ayodele (2017), that online tax registration, online tax filing and online tax remittance affected productivity of tax. The study findings agree as well as Wasao (2014) findings that that compliance by medium sized enterprises was influenced by online tax system as far as registration of tax online, filing of tax online and online tax remittance were concerned.

This study finding support Malonza (2016) findings which indicated that iTax usage was the cause of increased compliance by medium corporate taxpayers. The findings also support the findings by Bett and Omondi (2017) which showed that electronic tax payment, online tax return processing, online taxpayer registration, online compliance and monitoring activities contributed significantly on revenue collection. The study also agrees with the findings by Tambun and Kopong (2017) which indicates that tax compliance was significantly influenced by electronic filing.

The findings also relate to the findings by Aondo (2018). Aondo's findings were that that tax rate, filling procedures, knowledge of tax by taxpayer and accountability affect tax compliance among MSEs in Naivasha Sub-County. The study findings agree as well as Wasao (2014) findings that that compliance by medium sized enterprises was influenced by online tax system as far as registration of tax online, filing of tax online and online tax remittance were concerned. The results are in consistent with those of Nding'ori (2015) who found that customer services outsourcing enhances performance in terms of service delivery in the telecommunication sector in Kenya. Further, the results are in agreement with those of Kung'u (2016) who found that outsourcing customer interaction services influence firm profitability to a great extent.

Additionally, the results also indicate that there exists a statistically significant positive relationship between online tax payment and tax compliance among MSEs in Kericho County ( $\beta = 1.007, p < 0.05$ ). Numerically, the 1.007 beta coefficient of online tax payment implies that when online tax payment increase by an additional unit, tax compliance among MSEs in Kericho County increases by 1.007. Thus, it can be inferred that there exists a influence of online tax payment on tax compliance among MSEs in Kericho County. The findings of this study agree with Bett and Omondi (2017) which showed that electronic tax payment, online tax return

processing, online taxpayer registration, online compliance and monitoring activities contributed significantly on revenue collection.

The study findings agree with the study findings by Monica, Makokha and Namusonge (2017) which depicted that that electronic tax filing, electronic tax payment, staff competency and taxpayer's knowledge in operation influence tax collection efficiency. The findings of this study agree with the findings of Olatunji and Ayodele (2017), that online tax registration, online tax filing and online tax remittance affected productivity of tax. The study findings agree as well as Wasao (2014) findings that that compliance by medium sized enterprises was influenced by online tax system as far as registration of tax online, filing of tax online and online tax remittance were concerned.

Further, the results indicate that the relationship between online tax system's stability and tax compliance among MSEs in Kericho County was negative and statistically significant ( $\beta = -0.441, p < 0.05$ ). This means when online tax system's stability decreases by an additional unit, tax compliance decreases by 0.441. Thus, it can be implied that there exists a significant influence of online tax system's stability on tax compliance among MSEs in Kericho County. These findings disagree with the findings of a study done by Gwaro, Maina and Kwasira (2016) indicating that security and stability of the system did not significantly relate with tax compliance. In this study, online tax system stability significantly related with tax compliance. The study findings agree with Tendai (2018), Palil (2010) which indicated that non-simplicity of tax returns and administration of tax has had over time, a negative effect on behavior of tax compliance.

Loo (2010) study proved that tax laws which were complex, confusing and dynamic could result to an increase in non-compliance and could not be intentional on the taxpayers. As a result of that, Palil's (2010) answer was to bring into use; detailed but simple tax returns to ease taxpayers' completion of their returns accurately. As suggested further by Okello (2014), tax forms must be simple, with more clarification on procedures concerning the completion of tax filing. Furthermore, tax return filing should be such that it is designed in a way that is convenient to the taxpayers for example i-Tax.

**Table 4.12 Coefficients**

| Model        | Unstandardized Coefficients |           | Standardized Coefficients | t      | Sig. |
|--------------|-----------------------------|-----------|---------------------------|--------|------|
|              | B                           | Std.Error | Beta                      |        |      |
| (Constant)   | .286                        | .063      |                           | 4.507  | .000 |
| Registration | .211                        | .998      | .221                      | 2.067  | .000 |
| Filing       | .212                        | .102      | .232                      | 2.069  | .042 |
| Payment      | 1.007                       | .122      | 1.337                     | 8.285  | .000 |
| Stability    | -.441                       | .115      | -.619                     | -3.844 | .000 |

a. Dependent Variable: Tax Compliance

After fitting data, the following regression model was obtained;

$$Y = 0.286 + 0.211TR + 0.212TF + 1.007TP - 0.441 SS + \varepsilon$$

Where: Y = Tax Compliance

$\alpha$  = Regression constant

$\beta_1, \beta_2, \beta_3, \beta_4$  = Beta coefficients for independent variables

TR= Tax Registration

TF= Tax Filing

TP= Tax Payment

SS= System Stability

$\epsilon$ = Error Term assumed to be normally distributed

## **CHAPTER FIVE**

### **SUMMARY, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusions drawn from the research results, recommendations to be made basing on the study findings and suggestion for further research.

#### **5.2 Summary**

The main objective of the study was to establish the relationship between online tax system and tax compliance among medium sized enterprises in Kericho County. Specifically, the study sought to; establish the relationship between online tax registration and tax compliance among medium sized enterprises in Kericho County, Kenya; ascertain the relationship between online tax filing and tax compliance among medium sized enterprises in Kericho County, Kenya; determine the relationship between online tax payment and tax compliance among medium sized enterprises in Kericho County, Kenya and to examine the relationship between online tax system stability and tax noncompliance among medium sized enterprises in Kericho County, Kenya. Primary data was collected and analyzed based on the objectives of the study. The summary of the findings is presented based on the objectives of the study.

##### **5.2.1 Relationship between online tax registration and tax compliance among medium sized enterprises**

The first objective of the study was to establish the relationship between online tax registration and tax compliance among medium sized enterprises in Kericho County, Kenya. Respondents agreed that online VAT registration by enterprises has significantly influenced tax compliance among MSEs. Additionally, respondents agreed that online corporation tax registration takes less

time to complete by the taxpayers. There was agreement among respondents on whether online individual income tax registration has enabled individuals who operate in MSEs to comply with tax requirements. Most respondents agreed that online rental income tax registration by individuals who own rental houses has greatly influenced tax compliance since introduction of online tax system. Further, there was agreement among the respondents that online tax registration for withholding tax by MSEs has significantly influenced tax compliance across Kericho County. The results indicate that there exists a positive correlation between online tax registration and tax non-compliance among medium sized enterprises in Kericho County. There exists a positive causal relationship between online tax registration and tax non-compliance among medium sized enterprises in Kericho County.

#### **5.2.2 Relationship between online tax Filing and tax compliance among medium sized enterprises**

The second objective of the study was to ascertain the relationship between online tax filing and tax compliance among medium sized enterprises in Kericho County, Kenya. Most respondents agreed that online tax filing of VAT has greatly influenced tax compliance by MSEs. There was agreement on whether online tax filing of corporation tax has significantly influenced tax compliance by MSEs. Respondents agreed that online tax filing of individual income tax return has significantly influenced tax compliance by MSEs. According to the findings, online tax filing of rental income tax return has significantly influenced tax compliance by individual owners. Respondents agreed that online tax filing of withholding tax has significantly influenced tax compliance by MSEs. Further, there was agreement that online filing of related tax has improved tax compliance by MSEs in Kericho County. The results indicate that there exists a positive correlation between online tax filing and tax non-compliance among medium sized enterprises in

Kericho County. There exists a positive causal relationship between online tax filing and tax non-compliance among medium sized enterprises in Kericho County.

### **5.2.3 Relationship between online tax payment and tax compliance among medium sized enterprises**

The third objective of the study was to determine the relationship between online tax payment and tax compliance among medium sized enterprises in Kericho County, Kenya. According to the findings, online VAT remittance has significantly influenced tax compliance by MSEs. Respondents agreed that online tax payment of corporation tax has significantly influenced tax compliance by MSEs. There was agreement that online individual income tax remittances have significantly influenced tax compliance by individuals working in MSEs in Kericho County. Additionally, online rental income tax remittances have significantly influenced tax compliance by MSEs while online withholding tax remittances have significantly influenced tax compliance by MSEs in Kericho County according to most respondents. There exists a positive correlation between online tax payment and tax non-compliance among medium sized enterprises in Kericho County. Further, there exists a positive causal relationship between online tax payment and tax non-compliance among medium sized enterprises in Kericho County.

### **5.2.4 Relationship between online tax system stability and tax compliance among medium sized enterprises**

The fourth objective of the study was to examine the relationship between online tax system stability and tax noncompliance among medium sized enterprises in Kericho County, Kenya. According to the findings, respondents agreed that strong and stable internet connections have influenced tax compliance among MSEs. System hang ups leads to incurrence of costs to pay third parties to file on behalf of MSEs and it significantly influences tax compliance by MSEs.

There was agreement among most respondents on whether KRA's system capability to allow many users to execute different instructions in i-Tax platform has influence on tax compliance by MSEs. Additionally, respondents agreed that KRA systems' ability to handle numerous data for large number of clients for a long time has influenced tax compliance by great extent by MSEs. Based on the findings, system hang ups leads to unwillingness to file returns by MSEs and it significantly influence tax compliance among MSEs. There exists a positive correlation between online tax system stability and tax non-compliance among medium sized enterprises in Kericho County. Additionally, there exists a positive causal relationship between online tax system stability and tax non-compliance among medium sized enterprises in Kericho County.

### **5.3 Conclusions**

Based on the findings, the following conclusions are drawn per objectives of the study.

It can be concluded that online tax registration has a significant influence on tax compliance among medium sized enterprises in Kericho County, Kenya. Conclusions can be made that VAT registration and online corporation tax registration which takes less time to complete by the taxpayers as well as online individual income tax registration has enabled individuals who operate in MSEs to comply with tax requirements. Continued online tax registration among existing and prospective MSEs will enhance tax compliance. Thus, there is need to pool MSEs to register themselves through online platform to ensure that compliance is achieved.

It can be concluded that online tax filing has a significant influence on tax compliance among medium sized enterprises in Kericho County, Kenya. Conclusions can be made that online tax filing of VAT, individual income tax and rental income tax has significantly influenced tax compliance by MSEs. Continued partnership between MSEs operators and KRA will encourage those traders who have not enrolled to the online services to do so as compliance will be boosted.

It can be concluded that online tax payment has a significant influence on tax compliance among medium sized enterprises in Kericho County, Kenya. Conclusions can be made that online remittance for VAT, corporation tax, individual income tax and rental income tax have significantly influenced tax compliance among MSEs. It can be concluded that MSEs operators' embracement of online payment of taxes will lead to increased compliance. This method is convenient as there is no need to travel to banks.

It can be concluded that online tax system stability has a significant influence on tax compliance among medium sized enterprises in Kericho County. Conclusions can be made that KRA's system capability that allow many users to execute different instructions in i-Tax platform, the systems' ability to handle numerous data for large number of clients for a long time has influenced tax compliance by great extent by MSEs. Further, it can be concluded that the system hang ups leads to unwillingness to file returns by MSEs. This has a negative effect on tax compliance hence KRA strong online tax system will ensure consistent strength on matters internet and capability.

#### **5.4 Recommendations**

Based on the conclusions of the study the following recommendations are made per objectives of the study.

It is recommended that KRA agency should continue to strengthen the need for all MSEs to register their tax obligations online. This will open an easy way to file and pay tax online therefore boosting tax compliance.

Recommendations are made that KRA agency should encourage those taxpayers who have registered for tax obligations to file returns online in due dates so as to minimize cases where

taxpayers go beyond due dates without having filed their returns. This will help maintain tax compliance among taxpayers.

It is also recommended that KRA agency needs to enlighten the taxpayers on the advantages of online tax payments so that the taxpayers get to know how important it is for one to embrace online tax payment to enable them avoid unnecessary penalties and interests.

Recommendations is made that KRA agency should ensure that their i-Tax system should be strong to enable large number of taxpayers to file and pay for their tax obligations even on due dates so that all taxpayers are spared from not meeting deadlines on matters tax filing. This will increase compliance.

### **5.5 Suggestions for Further Study**

The MSEs sector in Kenya continues to experience new changes that are imposed by KRA. These changes are deemed to influence the way MSEs comply with the KRA requirements. The study suggests that in future, the researchers may consider undertaking research on the effect of tax reforms on tax compliance among MSEs. Further, a multi case study should be conducted in other parts of the country to warrant generalization of the results on the topic under study.

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## APPENDICES

### Appendix I: Letter of Transmittal

**Dear Respondent,**

My name is Kiplangat Yegon Geoffrey, a student at University of Kabianga pursuing Masters of Business Administration (Accounting Option).

In partial fulfilment of the requirements, I am carrying out research on “**Relationship between Online Tax System and Tax Compliance among Medium sized enterprises in Kericho County**” to solicit your views as a taxpayer. This research runs from July and ends in August 2022. I am kindly requesting you to take a few moments to respond to the questions. Your response will be of great help to both our study and the understanding of issues connected to the topic. I therefore assure you that your privacy will not be infringed at all cost. The information you provide will be treated with highest confidentiality.

Thanks in advance.

## Appendix II: Research Questionnaire

### SECTION A: PERSONAL DATA

1. What is your Gender?

Male ☐

Female ☐

2. Kindly Tick against your Age bracket (years)?

18 – 24 ☐

25 – 30 ☐

31 – 35 ☐

36 – 40 ☐

41 – 45 ☐

46 & above ☐

3. Education Qualification

Primary ☐

Tertiary College/ University ☐

Secondary ☐

Others (please specify) .....

4. Kindly Tick against your Sector as listed below or specify where necessary

Transport ☐

General trading ☐

Manufacturing ☐

Agriculture ☐

Hospitality ☐

Energy ☐

Mining & Minerals ☐

Others (please specify) .....

5. Number of Employees \_\_\_\_\_

- 1--10 ☐
- 11– 25 ☐
- 26– 45 ☐
- 46 & above ☐

## SECTION B

**Please tick appropriately against the following statements**

6. Our business has registered for online tax ☐
- Our business has been filing tax returns online ☐
- Our business has been paying tax online ☐

7. Please state your level of agreement or disagreement with the following statements of online tax system on the likert scale ranging from **Strongly Agree (1), Agree (2), Not Sure (3), Disagree (4) & Strongly Disagree (5)**

|   | Online Tax Registration                                                                                                                                               | SA | A | NS | D | SD |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|----|---|----|
|   | Statement                                                                                                                                                             | 1  | 2 | 3  | 4 | 5  |
| 1 | Online VAT registration by enterprises has significantly influenced tax compliance especially by MSEs                                                                 |    |   |    |   |    |
| 2 | Online Corporation tax registration takes less time to complete by the taxpayers and has influenced tax compliance                                                    |    |   |    |   |    |
| 3 | Online Individual Income tax registration has enabled individuals who operate in MSEs to comply with tax requirements and has influenced tax compliance significantly |    |   |    |   |    |

|                                                             |                                                                                                                                                          |  |  |  |  |  |
|-------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 4                                                           | Online Rental Income tax registration by individuals who own rental houses has greatly influenced tax compliance since introduction of online tax system |  |  |  |  |  |
| 5                                                           | Online tax registration for Withholding Tax by MSEs has significantly influenced tax compliance across Kericho County                                    |  |  |  |  |  |
| Please explain your experience with online tax registration |                                                                                                                                                          |  |  |  |  |  |

8. Kindly state your level of agreement or disagreement with the following statements of online tax filing. The scale ranges from **Strongly Agree (1), Agree (2), Not Sure (3), Disagree (4) and Strongly Disagree (5)**

|   | Online Tax Filing                                                                                                                | SA | A | NS | D | SD |
|---|----------------------------------------------------------------------------------------------------------------------------------|----|---|----|---|----|
|   | Statement                                                                                                                        | 1  | 2 | 3  | 4 | 5  |
| 1 | Online tax filing of VAT has greatly influenced tax compliance by MSEs across Kericho County                                     |    |   |    |   |    |
| 2 | Online tax filing of Corporation Tax Return has significantly influenced tax compliance by MSEs in Kericho County                |    |   |    |   |    |
| 3 | Online tax filing of Individual Income Tax Return has significantly influenced tax compliance by MSEs in Kericho County          |    |   |    |   |    |
| 4 | Online tax filing of Rental Income Tax Return has significantly influenced tax compliance by individual owners in Kericho County |    |   |    |   |    |

|   |                                                                                                                   |  |  |  |  |  |
|---|-------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|
| 5 | Online tax filing of Withholding Tax Return has significantly influenced tax compliance by MSEs in Kericho County |  |  |  |  |  |
| 6 | On-line filing of related tax has improved tax compliance by MSEs in Kericho County                               |  |  |  |  |  |

Please explain your experience with online tax filing on compliance.....

9. Kindly state your level of agreement or disagreement with the following statements of online tax payment. The scale ranges from **Strongly Agree (1), Agree (2), Not Sure (3), Disagree (4) and Strongly Disagree (5)**

|     | Online Tax Payment                                                                                                                 | SA | A | NS | D | SD |
|-----|------------------------------------------------------------------------------------------------------------------------------------|----|---|----|---|----|
| No. | Statement                                                                                                                          | 1  | 2 | 3  | 4 | 5  |
| 1   | Online VAT remittances has significantly influenced tax compliance by MSEs in Kericho County                                       |    |   |    |   |    |
| 2   | Online Corporation tax remittances has significantly influenced tax compliance by MSEs in Kericho County                           |    |   |    |   |    |
| 3   | Online Individual Income tax remittances has significantly influenced tax compliance by individuals working MSEs in Kericho County |    |   |    |   |    |
| 4   | Online Rental Income tax remittances has significantly influenced tax compliance by MSEs in Kericho County                         |    |   |    |   |    |
| 5   | Online Withholding tax remittances has significantly influenced tax compliance by MSEs in Kericho County                           |    |   |    |   |    |

Please share your experience with online tax payment.....

10. Kindly state your level of agreement or disagreement with the following statements of online tax system stability on non-compliance. The scale ranges from **Strongly Agree (1), Agree (2), Not Sure (3), Disagree (4) and Strongly Disagree (5)**

|   | Online Tax System Stability                                                                                                                                          | SA | A | NS | D | SD |
|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|---|----|---|----|
|   | Statement                                                                                                                                                            | 1  | 2 | 3  | 4 | 5  |
| 1 | Strong and stable internet connections have influenced tax compliance among MSEs in Kericho County                                                                   |    |   |    |   |    |
| 2 | System hang ups leads to incurrence of costs to pay third parties to file on behalf of MSEs hence significantly influencing tax compliance by MSEs in Kericho County |    |   |    |   |    |
| 3 | KRA System capability to allow many users to execute different instructions in i-Tax platform has influencing tax compliance by MSEs in Kericho County               |    |   |    |   |    |
| 4 | KRA systems' ability to handle numerous data for large number of clients for a long time has influenced tax compliance by great extent by MSEs in Kericho County     |    |   |    |   |    |
| 5 | System hang ups leads to unwillingness to file returns by MSEs hence significantly influence tax compliance among MSEs in Kericho County                             |    |   |    |   |    |

Please explain your experience with the stability of tax system

**Thank you very much for your patience, cooperation, and support for my research.**



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## RESEARCH LICENSE



This is to Certify that **Mr. Kiplangat Geoffrey Yegon** of **University of Kabianga**, has been licensed to conduct research in Kericho on the topic: **RELATIONSHIP BETWEEN ONLINE TAX SYSTEM AND TAX COMPLIANCE AMONG SMALL AND MEDIUM ENTERPRISES IN KERICHO COUNTY, KENYA** for the period ending : **11/August/2023**.

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DATE: 25<sup>TH</sup> JULY, 2022

Geofrey Kiplangat Yegon,  
Accounting & Finance Department,  
University of Kabianga,  
P.O Box 2030- 20200,  
**KERICHO.**

Dear Mr. Yegon,

**RE: CLEARANCE TO COMMENCE FIELD WORK**

I am glad to inform you that the Board of Graduate Studies during its meeting on 11<sup>th</sup> August, 2021 approved your research proposal entitled "**Relationship between Online Tax System and Tax Compliance among Small and Medium Enterprises in Kericho County, Kenya.**"

I am also acknowledging receipt of your corrected proposal via email and hard copy. You are now free to commence your field work on condition that you obtain a research permit from NACOSTI.

Please note that, you are expected to publish at least one (1) paper in a peer reviewed journal before final examination (oral defense) of your Masters thesis.

Thank you.

Yours Sincerely,

Prof. J. K. Kibett  
**DIRECTOR, BOARD OF GRADUATE STUDIES.**

- cc 1. Dean, SBE  
2. HOD, Accounting & Finance  
3. Supervisors

# Online Tax System And Tax Compliance Among Small And Medium Enterprises In Kericho County, Kenya

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**Abstract-** In bid to enhance tax compliance many states globally have now introduced online tax systems. Whereas these systems have been seen as an efficient way of tax administration, the complex nature of Small and Medium Size Enterprises (SMEs) in many developing countries may make pose challenge to these innovations. The purpose of this study is to establish whether tax compliance among small and medium enterprises in Kericho County, Kenya, is associated with online tax system, as the general objective. The population was 102 registered SMEs located in Kericho County, with a sample size of 102 SMEs. Kericho County was stratified into various sub-counties which included Bureti, Belgut, Ainamoi, Kipkelion East and Kipkelion West. The study employed census method to select the registered SMEs in the study area. Structured questionnaires were the collection tools for primary data. Instrument's validity was undertaken through a review of the instrument by an expert. In order to test if the instrument was reliable, Pearson coefficient of correlation was applied. The Statistical Package for Social Sciences (SPSS) version 20 and correlation analysis was utilized in analyzing the results. The study findings indicated that online tax registration, filing and payment had positive and significant effect on tax compliance where their statistical values were  $t(77) = 2.067$ ;  $p = 0.01$ ,  $t(77) = 2.069$ ;  $p = 0.04$ , and  $t(77) = 8.285$ ;  $p = 0.01$  respectively. Online tax system stability had a negative and statistically significant effect on tax compliance,  $t(77) = -3.844$ ;  $p = 0.01$ . This study recommends that SMEs embrace online tax registration, filing and payment as that will enable tax compliance be achieved with ease.

**Index Terms-** Online tax system, tax compliance, SMEs, Kenya

## I. INTRODUCTION

Nowadays, many countries in the world have modern systems of taxation upon which citizens register, perform self-assessment and pay tax due to the government revenue collecting units. Taxpayers who fail to pay by way of evading or resisting to pay are punished by law. Kenyan Government has its agent whose mandate is to manage tax assessment, collects and account for the revenue collected from taxes on central government behalf and in accordance with the laws of Kenya. In Kenya, the responsibility of administering taxes is the Revenue Authority of Kenya, (KRA) whose establishment took effect in 1995 under Chapter 469, Act of Parliament, with its parent agency being Ministry of Finance. KRA is headed by the Commissioner of Income Tax, (Maundu, 3 March 2015). KRA has six departments which include department of corporate support services, department of technical support services, department for customs, and services department for domestic taxes for medium and small taxpayers, department of investigations and enforcement and department for domestic taxes related to large tax payers. It also has four service departments which coordinate operations' efficiency that include, department of ethics and integrity, department of risk management and internal audit, department of information communication technology and legal service department, (KRA, 22 October 2016). The taxpayers are required to register online through iTax, an online system platform that taxpayers utilize to apply for Personal Identification Number (PIN). The same platform offers varieties of online tax services such as enabling taxpayers' self-assessment, filing for personal and business returns as well as submission of returns and nil returns to the KRA agency. It also facilitates payment of VAT to the KRA by taxpayers who have registered for VAT and facilitates registration of Turnover tax among others. The KRA website enables taxpayers to download various forms they need to fill for tax payment reasons.

Taxation is a necessity for sustaining economic development and administration of tax is the primary role of a successful nation. In Kenyan economy, the leading source of revenue to the government is tax. Provided it's a central function, revenues collected in form of taxes have been utilized to achieve two objectives. The first objective is raising enough revenue to provide public goods with no need to go for excessive public borrowing. The other objective is that it is used in mobilizing revenue in a way that is equitable and in a

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manner which minimizes its discouraging effects on economic activities, (Moyi Ronge, 2006). Taxation proves to be the major revenue source to the government for the developed and developing economies. Though that is the case, there are challenges that compromise this method of government financing one of which is the deliberate failure to pay tax. Transitional economies face this adverse challenge. In a review by GIZ (2010), the observation made is that countries which are more developed report relatively higher tax compliance levels of about (35%), whereas African countries record less than 23%. There are shortfalls in budgets and revenue gaps are realized in the budgets, resulting to overreliance on external sources that are unsustainable such as high interest loans from banks and multilateral donors. Countries which are developing are therefore needed to establish and implement appropriate policies that will reduce the prevailing tax shortfalls and unhealthy overreliance on donor funds.

Braithwaite (2009) coined that the full payment of all taxes due is termed as tax compliance. Tax non-compliance on the other hand is defined the actual amount of taxes paid minus the amount of taxes due. The difference arises as a result of overstatement and understatement of expenses, income and deductions. Non-compliance consists of intentional evasion and unintentional non-compliance, which is as a result from errors of miscalculation and minimum knowledge and understanding of laws relating to taxation. Tax compliance according to Jones (2009) refers to the filling and delivering reports on information relating to tax as well as performing self-assessment of taxes outstanding and paying those taxes without being forced to do so. This definition contains three dimensions which can be deduced to mean tax compliance and they are the reporting, filing and payment compliance. Filing compliance implies that the taxpayer did submission of the correct forms to the revenue authority. Reporting compliance means the accurate return was done while payment compliance refers to whether the taxpayer paid the amount, he/she was supposed to pay as reported tax liability in a timely manner. Any taxpayer qualifies to be not complying if these aspects are not met.

According to Tendai (2018), as cited in Muita (2011), the taxpayer finds paper returns to be tedious to file and reconcile by the authorities. Because of that reason, it required the use of electronic filing whose purpose involved keeping the accuracy and reconciliation of data in a timely manner therein since the SAP systems of ZIMRA performed automatic validation and reconciliation of the returns. Tax compliance is therefore the ability to pay taxes as well as reporting of the correct and accurate tax information on time. Most definitions relating to tax compliance focus on the information accuracy while making returns and the cost involved in making those tax returns. Auyat (2013) for instance, gave a definition for compliance as submission of correct and accurate, lodging income tax return with the expected payments as and when they fall due. As per Mandola (2013), tax compliance is of two types; involuntary and voluntary. Voluntary tax compliance does not require authorities to compel the taxpayers to comply with requirements for tax unlike involuntary tax compliance. Tax compliance concentrates on timely, correct and accurate remittance of tax and other tax information to the KRA. Nakiwala (2010) asserts that levels of tax compliance are influenced by online filing system has a direct impact on. The system ensures that a taxpayer fills all mandatory fields before being allowed to proceed to the next level. This assures the revenue authority, reception of a relatively higher quality data than the manual returns of the data, (Nakiwala, 2010). Mandola (2013) further explains that online tax filing ensures that there is no missing information, inconsistencies or unintentional errors made. In developing countries, the income tax compliance has been affected by continuous changes that have been made in laws relating to tax. They are complex and only the experts in taxation can understand them. Additional problems have risen on the matters compliance by the taxpayers who have no access to competent specialists who are knowledgeable on tax issues, (Oberholzer, 2008). In addition, enforcing these laws has no tendency to reduce non-compliance on part of taxpayers since certain tax policies put small and medium taxpayers under pressure of high liquidity, most being forced into the category of informal sector (Terkper, 2003).

The choice of the taxpayer to file and submit tax return to the KRA depends on many factors which are from within the individual taxpayer or external. For instance, Azjen (1991) and Peter (2012) assert that factors relating to psychology, including morality as well as ethics contribute a lot at influencing a taxpayer behavior. Azjen developed the theory of planned behavior in 1991. Peter (2012) cited that the theory talks of taxpayers' behaviors being influenced by a number of factors which arise from a given reason and emerge in various ways which are planned. Basing his arguments on the theory, Peter does not agree with the theory that compliance is affected by psychological factors.

SMEs are part of the major contributing enterprises to Kenya's economy through revenue collected by both county governments and the national government from them. They are viewed by the government as part of the major pillars of the vision 2030. Introduction of iTax was meant to boost administration and collection of tax on an effective and efficient manner across all the enterprises, SMEs included. There are many SMEs registered with KRA in Kericho County and it is the KRA's expectation that revenues collected should be directly related to the number of SMEs that have been registered. However, according to the conversation that the researcher engaged with the KRA agency in Kericho County, only a few SMEs have been able to file and submit their tax returns over the last periods. For that reason, KRA has been registering lower revenue collection than always been expected. This has raised concerns from stakeholders as to the newly introduced iTax system's effectiveness and efficiency in administering and collecting taxes across the SMEs in the region. Consequently, speculations have been directed to the online tax system processes including registration of tax, filing of tax, payment of tax as well as the state of the online tax system stability as being connected to tax noncompliance by some of the small and medium enterprises in Kericho County. This has triggered the researcher to establish the possible answers to the low revenue collection experiences in KRA agencies concerning the SMEs in the region. The purpose of this study was to determine the relationship between online tax system and tax compliance among small and medium enterprises in Kericho County, Kenya.

## II. METHODOLOGY

This study adopted correlational study design. The researcher adopted correlational design as the researcher intends to examine the relationship between the independent variables and the dependent variables. The study was carried out among Small and Medium Enterprises established and registered in Kericho County. The study location was chosen because there was limited information on similar study across the region especially relating to online tax system and tax compliance among SMEs. The target population of this study comprised 102 SME operators registered with the County government of Kericho and who are located in the Central Business District (Trade department, 2018). Since the population size was relatively small and manageable, the study was based on census of all targeted SMEs

**Table 1 Target population per sub-county**

|   | Sub-county     | SMEs target population |
|---|----------------|------------------------|
| 1 | Bureti         | 25                     |
| 2 | Belgut         | 21                     |
| 3 | Ainamoi        | 20                     |
| 4 | Kipkelion East | 17                     |
| 5 | Kipkelion West | 17                     |
|   | <b>Total</b>   | <b>102</b>             |

This study used the primary sources of data. Primary data is data collected directly from firsthand experience. A number of instruments will be used to collect primary. The main tools that will be used are the questionnaires. Primary data was collected using semi-structured questionnaires through the drop and pick method in an effort to conserve time and financial resources as well as to make it easier for analysis as they are in immediate usable form. The semi-structured questionnaires consisted of open and closed ended questions.

To ensure validity of the instruments, the study considered both the face value method and content validity of the questionnaire. To ensure validity of the instrument, face value validity was assessed by having all the questions phrased in line with the study objectives to reduce ambiguity to the lowest limit possible. Content validity was undertaken through a review of the questionnaire by an expert in the study field. The researcher sought support, guidance and advice from the supervisor to assist in reviewing the content validity of the data collection instrument. On the other hand, to establish the reliability of the research instrument, the instrument was be piloted in Bomet County. Test-retest method was used where research instrument was administered to the same respondent twice. After the first administration, a period of time was granted to pass long enough to make the respondents forget giving similar responses by remembering what they gave as answers in the first round. Estimated coefficient of reliability was obtained from correlating the scores on the two sets of measures. Computation of coefficient was achieved with the help of Karl Pearson's product moment coefficient of correlations given as 'r'. The items in the instrument were scored individually and aggregated to get the total score on the whole instrument for both test and retest administration.

Data analysis was conducted by Correlation and regression techniques with aid of Statistical Package for Social Sciences (SPSS) version 23 using the following multiple linear regression model:

$$Y = \alpha + \beta_1 TR + \beta_2 TF + \beta_3 TP + \beta_4 SS + \epsilon$$

Where: Y = Dependent variable (Tax Compliance)

$\alpha$  = the constant term

$\beta$  = Regression Coefficients of independent variables

TR= Tax Registration

TF= Tax Filing

TP= Tax Payment

$\epsilon$ = Error Term

## III. FINDINGS AND DISCUSSIONS

The researcher sought to determine whether online VAT registration by enterprises has significantly influenced tax compliance especially by SMEs. The results were as tabulated. Table 2 illustrates the correlations between the dependent variable and predictors for this study namely control environment, risk assessment, information and communication system, control activities and monitoring. Values of correlation coefficients (r) range between -1.00 and +1.00 in which a negative value is used indicate a perfect negative relationship while a positive number is used to indicate a perfect positive relationship. Values between 0.8-1.00 are used to indicate a very strong relationship, 0.6-0.8 indicate strong relationship, 0.4-0.6 indicate moderate relationship, 0.2-0.4 indicate weak relationship while 0.00-0.2 indicate very weak relationship. The test of the relationship between the study variables was at 1% significant level.

**Table 2 Correlation Analysis**

|              |                     | Compliance | Registration | Filing | Payment | Stability |
|--------------|---------------------|------------|--------------|--------|---------|-----------|
|              |                     | n          |              |        |         |           |
|              | Pearson Correlation | 1          |              |        |         |           |
| Compliance   | Sig. (2-tailed)     |            |              |        |         |           |
|              | N                   | 81         |              |        |         |           |
| Registration | Pearson Correlation | .978**     | 1            |        |         |           |
|              | Sig. (2-tailed)     | .000       |              |        |         |           |
|              | N                   | 81         | 81           |        |         |           |
|              | Pearson Correlation | .918**     | .918**       | 1      |         |           |
| Filing       | Sig. (2-tailed)     | .000       | .000         |        |         |           |
|              | N                   | 81         | 81           | 81     |         |           |
| Payment      | Pearson Correlation | .953**     | .953**       | .955** | 1       |           |
|              | Sig. (2-tailed)     | .000       | .000         | .000   |         |           |
|              | N                   | 81         | 81           | 81     | 81      |           |
|              | Pearson Correlation | .911**     | .911**       | .955** | .978**  | 1         |
| Stability    | Sig. (2-tailed)     | .000       | .000         | .000   | .000    |           |
|              | N                   | 81         | 81           | 81     | 81      | 81        |

\*\* . Correlation is significant at the 0.05 level (2-tailed).  
(Researcher, 2022)

Table 2 shows that tax compliance has a very strong positive and statistically significant relationship with tax registration ( $r=0.978$ ;  $P<0.05$ ). The findings also indicate that tax compliance positively correlate with tax filing. The relationship is very strong and statistically significant ( $r=0.918$ ;  $P<0.05$ ). The correlation table also shows a very strong positive and significant relationship between tax compliance and tax payment ( $r=0.953$ ;  $P<0.05$ ). As indicated in the correlation analysis table, stability of tax system has a very strong and significant relationship with tax compliance ( $r=0.911$ ;  $P<0.05$ ). The results of the correlation indicate that there is a very strong positive and a high significant relationship among the study independent variables. The findings indicate that the highest, very strong positive and highly significant correlation is that between online tax registration and tax compliance ( $r=0.978$ ;  $P<0.05$ ). The table also indicates that lowest, very strong positive and highly significant correlation is that between system stability and tax compliance ( $r=0.911$ ;  $P<0.05$ ).

As per the research questions on the relationship between online tax system and tax compliance, the study findings based on correlation analysis are that online tax registration, online tax filing, online tax payment as well as online system stability have very strong, positive and significant relationship with tax compliance ( $r=0.978$ ;  $P<0.05$ ,  $r=0.918$ ;  $P<0.05$ ,  $r=0.953$ ;  $P<0.05$  and  $r=0.911$ ;  $P<0.05$ ) respectively. The study's correlation analysis findings agree with the findings of Olatunji and Ayodele (2017), that online tax registration, online tax filing and online tax remittance affected productivity of tax. This study finding agrees with the findings by Munyoro (2017) that most of the taxpayers had registered for VAT and income tax. Through the scholar's study, taxpayers gave the benefits of iTax as limited time required to file tax returns, simple to use and less costs incurred.

The study's correlation analysis findings also concur with the findings by Bett, Tanui and Osodo (2017) which showed that tax return processing was significantly contributed by online taxpayer registration to KRA. The findings also are in tandem with the findings by Tarmidi, Fitria and Purwaningsih (2017) which showed that implementation of online tax application significantly and positively affected tax compliance. The findings are in contrary to the findings by Gwaro, Maina and Kwasira (2016). According to Gwaro, Maina and Kwasira (2016), online tax system stability and online tax filing had no significant relationship with tax compliance. However, the findings support the findings by Monica, Makokha and Namusonge, (2017) that electronic tax filing and electronic tax payment influenced compliance by taxpayers.

The study findings also support the findings of Tambun and Kopong (2017). Tambun and Kopong (2017) findings revealed that e-filing influenced greatly individual taxpayer compliance. The findings also support Bett and Omondi (2017) which indicate that electronic tax

payment, online tax return processing, online taxpayer registration, online compliance and monitoring activities contributed significantly on revenue collection

#### IV. CONCLUSIONS AND RECOMMENDATIONS

Basing on the findings the conclusion with regards to the first objective is that online tax registration has a positive, strong and significant relationship with tax compliance. This indicates that there is a further need to pool all SMEs to register themselves through online platform to ensure that compliance is achieved. Online tax filing also has a positive, strong and significant relationship with tax compliance. The implication is that the SMEs operators in partnership with KRA should continue to encourage those traders who have not enrolled to the online services to do so as compliance will be boosted further.

There was a positive and significant relationship between online tax payment and tax compliance. This calls for the SMEs operators to embrace payment of taxes through online as this leads to increased compliance. This method is convenient as there is no need to travel to banks. Online system stability on the contrary, has a negative and significant effect on tax compliance. This indicates that when the online systems are not stable like they are facing internet strength variations, it is very easy for the taxpayers not to comply. This calls for the KRA agencies to ensure strong online tax system which will ensure consistent strength on matters internet and capability.

On the basis of the study findings and conclusions which have been made, the researcher recommends the following measures to be implemented by both SMEs and the KRA agency. The KRA agency should continue to strengthen the need for all SMEs to register their tax obligations online. This will open an easy way to file and pay tax online therefore boosting tax compliance. KRA agency should also encourage those taxpayers who have registered for tax obligations to file returns online in due dates so as to minimize cases where taxpayers go beyond due dates without having filed their returns. This will help maintain tax compliance among taxpayers. The KRA agency also needs to enlighten the taxpayers on the advantages of online tax payments so that the taxpayers get to know how important it is for one to embrace online tax payment to enable them avoid unnecessary penalties and interests. The KRA agency should ensure that their i-Tax system should be strong to enable large number of taxpayers to file and pay for their tax obligations even on due dates so that all taxpayers are spared from not meeting deadlines on matters tax filing. This will increase compliance. The SMEs sector in Kenya continues to experience new changes that are imposed by KRA. These changes are deemed to influence the way SMEs comply with the KRA requirements. The study suggests that in future, the researchers may consider undertaking research on the effect of tax reforms on tax compliance among SMEs.

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